MASTER WATER REPORT UPDATE
FOR EASTMARK

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mesa·az
DEVELOPMENT SERVICES
REVIEWED FOR CODE
COMPLIANCE
DATE 12/16/2021 RAP
APPROVED

Brookfield Residential
MASTER
DEVELOPER
APPROVAL
EASTMARK
DATE 03/09/2021
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Water Master Report Update March 2021

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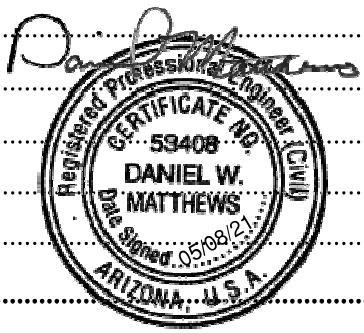

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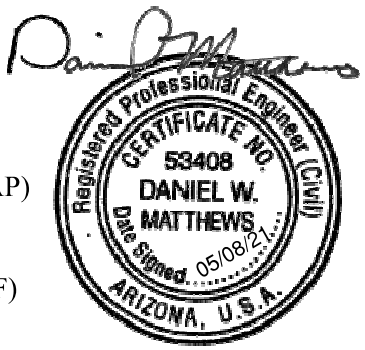

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EXECUTIVE SUMMARY

This report supersedes the *Master Water Report Update for Eastmark*, dated June 30, 2020, and has been prepared to specifically address revisions to the proposed water system layout within Development Units 1 (DU 1), 2 (DU 2), 5 West (DU 5W), 3/4 (DU 3/4), 6 North (DU 6N), and 6 South (DU 6S), and other updates within several Development Units. More detailed land use planning within DU 1, 2, 5W, 6N, and 6S has been provided to Wood, Patel & Associates, Inc. (WOODPATEL) by DMB Mesa Proving Grounds, LLC (DMB). Portions of DU 3/4 have already been constructed or in the process of construction. The next phase of development within Eastmark is planned to include the Commercial Core, located at the northeast corner of Ray Road and Ellsworth Road, DU 1, DU 2, DU 5W, and residential parcels in DU 6S.

Changes to the *Master Water Report Update for Eastmark* include:

- Eastmark is approaching full buildout; therefore, the last few Development Units will be constructed per this Master Plan report. Additionally, in order to model the interim condition with DU 1, DU 2, DU 5W, and DU 6S constructed, a water model scenario analyzing the interim condition is included within this report. Refer to Exhibit 2 – *Master Water Exhibit - Interim Condition (Served by SCAP).*
- Development Unit 5N was split into East and West portions.
- Revised boundary of DU 6N and DU 6S. DU 6N decreased to approximately 208 acres, while DU 6S increased to approximately 475 acres.
- Combined boundary of DU 1, DU 2, and DU 5W; which is now called DU 1-2-5W.
- Revised DU 1-2-5W, DU 5E, DU 6N, and DU 6S land uses, boundaries, and naming convention to reflect more detailed planning of parcel boundaries, based on potential end users.
- Removed Great Park within DU 2.
- Revised land uses within DU 3/4 and DU 6S to reflect more detailed planning of land uses, based on detailed planning and approved plans.
- Added a waterline loop within DU 5E to serve Parcels DU-5E1, DU-5E2, DU-5E North, DU-6B, and DU-6C.
- Revised waterline size and alignment between DU 6N and DU 6S, based on planned residential land use within Parcel DU 6D.
- Revised waterline alignment within Eastmark Parkway along the DU 1, DU 2, DU 5W and DU 5E boundary; per roadway realignment.

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

1.0 INTRODUCTION

1.1 General Background and Project Location

The proposed Eastmark development (Site) is anticipated to be an approximate 3,154-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, office, industrial, hotel, resort, various community uses, and open spaces.

This Master Water Report Update has been prepared in accordance with Wood, Patel & Associates, Inc.'s (WOODPATEL) understanding of the City of Mesa's technical requirements for water distribution systems, as applicable for 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, Cadence (formerly Pacific Proving Grounds) on the south, Ellsworth Road to the west, and Signal Butte Road to the east (refer to Exhibit 1).

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 buildout conditions. The purpose of this update is to reflect proposed revisions to the water system layout for DU 1-2-5W, DU 3/4, DU 5E, DU 6N, and DU 6S. Land uses modeled within this report are not intended to restrict any entitlement agreement between the City of Mesa and the Developer. If the Site is redeveloped to the full entitlement in the future, additional infrastructure may need to be constructed at that time.

A more-detailed analysis of the water system for each development unit was previously provided with each Development Unit Master Water Report. Each Development Unit Master Water Report has addressed changes in the development units and adjacent development units which has occurred as development progressed and densities changed. 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 completed the *2018 City of Mesa Water Master Plan Report (Update).* According to this report, the Site is located in the City's Desert Wells pressure zone.

1.4 Full Buildout Condition

The land use utilized to calculate water demands and to determine required pipe sizes for the Site are based on projected full buildout 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 17 – *Overall Eastmark Modeled Land Use,* Exhibit 3 – *Master Water Exhibit - Full Buildout (Served by SCAP).*

1.5 Interim Condition

The land use utilized to calculate water demands and to determine required pipe sizes for the Site are based on the projected interim condition for residential dwelling unit densities, commercial uses, industrial uses, and community uses within the Site. Only Parcels DU-5A and DU-6A are assumed to be constructed within DU 5 East and DU 6 North. The interim model also takes into account demands from proposed areas DU 1-2-5W and DU 6D. For a detailed breakdown of the interim modeled land use areas, refer to Table 21 – *Interim Eastmark Modeled Land Use*, and Exhibit 2.

1.6 Development Unit Master Plan Approvals

As each development unit was planned, this *Master Water Report for Eastmark* was updated as a living document to reflect changes to the land use plan that would affect the full buildout potable water distribution system. Since the development of Eastmark has spanned 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 has been master planned utilizing current approved criteria, which accurately reflects water demand calculations on a master planned level for the entire community. The development unit Master Plans are prepared to ensure the planned infrastructure for the development units will adequately serve the interim condition prior to the full buildout, as contemplated in the overall Master Plans. The approvals of development unit water master plans and corresponding criteria are as follows:

- DU 7 – Approved report dated August 10, 2012, with 2009 City of Mesa water criteria.
- DU 3 South - Approved report dated November 26, 2013, with 2012 City of Mesa water criteria.
- DU 8 & 9 – Approved report dated January 14, 2014, with 2012 City of Mesa water criteria.
- DU 3/4 – Approved report dated April 8, 2014, with 2012 City of Mesa water criteria along with City-accepted population based criteria.
- DU 5E – Approved report dated April 16, 2014, with 2012 City of Mesa water criteria along with City-accepted population based criteria was replaced by DU 5N, DU 5, and DU 6S.
- DU 6S – Approved report dated October 9, 2015, with 2017 City of Mesa water criteria along with City-accepted population based criteria.
- DU 5N, DU 5, and DU 6S – Approved report dated February 16, 2017, with 2017 City of Mesa water criteria, along with City-accepted population-based criteria.
- DU 3/4 – Approved report dated June 30, 2020, with 2012 City of Mesa water criteria, along with City-approved population based criteria.
- DU 2 – Approved report, dated June 30, 2020, with 2019 City of Mesa water criteria along with City-accepted population based criteria.

1.7 Construction Phasing

This Master Water Report Update presents the full buildout condition of the Site. It is anticipated that waterline construction will be phased corresponding to the Development Unit Plans. Proposed plans are 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.

1.8 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 predeveloped Site consists of multiple automotive test tracks, a grouping of commercial/industrial buildings, and undisturbed desert. Demolition and remediation of the existing facilities is ongoing. The Site was 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 western boundary. Along the northern boundary, the Site is bordered by open space, undeveloped desert, and commercial development. Along the southern boundary, the Site is bordered by a residential development named Cadence, which is currently under construction. The eastern boundary of the Site is bordered by two (2) residential developments, including Nova Vista and Bella Via (formerly known as Mountain Horizons). Additionally, the La Mira residential subdivision is currently under construction. 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:

Desert Wells Pressure Zone:

- Ground elevation range = 1,375 to 1,525 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 north of Elliot Road to Pecos Road.

- 30-inch waterline extending south along Signal Butte Road from Elliot Road to Rueben Avenue.
- 24-inch waterline extending south along Signal Butte Road to Elliot Road.
- 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 east of Signal Butte Road.
- 12-inch waterline extending east along Warner Road from the Loop 202 Freeway to Ellsworth Road.
- 16-inch waterlines extending east along Warner Road and Ray Road, from Signal Butte Road to Mountain Road.
- 24-inch waterline extending east/west along Williams Field Road, adjacent to the southern boundary of Eastmark.
- 24-inch waterline along Signal Butte Road, from Ray Road to Williams Field Road.
- 16-inch waterline extending south along Crimson Road, between DU 3 South and Williams Field Road.

2.4 Existing Onsite Water Infrastructure

It is WOODPATEL's understanding, water service lines for the General Motors Proving Grounds offices and facilities were previously removed by the developer in conjunction with construction of Eastmark. Additionally, it is WOODPATEL's understanding the following onsite waterlines have been constructed:

- 12-inch waterlines looping around the Apple facility (DU 6A) 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 Warner Road.
- 20-inch waterline extending north along Eastmark Parkway, from Ray Road to the DU 5N/DU 6S boundary.

- 12-inch waterline extending north along Everton Terrace, from DU 8 to the south boundary of DU 5N.
- 16-inch waterline extending north along Everton Terrace from the south/west boundary of DU 5N across the open space buffer.
- 12-inch waterline extending north between the open space buffer to Elliot Road.
- 12-inch waterline extending through DU 7 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 Ellsworth Road.
- 16-inch waterline extending southeast along Eastmark Parkway, from Ray Road to Signal Butte Road.
- 8-inch waterline extending north along Copernicus Drive, from Ray Road to Point Twenty-Two Boulevard within DU 3/4.
- 8-inch waterline extending north along Parc Joule Avenue, from Point Twenty-Two Boulevard to the open space buffer.
- 8-inch looped waterlines through portions of DU 6S, DU 7, DU 8 & 9, DU 3S, and portions of DU 3/4.
- 12-inch waterline through DU 3/4 North Phase 5, extending west from Inspirian Parkway to Ellsworth Road.

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 WOODPATEL's understanding of the following:

- Applicable water system design criteria listed in the *City of Mesa Engineering and Design Standards,* along with City-accepted population-based criteria.
- Previously-approved report criteria for DU 6N, DU 7, DU 8 & 9, DU 3S, DU 3/4, DU 6S, and DU 5.
- Regionally-accepted design standards.
- Title 18, Chapter 9 of the *Arizona Administrative Code.*
- DU 1, DU 2, DU 5W criteria provided by the end user.

Tables 2, 4, 6, 8, 10, 12, 14, and 16 present the full buildout 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, 13, and 15 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 2,000 gpm, and the commercial/industrial development was modeled with a minimum fire flow of 4,000 gpm.

3.2 Water Demand Design Flows

Water demands under full buildout and interim conditions are calculated using the design criteria listed in Section 3.1. For detailed calculations, refer to Table 17 – *Overall Eastmark Modeled Land* Use, and Table 21 – *Interim Eastmark Modeled Land Use.* Design flows are summarized below and include the adjustments for DU 1-2-5W.

Eastmark Full-Buildout Condition:

	Average-Day Demand MGD (gpm)	Max-Day Demand MGD (gpm)	Peak-Hour Demand MGD (gpm)
DU 1, DU 2, DU 5W	1.013 (704)	3.959 (2,750)	6.416 (4,456)
Remaining Eastmark	9.427 (6,707)	12.489 (9,005)	16.258 (11,290)
TOTAL	**10.440 (7,411)**	**16.448 (11,755)**	**22.674 (15,746)**

Eastmark Interim Condition:

	Average-Day Demand MGD (gpm)	Max-Day Demand MGD (gpm)	Peak-Hour Demand MGD (gpm)
DU 1, DU 2, DU 5W	1.013 (704)	3.959 (2,750)	6.416 (4,456)
Remaining Eastmark	5.178 (3,756)	7.943 (5,849)	11.436 (7,941)
TOTAL	**6.191 (4,460)**	**11.902 (8,599)**	**17.852 (12,397)**

Overall, the average day demand decreased from the previous Master Water Report based upon land use and demand updates. The maximum day and peak hour increased from the prior report due to the peak factor provided by the proposed development of DU 1-2-5W being much higher than City of Mesa peaking factors previously modeled.

3.3 Park Irrigation Water Demands

Landscape areas are based on land use data provided by DMB Mesa Proving Grounds. Landscape areas have been divided into two (2) water demand categories, including turf areas and low-water use areas. The Great Park shall be developed in four (4) or more phases. Phases 1 through 3 within DU 7 includes a 1-acre lake and up to 15 acres of turf, and 11 acres of low-water use landscaping. Phase 4 within DU 3/4 will include a planned 2-acre lake, up to 19.1 acres of turf, and 7.0 acres of low-water use landscaping.

The unit water demands for irrigation were based upon 4,400 gpd/ac for turf, per City of Mesa Design Standards, and 800 gpd per regional-accepted criteria for low-water-use irrigation. The peak-day landscaping demand for the Great Park, if the lakes are filled over 24 hours, is approximately 320 gpm. If the lakes are filled over 10 hours, then the instantaneous flow rate is approximately 767 gpm. Within the water model, the worst-case scenario, equal to filling the lakes in 10 hours/day, was utilized to size the waterlines adjacent to the Great Park.

3.4 Sustainability Techniques

Currently, all of the water demands for the Site are planned to connect to the potable water system. In the future, new techniques 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 *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*. Fire flow analysis were modeled both with a higher flow than required to see how much flow the system is capable of delivering and at the actual fire flow demand to evaluate system velocities during the fire flow event. 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, 12, 14, and 16 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 buildout and interim design conditions. Refer to Exhibit 2, Exhibit 3, and Exhibit 4 – *Master Water Exhibit - Full Buildout (Served by DWGWF)* 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 20 – *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:

Interim Onsite Pressure (psi)

	Non-Drought		Drought*	
Hydraulic Model Scenario	Low	High	Low	High
Average Day Demand	64	107	--	--
Peak Hour Demand	64	102	--	--

* The infrastructure for the Desert Wells Groundwater facility is not anticipated to be completed prior to the interim-condition buildout. Thus, it was not modeled during the interim condition scenarios

Full Buildout Onsite Pressure (psi)

	Non-Drought		Drought	
Hydraulic Model Scenario	Low	High	Low	High
Average Day Demand	64	101	64	107
Peak Hour Demand	64	102	64	105

Fire flow results for the model indicate available fire flows of 4,000 gpm for commercial development, and 2,000 gpm for residential development during Max Day Demand, while maintaining residual pressures greater than 20 psi throughout the Site at full buildout conditions. Results also indicate fire flow velocities within future waterlines do exceed 10 feet per second (fps) and five (5) waterline segments slightly exceed 10 fps within existing waterlines. Velocities within these existing waterlines do not exceed 12 fps at full buildout condition. Detailed hydraulic modeling results, calculations, and exhibits are provided in the attached appendices and exhibits. Modeled outflow from each water source is shown below.

The drought condition model utilizes the 2040 capacity of the DWGWF and SBGWF determined from the City of Mesa Facility Inventory (refer to Table 20).

Interim Flow from South CAP Desert Wells Pump Station

	Non-Drought	Drought
Average Day Demand:	3,871 gpm	--
Max Day Demand:	7,361 gpm	--
Peak Hour Demand:	10,563 gpm	--

Interim Flow from City of Mesa Water System, North of Elliot Road

	Non-Drought	Drought
Average Day Demand:	589 gpm	--
Max Day Demand:	1,238 gpm	--
Peak Hour Demand:	1,835 gpm	--

Full-Buildout Flow from South CAP Desert Wells Pump Station

	Non-Drought	Drought
Average Day Demand:	6,474 gpm	5,005 gpm
Max Day Demand:	10,194 gpm	7,730 gpm
Peak Hour Demand:	13,624 gpm	10,230 gpm

Full-Buildout Flow from City of Mesa Water System, North of Elliot Road

	Non-Drought	Drought
Average Day Demand:	936 gpm	762 gpm
Max Day Demand:	1,554 gpm	1,267 gpm
Peak Hour Demand:	2,123 gpm	1,725 gpm

Full-Buildout Flow from Desert Wells Groundwater Facility

	Non-Drought	Drought
Average Day Demand:	0 gpm	1,644 gpm
Max Day Demand:	0 gpm	2,751 gpm
Peak Hour Demand:	0 gpm	3,791 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 the City's regional needs (refer to Exhibit 2 and Exhibit 3).

5.2 Water Sources

According to the *2018 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 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 the construction of the C.A.P. raw water conveyance system and South CAP Water Treatment Plant are completed. The City completed Phase 1 of the C.A.P. raw water conveyance system along Elliot Road, and Phase 2 will be fully constructed by 2025, per the *2018 City of Mesa Water Master Plan (Update)*.

According to the *2018 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 *2018 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 Exhibit 3. 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 WOODPATEL'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 buildout hydraulic modeling results, peak-hour residual pressures within the Site are at or above 60 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 buildout and interim conditions have been evaluated for the design of the water distribution system. It is anticipated waterline construction at Eastmark will be phased with these two scenarios to accomplish full buildout.

3. Previously, a more-detailed analysis of the water system for each development unit was provided with each Development Unit Master Water Report. Each Development Unit Master Water Report addressed changes in the development units and adjacent development units which would occur as development progressed and densities changed, and each report presented the portions of the improvements that were to be built to serve the development unit. Since Eastmark is approaching full buildout, no further Development Unit Master Water Reports will be completed. However, individual parcels will still be required to complete Water Basis of Design Reports.

4. The approximate average daily water demand for the full buildout of the Site is 10.440 million gallons per day (MGD), and 6.191 MGD for the interim condition, per Section 3.2 of this report.

5. The full buildout and interim condition for the Site meets the revised well capacity per the *2018 City of Mesa Master Water Plan (Update)*.

6. 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.

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

8. 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.

9. It is WOODPATEL's understanding, the City of Mesa will evaluate the planned capital improvements for adequacy in serving Eastmark, as well as the full buildout service areas.

10. 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, with exception to note 9 above.

TABLE 1

DU 6 NORTH MODELED LAND USE

Project: DU 6 North 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 (GPD)	Total Avg Day (GPD)
DU-6A	--	--	--	86.5	1,340,000	INDUSTRIAL[1]	23,121	2,000,000	2,000,000
DU-6B	--	--	--	50.7	723,200	INDUSTRIAL[2]	23,121	1,172,235	1,172,235
DU-6C	--	--	--	67.3	700,000	INDUSTRIAL[3]	1,160	78,080	78,080
Other	--	--	--	3.0	--	Road ROW	--	--	--
DU 6N Totals	**--**			**207.5**	**2,763,200**			**3,250,315**	**3,250,315**

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	50% DU-6A	--	43.25	--	INDUSTRIAL	11,561	1,000,000	694.4
J-DU6-050	--	--	--	--	INDUSTRIAL	--	--	--
J-DU6-060	50% DU-6A	--	43.25	--	INDUSTRIAL	11,561	1,000,000	694.4
J-DU6-070	--	--	--	--	INDUSTRIAL	--	--	--
J-DU6-090	--	--	--	--	INDUSTRIAL	--	--	--
J-DU6-100	DU-6C	--	67.30	--	INDUSTRIAL	1,160	78,080	54.2
J-1130EX	1/2 DU-6B	--	25.4		INDUSTRIAL	11,561	586,118	407.0
J-2140EX	1/2 DU-6B	--	25.4		INDUSTRIAL	11,561	586,117	407.0
							3,250,315	**2,257.0**

Notes:
1) The demand for DU-6A (Apple) was given by the City of Mesa as 2 million gallons a day (MGD). It was also determined that the industrial land use within DU-6A would draw a constant amount of water into onsite storage tanks, which would be used to supply water to the site during the max day and peak hour scenarios. Thus, the industrial demand is the same for average day, max day, and peak hour scenarios.

2) The proposed land uses will be similar to parcel DU-6A, which has a demand of appoximately 23,121 GPD/Acre. It was also assumed that the industrial land use within DU-6B would draw a constant amount of water into onsite storage tanks, which would be used to supply water to the site during the max day and peak hour scenarios. Thus, the industrial demand is the same for average day, max day, and peak hour scenarios.

3) The potential end user of DU-6C is anticipated to be similar to DU-5A. It is assumed that 10% of the Site will be landscaped with low water use landscaping or approximately 6.7 acres. By multiplying 6.7 acres by 800 GPD/Acre, the outdoor average daily water demand is approximately 5,360 GPD. The total average day industrial water demand is 5,360 GPD + 1,200 (GPD/AC)*60.6 AC=78,080 GPD.

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: DU 6 North at Eastmark
Location: Mesa, Arizona
References: 2007 City of Mesa Engineering Design Standards

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT		UNIT DAILY WATER		NOTES
		RANGE / VALUE	UNITS	VALUE	UNITS	
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		NOTES
	VALUE	UNITS	
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	
Industrial / High Technology	12,293	GPD/AC	Based on projected industrial water use, provided by DMB & Associates.

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Max Day	2.00	x Ave Day Demand	4
Peak Hour	3.00	x Ave Day Demand	4
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	4
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.
4. Peaking Factors per 2012 City of Mesa Engineering Design Standards.

TABLE 3

DU 7 MODELED LAND USE

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 (GPD)
7-1	84	15.9	5.28	--	--	MDR-3	1,602	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	1,602	37,647
7-9	81	23.1	3.51	--	--	MDR-1	834	19,265
7-10	--	--	--	7.5	37,000	CHURCH	1,500	11,250
7-11	135	24.4	5.53	--	--	MDR-3	1,602	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	1,602	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
7-25	–	--	–	1.7	8,000	CIVIC	1,500	2,550
7-26	–	--	–	2.0	15,000	COMMERICAL/ RESTURANT	1,700	3,400
7-50	–	--	–	5.0	185,000	EDUCATION	1,500	7,500
7-51	–	--	–	8.0	20,000	EDUCATION	1,500	12,000
7-53	135	14.5	9.31	--	–	HDR-1	1,936	28,072
7-52, 7-54[1,2]	–	--	–	15.0	--	GREAT PARK TURF	1,579	75,800
				11.0	--	GREAT PARK LOW WATER USE		
				22.0	--	Lake/ Road R.O.W.		
				--	--	Public Restroom		
ROW				33.0	--	INFRASTRUCTURE ROAD R.O.W.	--	--
DU 7 Totals	**1,873**	**470.3**		**105.2**	**265,000**			**585,144**

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	--	2.0	--	COMMERICAL/ RESTAURANT	1,700	3,400	2.4
J-DU7-020	Refer to DU3/4							
J-DU7-030	7-52, 7-54[1]	--	48.0	--	GREAT PARK [1]	1,558	74,800	125
J-DU7-040	Refer to DU3/4							
J-DU7-050	Refer to DU3/4							
J-DU7-060	7-13	78	19.2	4.1	MDR-1	834	16,013	11.1
J-DU7-070	–	--	–	--	--	--	--	--
J-DU7-080	7-9, 7-11	216	47.5	4.5	MDR-1 MDR-3	1,229	58,354	40.5
J-DU7-090	–	--	–	--	--	--	--	--
J-DU7-100	7-1	84	15.9	5.3	MDR-3	1,602	25,472	17.7
	7-2	79	19.3	4.1	MDR-1	834	16,096	11.2
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	--	1.7	--	CIVIC	1,500	2,550	1.8
J-DU7-140	7-16, 7-19, 7-50	209	55.2	4.2	MDR-1, EDUCATION	912	50,367	35.0
	7-52, 7-54	--	--	--	PUBLIC RESTROOM[3]			
J-DU7-150	7-14, 7-51, 7-53	188	39.8	5.9	MDR-1, EDUCATION	1,369	54,500	37.8
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	7-10	--	7.5	0.0	CHURCH	1,500	11,250	7.8
J-1990EX	7-8	120	23.5	5.1	MDR-3	1,602	37,647	26.1
DU 7 Totals		**1,873**	**542.5**				**585,144**	**479.4**

Notes:

1) The irrigation system for the Great Park is supplied by a lake that is filled from the potable water system. Per DMB and Associates, the lake is planned to be filled within 10 hours/day. Therefore, the total instantaneous peak flow to fill the south lake at the Great Park is calculated as follows: 74,800 GPD *(1 Day/10 Hours)*(1 Hour/60 Minutes)= 125 GPM.

2) The Average Day Water demand for Parcel 7-52 was calculated by the following: (15 AC of Turf * 4,400 GPD/AC) + (11 AC of Low Water Use * 800 GPD/Acre) + (4 Restrooms * 250 GPD/Restroom) = 75,800 GPD.

3) The Average Day Water demand for Public Restrooms was calculated by the following: (4 Restrooms * 250 GPD/Restroom)=1,000 GPD

TABLE 4

DU 7 WATER DESIGN CRITERIA

Project: DU 7 at Eastmark
Location: Mesa, Arizona
References: 2009 City of Mesa Engineering Design Standards

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 v
Commercial / Retail / Office	1,700	GPD/AC	Source: City of Mesa 2009 Engineering and Design Standards.
Education/Civic/Church	1,500	GPD/AC	
Potable Irrigated Turf	4,400	GPD/AC	
Low Water Use Landscaping	800	GPD/AC	Per City of Mesa approved Criteria
Public Restrooms	250	Per Toilet	Based on ADEQ Public Restroom Requirement of 200 GPD/Restroom for Wastewater. Assumed a water demand of 250 GPD/Restroom.

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Max Day	2.00	x Ave Day Demand	4
Peak Hour	3.00	x Ave Day Demand	4
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.
4. Peaking Factors per 2012 City of Mesa Engineering Design Standards.

TABLE 5

DU 8 & 9 MODELED LAND USE

Project: DU 8 & 9 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
8-1	74	22.9	3.23	--	--	MDR-1	300	GPD/DU	22,200
8-2	87	30.0	2.90	--	--	MDR-1	300	GPD/DU	26,100
8-3	64	24.7	2.59	--	--	MDR-1	300	GPD/DU	19,200
8-3B	--	--	--	2.7	--	PARK	4400	GPD/AC	14,580
	9	4.0	2.25	--	--	MDR-1	300	GPD/DU	
8-4	42	21.0	2.00	--	--	MDR-1	300	GPD/DU	12,600
8-6	91	23.6	3.86	--	--	MDR-1	300	GPD/DU	27,300
8-7	74	28.2	2.62	--	--	MDR-1	300	GPD/DU	22,200
8-8	39	20.0	1.95	--	--	LDR-3	490	GPD/DU	19,110
8-9	64	21.7	2.95	--	--	MDR-1	300	GPD/DU	19,200
9-1	189	57.2	3.30	--	--	MDR-1	300	GPD/DU	56,700
9-2	99	25.6	3.87	--	--	MDR-1	300	GPD/DU	29,700
9-3	--	--	--	11.2	200,000	Civic	1500	GPD/AC	16,800
9-4	158	49.4	3.20	--	--	MDR-1	300	GPD/DU	47,400
9-5	144	39.8	3.62	--	--	MDR-1	300	GPD/DU	43,200
9-6	90	22.4	4.02	--	--	MDR-2	250	GPD/DU	22,500
9-7	226	60.7	3.72	--	--	MDR-1	300	GPD/DU	67,800
Other	--	--	--	61.9	--	Drainage Channel/Road ROW	--		0
DU 8 & 9 Totals	**1,450**	**451.2**		**75.8**	**200,000**				**466,590**

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	15.0	2.9	MDR-1	860	12,900	9.0	
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	20.5	2.0	MDR-1 & LDR-3	773	15,855	11.0	
J-DU8-100	1/2 8-2	44	15.0	2.9	MDR-1	880	13,200	9.2	*
J-DU8-110	8-3 & 8-3B, 1/2 8-6	119	43.2	2.8	MDR-1 & Park	1,101	47,580	33.0	
J-DU8-120	1/2 8-6, 1/2 8-7	82	25.9	3.2	MDR-1	950	24,600	17.1	
J-DU8-130	1/2 8-7, 1/2 8-8, 1/2 8-9	89	35.0	2.5	MDR-1 & LDR-3	864	30,255	21.0	
J-DU9-010	1/2 9-1	95	28.6	3.3	MDR-1	991	28,350	19.7	
J-DU9-020	1/2 9-1, 1/2 9-2 & 9-3	144	47.0	3.1	MDR-1 & Civic	1,098	51,600	35.8	
J-DU9-030	1/2 9-2 & 9-3, 1/2 9-4	128	43.1	3.0	MDR-1 & Civic	1,089	46,950	32.6	
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	151	44.6	3.4	MDR-1	1,016	45,300	31.5	
J-DU9-080	1/2 9-5, 1/2 9-7	185	50.3	3.7	MDR-1	1,103	55,500	38.5	
DU 8 & 9 Totals		**1,450**	**465.3**				**466,590**	**324.1**	

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

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY		UNIT DAILY WATER DEMAND		UNIT DAILY WATER DEMAND		NOTES
		RANGE / VALUE	UNITS	VALUE	UNITS	VALUE	UNITS	
LDR-1	Low Density Residential (LDR 0-1)	0.5	DU/AC	490	GPD/DU	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 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		NOTES
	VALUE	UNITS	
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

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	113	31.4	3.60	--	--	MDR-2	1218	38,245
3S-3	138	30.0	4.60	--	--	MDR-2	1218	36,540
DU 3S Totals	**388**	**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	50	13.0	3.8	MDR-2	1,218	15,834	11.0
J-DU3S-030	3S-1, 3S-2	72	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
		388	**92.3**				**112,421**	**78.1**

TABLE 8

DU 3 SOUTH WATER DESIGN CRITERIA

Project: DU 3S at Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

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	
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	204	GPD/AC	Source: Dwelling unit density divisions are
LDR-3	Low Density Residential (LDR-1-2)	1-2	DU/AC	281	GPD/AC	based on City of Mesa 2025 General Plan.
MDR-1	Medium Density Residential (MDR 2-4)	2-4	DU/AC	834	GPD/AC	Unit water demands are based on the City of
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	1,218	GPD/AC	Mesa 2012 Engineering and Design
MDR-3	Medium Density Residential (MDR 4-6)	4-6	DU/AC	1,602	GPD/AC	Standards. LDR 1.0 Average and MDR 4.0
MDR-4	Medium Density Residential (MDR 6-10)	6-10	DU/AC	1,523	GPD/AC	Average are used at locations where the
HDR-1	High Density Residential (HDR 10-15)	10-15	DU/AC	1,936	GPD/AC	dwelling unit densities are at or near 1 DU/AC
HDR-2	High Density Residential (HDR 15+)	15+	DU/AC	2,355	GPD/AC	and 4 DU/AC, respectively.
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	Source: City of Mesa 2012 Engineering and Design Standards.
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

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 to 3/4-3	251	40.0	6.28	--	MDR-4	–	–	–	–	250	GPD/DU	62,750	100,700
	165	11.0	15.00	-	HDR-2	–	–	–	–	230	GPD/DU	37,950	
	–	--	–	4.0	Open Space	–	–	–	–	–	--	–	
3/4-4	195	34.0	5.74	--	MDR-3	–	–	–	–	250	GPD/DU	48,750	48,750
3/4-6	–	--	–	60.8	Eastmark High School[2]	420,000	3,100	Students	3,100	28	GPD / Person	86,800	232,440
							240	Staff	240	20	GPD / Person	4,800	
							0.3	Acres of Turf/Acre	18.2	4,400	GPD/Acre	80,080	
							0.2	Acres of Low Water Use Landscaping/Acre	12.2	800	GPD/Acre	9,760	
	–	--	–		Aquatic Center (5 AC)	20,000	200	Patrons and Staff / Acre	3,400	15	GPD / Person	51,000	
3/4-7	–	--	–	5.5	Church	21,000	0.4	Employees / 1,000 S.F.	8.4	54	GPD / Person	454	6,754
							15	Patrons / 1,000 S.F.	315	20	GPD / Person	6,300	
3/4-8	56	10.51	5.33	--	MDR-2	–	–	–	–	250	GPD/DU	14,000	14,000
3/4-8B	216	8.50	25.41	--	HDR-2	–	–	–	–	230	GPD/DU	49,680	49,680
3/4-9	55	10.73	5.13	--	MDR-2	–	–	–	–	250	GPD/DU	13,750	13,750
3/4-9A	–	--	–	7.19	Restaurant	4,080	2.5	Employees and Patrons / 1,000 S.F.	10.2	80	GPD / Person	816	32,280
	–	--	–		Office	78,654	5.0	Employees / 1,000 S.F.	393.3	80	GPD / Person	31,464	
3/4-9B	–	--	–	7.37	Office	68,000	5	Employees / 1,000 S.F.	340	80	GPD / Person	27,200	27,200
3/4-9C	–	--	–	2.22	Restaurant	7,500	2.5	Employees and Patrons / 1,000 S.F.	18.8	80	GPD / Person	1,504	1,504
3/4-9D	–	--	–	4.35	Restaurant	3,900	2.5	Employees and Patrons / 1,000 S.F.	9.8	80	GPD / Person	784	31,909
	–	--	–		Hotel	66,000	120	Rooms	–	150	GPD / Room	18,000	
	–	--	–		Theater/ Entertainment Center (7 Screens)	24,000	250	Seats / Screen	1,750	7.5	GPD / Seat	13,125	
3/4-9E	–	--	–	2.11	Hotel	63,155	114	Rooms	–	150	GPD / Room	17,100	17,100
3/4-9F	–	--	–	5.95	Commercial/Retail	30,778	2.5	Employees and Patrons / 1,000 S.F.	76.9	80	GPD / Person	6,152	8,320
	–	--	–		Restaurant	10,855	2.5	Employees and Patrons / 1,000 S.F.	27.1	80	GPD / Person	2,168	
3/4-9G	–	--	–	1.83	Restaurant	10,380	2.5	Employees and Patrons / 1,000 S.F.	26.0	80	GPD / Person	2,080	2,080

3/4-9H	140	4.7	29.8	--	HDR-2	–	–	–	–	230	GPD/DU	32,200	35,950
	–	--	–	0.30	Recreation Center (Club House)[3]	5,000	–	–	250	15	GPD / Person	3,750	
3/4-9J/K	397	13.5	29.4	--	HDR-2	–	–	–	–	230	GPD/DU	91,310	101,735
	–	--	–	0.28	Recreation Center (Club House)[3]	5,000	–	–	695	15	GPD / Person	10,425	
3/4-9L	190	5.9	32.2	--	HDR-2	–	–	–	–	230	GPD/DU	43,700	51,975
	–	--	–	0.23	Recreation Center (Club House)[3]	5,000	–	–	285	15	GPD / Person	4,275	
	–	--	–		Commercial/Retail	20,000	2.5	Employees and Patrons / 1,000 S.F.	50	80	GPD / Person	4,000	
3/4-10	45	12.18	3.69	--	MDR-2	–	–	–	–	250	GPD/DU	11,250	11,250
3/4-10B	–	--	–	6.7	Commercial/Retail	11,000	2.5	Employees and Patrons / 1,000 S.F.	28	80.0	GPD / Person	2,240	63,400
	–	--	–	0.5	Commercial/Retail	6,972	2.5	Employees and Patrons / 1,000 S.F.	17	80.0	GPD / Person	1,360	
	260	12	21.67	--	HDR-2	–	–	–	–	230	GPD/DU	59,800	
3/4-11	41	11.76	3.49	--	MDR-2	–	–	–	–	250	GPD/DU	10,250	10,250
3/4-12	45	13.07	3.44	--	MDR-2	–	–	–	–	250	GPD/DU	11,250	11,250
3/4-13	44	13.4	3.28	--	MDR-2	–	–	–	–	250	GPD/DU	11,000	11,000
3/4-14 to 3/4-17	201	46.9	4.29	–	MDR-3	–	–	–	–	250	GPD/DU	50,250	50,250
3/4-18	121	10.2	11.9	--	HDR-1	–	–	–	–	230	GPD/DU	27,830	27,830
3/4-19 to 3/4-22	–	--	–	26.1	Great Park[1]	–	0.73	Acres of Turf/ Acre	19.1	4400	GPD/Acre	84,040	89,640
	–	--	–			–	0.27	Acres of Low Water Use Landscaping/ Acre	7.0	800	GPD/Acre	5,600	
3/4-23 to 3/4-27	217	62.3	3.5	--	MDR-1	–	–	–	–	250	GPD/DU	54,250	54,250
3/4-28 to 3/4-30	350	56.1	6.2	--	MDR-3	–	–	–	–	250	GPD/DU	87,500	87,500
3/4-31 to 3/4-33	223	41.9	5.3	--	MDR-3	–	–	–	–	250	GPD/DU	55,750	56,750
	–	--	–	2.3	Fire Station	–	4	Restrooms	–	250	GPD/Restroom	1,000	
3/4-34	276	16.6	16.6	--	HDR-2	–	–	–	–	230	GPD/DU	63,480	71,160
	–	--	–	1.6	Club House/Fitness	20,000	–	–	512	15	GPD / Person	7,680	
Other	–	--	–	39.9	Road ROW	–	–	–	–	–	--	–	--
DU 3 & 4 Totals	**3,488**	**435.3**		**179.2**		**901,274**						**1,320,657**	**1,320,657**

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

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	1/3 3/4-6	--	20.27	--	Eastmark High School(2)	146,667	77,480	77,480	53.8	53.8	
J-DU3-4-020	1/3 3/4-6	--	20.27	--	Eastmark High School(2)	146,667	77,480	77,480	53.8	53.8	
J-DU3-4-030	3/4-9B	--	7.37	--	Office	68,000	27,200	103,738	19.0	72.2	
	1/2 3/4-9J/K	198	6.89	28.7	HDR-2/ Recreation Center	2,500	50,867		35.3		
	3/4-7	--	5.50	--	Church	21,000	6,754		4.7		
	1/3 3/4-31 to 3/4-33	75	14.73	5.1	MDR-3/ Fire Station	–	18,917		13.2		
J-DU3-4-030A	3/4-9D	--	4.35	--	Hotel/ Theater/ Entertainment Center/ Restaurant	93,900	31,909	120,807	22.2	83.9	
	3/4-9G	--	1.83	--	Restaurant	10,380	2,080		1.4		
	3/4-9H	140	5.00	28.0	HDR-2/ Recreation Center	5,000	35,950		25.0		
	1/2 3/4-9J/K	199	6.89	28.9	HDR-2/ Recreation Center	2,500	50,868		35.3		
J-DU3-4-040	1/2 3/4-4	97	17.00	5.7	MDR-3	–	24,375	51,500	17.0	35.8	
	1/2 3/4-23 to 3/4-27	108	31.15	3.5	MDR-1	–	27,125		18.8		
J-DU3-4-050	3/4-19 to 3/4-22	--	26.10	--	Great Park[1]	--	89,640	89,640	149.4	149.4	
J-DU3-4-070	1/3 3/4-28 to 3/4-30	117	18.70	–	MDR-3	--	29,167	29,167	20.3	20.3	
J-DU3-4-080	1/3 3/4-31 to 3/4-33	74	14.73	5.0	MDR-3/ Fire Station	–	18,917	18,917	13.1	13.1	
J-DU3-4-090	1/2 3/4-10B	130	9.60	13.5	HDR-2/ Commercial/Retail	8,986	31,700	50,616	22.0	35.1	*
	1/3 3/4-31 to 3/4-33	74	14.83	5.0	MDR-3/ Fire Station	–	18,916		13.1		
J-DU3-4-100	1/2 3/4-10B	130	9.60	13.5	HDR-2/ Commercial/Retail	8,986	31,700	65,484	22.0	45.4	
	3/4-9C	--	2.22	--	Restaurant	7,500	1,504		1.0		*
	3/4-9A	--	7.19	--	Restaurant/Office	82,734	32,280		22.4		
J-DU3-4-110	1/3 3/4-28 to 3/4-30	117	18.70	–	MDR-3	--	29,167	29,167	20.3	20.3	
J-DU3-4-120	–	--	–	--	--	–	--	–	–	–	
J-DU3-4-130	1/2 3/4-34	138	9.10	15.2	MDR-2/ Club House	10,000	35,580	35,580	24.7	24.7	*
J-DU3-4-140	1/2 3/4-34	138	9.10	15.2	MDR-2/ Club Hosue	10,000	35,580	49,580	24.7	34.4	*
	3/4-8	56	10.51	5.3	MDR-2	--	14,000		9.7		
J-DU3-4-150	1/3 3/4-28 to 3/4-30	116	18.70	–	MDR-3	--	29,166	42,916	20.3	29.8	
	3/4-9	55	10.73	5.1	MDR-2	--	13,750		9.5		
J-DU3-4-160	3/4-11	41	11.76	3.5	MDR-2	--	10,250	21,500	7.1	14.9	
	3/4-10	45	12.18	3.7	MDR-2	--	11,250		7.8		

J-DU3-4-200	1/3 3/4-1 to 3/4-3	84	13.33	6.3	MDR-4	--	20,917	33,567	14.5	23.3
		55	3.67	15.0	HDR-2	--	12,650		8.8	
		--	1.33	--	Open Space	--	--		--	
J-DU3-4-210	1/3 3/4-6	--	20.26	--	Eastmark High School(2)	146,666	77,480	135,422	53.8	94.1
	1/3 3/4-1 to 3/4-3	84	13.33	6.3	MDR-4	--	20,917		14.5	
		55	3.67	15.0	HDR-2	--	12,650		8.8	
		--	1.33	--	Open Space	--	--		--	
	1/2 3/4-4	98	17.00	5.8	MDR-3	--	24,375		17.0	
J-DU6-130	1/2 3/4-12	23	6.54	3.5	MDR-2	--	5,625	11,125	4.0	7.8
	1/2 3/4-13	22	6.70	3.3	MDR-2	--	5,500		3.8	
J-DU6-140	1/2 3/4-14 to 3/4-17	101	23.45	4.3	MDR-3	--	25,125	25,125	17.5	17.5
J-DU6-170	1/2 3/4-12	22	6.53	3.4	MDR-2	--	5,625	36,250	4.0	25.3
	1/2 3/4-13	22	6.70	3.3	MDR-2	--	5,500		3.8	
	1/2 3/4-14 to 3/4-17	100	23.45	4.3	MDR-3	--	25,125		17.5	
J-300EX	3/4-9F	--	5.95	--	Commerical/ Retail/ Restaurant	41,633	8,320	25,420	5.8	17.7
	3/4-9E	--	2.11	--	Hotel	63,155	17,100		11.9	
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-DU3S-080	3/4-9L	190	6.13	31.0	HDR-2/ Recreation Center/ Commercial/ Retail	25,000	51,975	101,655	36.1	70.6
	3/4-8B	216	8.50	25.4	HDR-2	--	49,680		34.5	
J-DU7-020	1/3 3/4-1 to 3/4-3	83	13.34	6.2	MDR-4	--	20,917	33,567	14.5	23.3
		55	3.66	15.0	HDR-2	--	12,650		8.8	
		--	1.33	--	Open Space	--	--		--	
J-DU7-040	1/2 3/4-23 to 3/4-27	109	31.15	3.5	MDR-1	--	27,125	27,125	18.8	18.8
J-DU7-050	3/4-18	121	10.20	11.9	HDR-1	--	27,830	27,830	19.3	19.3
DU 3 & 4 Totals		**3,488**	**574.69**			**901,274**	**1,320,657**	**1,320,657**	**1,004.6**	**1,004.6**

Notes:

1) The irrigation system for the Great Park is supplied by a lake planned in Great Park Phase 4 just north of Point Twenty-Two Blvd within Development Unit 3/4 that is filled from the potable water system. Per DMB Mesa Proving Grounds,LLC, the lake is planned to be filled within 10 hours/day. Therefore, the total instantaneous peak flow to fill the north lake at the Great Park is calculated as follows: (89,640 GPD within DU 3/4) *(1 Day/10 Hours)*(1 Hour/60 Minutes)= 149 GPM. The Great Park demand within DU 3/4 is modeled at junction J-DU3-4-050. Overall peak flow to fill the north lake and irrigate the Great Park is calculated as follows: (149 GPM within DU 3/4) + (56 GPM within DU 2) = 205 GPM. Refer to Development Unit 2 for Great Park details.

2) Eastmark High School water demands were taken from the Eastmark High School Water System Basis of Design Report.

3) Total Population was based on the parking spaces provided on the Eastmark Commerical Core Concept Plan dated July 24, 2019.

TABLE 10

DU 3/4 WATER DESIGN CRITERIA

Project: DU 3/4 at Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards and City of Mesa approved population based design criteria

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
Eastmark High School[3]	3,100	Students	28	GPD / Person	Source: City of Mesa approved population based criteria
	240	Staff	20	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	15	GPD / Person	
Recreation Center (Club House)	Based on the parking spaces provided on Eastmark Commerical Coredated July 24, 2019.		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	
Public Restrooms	---	---	250	GPD/Restroom	Title 18, Chapter 9 of the Arizona Adminstrative Code

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.
3. The assumptions for Eastmark High School were taken from the *Final Water Design Report for Queen Creek High School-Eastmark Campus* , prepared by Hess-Rountree, Inc. dated January 12,

TABLE 11

DU 6 SOUTH MODELED LAND USE

Project: DU 6 South 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	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)
6-1/2	107	31.0	3.5	–	MDR-1	–	–	–	–	420	GPD/DU	44,940	44,940
	--	–	--	1.7	Road ROW/ Open Space	–	--	–	–	--	–	–	
6-3	–	–	–	17.9	Commercial/Retail	131,000	2.5	Employees and Patrons / 1,000 S.F.	327.5	80	GPD / Person	26,200	26,200
				0.5	Open Space	—	—	—	---	—	--	--	
6-4, 6-5	92	31.3	2.9	–	MDR-1	–	–	–	–	420	GPD/DU	38,640	38,640
	–	–	–	5.2	Open Space	—	—	—	---	—	--	--	
6-6	58	17.9	3.2	–	MDR-1	–	–	–	–	420	GPD/DU	24,360	24,360
	–	–	–	1.4	Open Space	—	—	—	---	—	--	--	
6-7	61	21.0	2.9	–	MDR-1	–	–	–	–	420	GPD/DU	25,620	25,620
6-8	52	30.2	1.7	–	LDR-3	–	–	–	–	470	GPD/DU	24,440	24,440
	--	–	--	0.8	Open Space	—	—	—	---	—	--	--	
6-9 & 6-17	116	24.9	4.7	–	MDR-3	–	–	–	–	400	GPD/DU	46,400	46,400
	--	–	--	0.5	Open Space	—	—	—	---	—	--	--	
6-10 through 6-12	171	41.9	4.1	–	MDR-2	–	–	–	–	420	GPD/DU	71,820	71,820
6-13 through 6-15	161	50.2	3.2	–	MDR-1	–	–	–	–	420	GPD/DU	67,620	67,620
6-16 through 6-18	114	36.7	3.1	–	MDR-1	–	–	–	–	420	GPD/DU	47,880	47,880
6-19 through 6-23	291	72.8	4.0	–	MDR-2	–	–	–	–	420	GPD/DU	122,220	122,220
	--	–	--	4	Open Space	–	--	–	–	--	–	–	
DU-6D	141	42.8	3.3	–	MDR-1	–	–	–	–	420	GPD / Person	59,220	123,620
	161	37.1	4.3	–	MDR-3	–	–	–	–	400	GPD / Person	64,400	
	--	–	--	5.4	Road ROW/ Open Space	–	--	–	–	--	–	–	
DU 6 South Totals	**1,525**	**437.8**		**37.4**		**131,000**						**663,760**	**663,760**

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.)	Avg Day Flow (GPD)	Total Avg Day Flow (GPD)	Avg Day (GPM)	Total Avg Day Flow (GPM)
J-DU6-110	6-9, 6-17	116	25.4	4.7	MDR-3	–	46,400	70,760	32.2	49.1
	6-6	58	19.3	3.0	MDR-1	–	24,360		16.9	
J-DU6-120	6-4, 6-5	92	36.5	2.5	MDR-1	–	38,640	72,450	26.8	50.3
	1/2 6-13 to 6-15	81	25.1	3.2	MDR-1	–	33,810		23.5	
J-DU6-130	6-16, 6-18	114	36.7	3.1	MDR-1	–	47,880	47,880	33.3	33.3
J-DU6-140	1/2 6-13 to 6-15	80	25.1	3.2	MDR-1	–	33,810	69,720	23.5	48.4
	1/2 6-10 to 6-12	86	21.0	4.1	MDR-2	–	35,910		24.9	
J-DU6-150	1/2 6-7	30	10.5	2.9	MDR-1	–	12,810	60,940	8.9	42.3
	1/2 6-8	26	15.5	1.7	LDR-3	–	12,220		8.5	
	1/2 6-10 to 6-12	85	20.9	4.1	MDR-2	–	35,910		24.9	
J-DU6-160	6-1/2	107	32.7	3.3	MDR-1	–	44,940	69,970	31.2	48.6
	1/2 6-7	31	10.5	3.0	MDR-1	–	12,810		8.9	
	1/2 6-8	26	15.5	1.7	LDR-3	–	12,220		8.5	
J-260EX	6-3	–	18.4	–	Commerical/ Retail	131,000	26,200	26,200	18.2	18.2
J-DU3-4-170	6-19 to 6-23	291	76.8	3.8	MDR-2	–	122,220	122,220	84.9	84.9
J-DU6-080	DU-6D	141	48.2	2.9	MDR-1	–	59,220	123,620	41.1	85.8
		161	37.1	4.3	MDR-3	–	64,400		44.7	
DU 6 South Totals		**1,525**	**475.2**			**--**	**663,760**	**663,760**	**460.9**	**460.9**

TABLE 12

DU 6 SOUTH WATER DESIGN CRITERIA

Project: DU 6S at Eastmark
Location: Mesa, Arizona
References: 2017 City of Mesa Engineering Design Standards and City of Mesa approved population based design criteria

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 2017 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	470	GPD/DU	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	420	GPD/DU	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	420	GPD/DU	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	400	GPD/DU	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	254	GPD/DU	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	194	GPD/DU	
HDR-2	High Density Residential (HDR 15+)	20.0	DU/AC	154	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	3
Peak Hour	3.0	x Ave 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	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 2017 City of Mesa Engineering Design Standards.
2. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.
3. Peaking Factors per 2017 City of Mesa Engineering Design Standards.

TABLE 13

DU 5 EAST MODELED LAND USE

Project: DU 5 East 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	Land Use	Floor Area (SQ. FT.)	Total Population or Acreage	Unit Daily Water Demand (GPD/DU, AC, or S.F.)		Avg Day Flow (GPD)	Total Avg Day Flow (GPD)
DU-5A	--	--	--	25.0	Industrial[1]	390,000	25	1,000	GPD/ACRE	25,000	29,000
	--	--	--	5.0	Low Water Use Landscaping	--	5.0	800	GPD/Acre	4,000	
	--	--	--	1.1	Road ROW	--	--			--	
DU-5B	--	--	--	47.4	Industrial[2]	560,000	47.4	1,000	GPD/ACRE	47,400	55,000
	--	--	--		Low Water Use Landscaping (9.5 AC)	--	9.5	800	GPD/Acre	7,600	
DU-5E North	--	--	--	120.7	Industrial[3]	1,250,000	120.7	23,121	GPD/ACRE	2,790,705	2,790,705
DU-5E1	625	25	25	--	HDR-2	--	--	154	GPD/DU	96,250.0	110,410
	--	--	--	6.8	Road ROW/ Well Site/ Open Space/'Low Water Use Landscaping (35.4 AC)	--	17.7	800	GPD/Acre	14,160.0	
DU-5E2	--	--	--	28.5	Industrial	300,000	28.5	1,000	GPD/ACRE	28,500	42,660
	--	--	--	4.6	Open Space/'Low Water Use Landscaping (35.4 AC)	--	17.7	800	GPD/Acre	14,160.0	
DU5 NorthTotals	**--**	**25.0**		**239.1**		**2,500,000**				**3,027,775**	**3,027,775**

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.)	Avg Day Flow (GPD)	Total Avg Day Flow (GPD)	Total Avg Day Flow (GPM)
J-DU5N-010	DU-5E2	--	33.1	--	Industrial	300,000	42,660	42,660	29.6
J-DU5N-020	DU-5E1	625	31.8	--	HDR-2/Road ROW	--	110,410	110,410	76.7
J-DU5N-030	5A	--	31.1	--	Industrial	390,000	25,000	29,000	20.1
		--		--	Low Water Use Landscaping/ Road ROW	--	4,000		
J-DU5N-040	--	--	--	--	--	--	--	--	--
J-DU5N-070	1/2 5E-North	--	60.4	--	Industrial/ Low Water Use Landscaping/ Road ROW	625,000	1,395,353	1,395,353	969.0
J-DU5N-080	1/2 5E-North	--	60.3	--	Industrial/ Low Water Use Landscaping/ Road ROW	625,000	1,395,352	1,395,352	969.0
J-2340EX	1/2 5B	--	23.7	--	Industrial	280,000	23,700	27,500	19.1
		--		--	Low Water Use Landscaping	--	3,800		
J-110EX	1/2 5B	--	23.7	--	Industrial	280,000	23,700	27,500	19.1
		--		--	Low Water Use Landscaping	--	3,800		
	TOTALS	**625**	**264.1**			**2,500,000**	**3,027,775**	**3,027,775**	**2,103**

Notes:

1) The user of DU-5A anticipates an indoor average daily water demand of approximately 25,000 GPD. It is assumed that 20% of the Site will be landscaped with low water use landscaping (approximately 5 Acres). By multiplying 5 Acres by 800 GPD/Acre, the outdoor average daily water demand is approximately 4,000 GPD. The total average daily water demand for the industrial land uses within DU-5A is 25,000 GPD + 4,000 GPD = 29,000 GPD.

2) DU 5B is anticipated to have the same water use of 1,000 GPD/Acre for the indoor water usage as DU-5A. Additionally, it was assumed that 20% of the Site would have low water use landscaping.

3) DU-5E North is anticipated to have an average day demand of 23,121 GPD/Acre for the industrial land use per information provided by the City of Mesa. It was also determined that the industrial land use withing DU-5E would draw a constant amount of water into onsite storage tanks, which would be used to supply water to the Site during the max day and peak hour scenarios. Thus, the industrial demand is the same for average day, max day, and peak hour scenarios.

TABLE 14

DU 5 EAST WATER DESIGN CRITERIA

Project: DU 5E at Eastmark
Location: Mesa, Arizona
References: 2017 City of Mesa Engineering Design Standards and City of Mesa approved population based design criteria

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 2017 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	470	GPD/DU	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	420	GPD/DU	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	420	GPD/DU	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	400	GPD/DU	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	254	GPD/DU	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	194	GPD/DU	
HDR-2	High Density Residential (HDR 15+)	20.0	DU/AC	154	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	3
Peak Hour	3.0	x Ave 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	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 2017 City of Mesa Engineering Design Standards.
2. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.
3. Peaking Factors per 2017 City of Mesa Engineering Design Standards.

TABLE 15

DU 1-2-5W MODELED LAND USE

Project: DU 1, DU 2 & DU 5W 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	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-1, DU-2, & DU-5W	–	--	–	394.5	Industrial	3,000,000	--	–	--	–	–	1,013,760	1,013,760
	–	--	–	1.5	Road ROW/Open Space	–	--	–	--	–	–	–	
DU 1, 2, & 5W Totals	**–**	**--**	**–**	**396.0**		**3,000,000**						**1,013,760**	**1,013,760**

Project: DU 1, DU 2 & DU 5W at Eastmark
Location: Mesa, Arizona

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-360EX	1/3-DU-1, DU-2, & DU-5W	--	198.0	--	Industrial	–	506,880	1,013,760	352.0	704.0
J-DU5N-050	1/3-DU-1, DU-2, & DU-5W	--	198.0	--	Industrial	–	506,880		352.0	
DU 1, 2, & 5W Totals		**--**	**396.0**			**–**	**1,013,760**	**1,013,760**	**704.0**	**704.0**

Notes:
1) The estimated average day demand for the anticipated industrial land uses utilized the following information from Olsson Engineers Land Use Tables & Utility Monthly Water Use Phase 1 Table:
*Based on the Phase 1 relationship between the Max Day Demand GPDM to Average Daily Water Use, a peaking factor of approximatly 3.9 was determined. Phase 1 Average Daily Water Use Flow over 12 months=403,789 GPD and Phase 1 Max Day GPD=1,576,600 GPD.
*Maintaining the same relationship assumption from Phase 1 to Full Buildout (FBO). FBO Max Day Demand=3,941,501 GPD + 17,460 GPD= 3,958,961 GPD= 2750 PGM, therefore, FBO Average Day Flow=FBO Max Day Demand/Peaking Factor= 2.750 GPM/4= 704GPM= 1.013.760 GPD

TABLE 16

DU 1-2-5W WATER DESIGN CRITERIA

Project: DU 1, DU 2 & DU 5W at Eastmark
Location: Mesa, Arizona
References: Per Olsson Engineer's land use information provided on 01/17/2021

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	Population Density		WATER DESIGN DEMANDS (PER CAPITA)		NOTES
Industrial	---	—	—	---	Refer to the Utility Monlty Water Use - Phase 1 Table provided by Olsson Engineers dated 01/17/2021 in Appendix E

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	-	3

Notes:
1. Per 2019 City of Mesa Engineering Design Standards.
2. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.
3. DU2 Hazen-Williams C-value per previously approved master plans.

TABLE 17

OVERALL EASTMARK MODELED LAND USE

Project: Eastmark
Location: Mesa, Arizona

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	0.0	50.2	1,073.9	301.1	324.8	40.0	24.7	97.2	**1,911.9**	0.0	–
Dwelling Units	0	91	3,572	1,226	1,684	251	256	2,269	**9,349**	0	**9,349**

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, 2, & 5W	396.0	0.0	--	0	0.0	3,000,000	--	0.0	0.0	1.5	1,013,760	396	2,560.0
3S	92.3	92.3	388	0	0.0	--	0.0	0.0	0.0	0.0	112,421	92.3	1,218.0
3/4	616.8	435.3	3,488	234	42.9	901,274	60.8	5.5	2.3	70.0	1,320,657	616.8	2,141.1
5E	264.1	25.0	625	0	221.6	2,500,000	0.0	0.0	0.0	17.5	3,027,775	264.1	11,464.5
6N	207.5	0.0	--	0	204.5	2,763,200	0.0	0.0	0.0	3.0	3,250,315	207.5	15,664.2
6S	475.2	437.8	1,525	0	17.9	131,000	0.0	0.0	0.0	19.5	663,760	475.2	1,396.8
7	575.5	470.3	1,873	0	2.0	265,000	13.0	7.5	1.7	81.0	585,144	575.5	1,016.8
8	198.8	196.1	544	0	0.0	--	0.0	0.0	0.0	2.7	182,490	198.8	918.0
9	328.2	255.1	906	0	0.0	200,000	0.0	0.0	11.2	61.9	284,100	328.2	865.6
Subtotal:	**3,154.4**	**1,911.9**	**9,349**	**234**	**488.9**	**9,760,474**	**73.8**	**13.0**	**15.2**	**257.1**	**10,440,422**	**3,154.4**	--

Notes:

[1] Anticipated number of "Keys" represents hotel and resort uses. This includes approximately 6.5 acres within DU-3/4.

[2] Non-residential water demands are calculated based on actual land use where detailed information is known and estimated square feet on the remainder.

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

TABLE 18

WATER DEMAND DESIGN FLOWS (FULL BUILDOUT) BY DEVELOPMENT UNIT

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

Eastmark

							AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
DEVELOPMENT UNIT	**PARCEL/ DEVELOPMENT UNIT SUB-AREA**	**DEVELOPMENT UNIT DEMAND AREA (ACRES)**	**DWELLING UNITS**	**LAND USE**	**UNIT FLOW (GPD/AC)**	**HYD. MODEL NODE**	**(GPD)**	**(GPM)**	**(GPD)**	**(GPM)**	**(GPM)**
DU-1, DU-2, & DU-5W	DU-1, DU-2, & DU-5W	396.0	–	Industrial/ROW	2,560.00	J-360EX (50%), J-DU5N-050 (50%)	1,013,760	704.0	3,958,961	2,750.0	4,456.0
Total		**396.0**					**1,013,760**	**704.0**	**3,958,961**	**2,750.0**	**4,456.0**
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	113	MDR-2	1,218	J-DU3S-020, J-DU3S-030, J-DU3S-050, J-DU3S-060	38,245	26.6	76,490	53.1	79.8
	3S-3	30.0	138	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**	**388**				**112,421**	**78.1**	**224,842**	**156.2**	**234.3**
DU-3/4	DU-3/4-1 to DU-3/4-3	55.00	416	MDR-4 / HDR-2 /Open Space	1,831	J-DU3-4-200, J-DU3-4-210, J-DU7-020	100,700	69.9	201,400	139.9	209.7
	DU-3/4-4	34.00	195	MDR-3	1,434	J-DU3-4-040, J-DU3-4-210	48,750	34.0	97,500	67.7	102.0
	DU-3/4-6	60.80	–	High School/ Aquatic Center	3,823	J-DU3-4-010, J-DU3-4-020, J-DU3-4-210	232,440	161.4	464,880	322.8	484.2
	DU-3/4-7	5.50	–	Church	1,228	J-DU3-4-030	6,754	4.7	13,508	9.4	14.1
	DU-3/4-8	10.51	56	MDR-2	1,332	J-DU3-4-140	14,000	9.8	28,000	19.6	29.4
	DU-3/4-8B	8.50	216	HDR-2	5,845	J-DU3S-080	49,680	34.5	99,360	69.0	103.5
	DU-3/4-9	10.73	55	MDR-2	1,281	J-DU3-4-150	13,750	9.6	27,500	19.2	28.8
	DU-3/4-9A	7.19	–	Office/ Restaurant	4,490	J-DU3-4-100	32,280	22.5	64,560	45.0	67.5
	DU-3/4-9B	7.37	–	Office	3,691	J-DU3-4-030	27,200	18.9	54,400	37.8	56.7
	DU-3/4-9C	2.22	–	Restaurant	677	J-DU3-4-100	1,504	1.1	3,008	2.2	3.3
	DU-3/4-9D	4.35	–	Hotel/ Theater/ Entertainment Center Restaurant	7,335	J-DU3-4-030A	31,909	22.2	63,818	44.4	66.6
	DU-3/4-9E	2.11	–	Hotel	8,104	J-300EX	17,100	11.9	34,200	23.8	35.7
	DU-3/4-9F	5.95	–	Commercial/ Retail/ Restaurant	1,398	J-300EX	8,320	5.8	16,640	11.6	17.4
	DU-3/4-9G	1.83	–	Restaurant	1,137	J-DU3-4-030A	2,080	1.5	4,160	3.0	4.5
	DU-3/4-9H	5.00	140	HDR-2/ Recreation Center	7,190	J-DU3-4-030A	35,950	25.0	71,900	50.0	75.0
	DU-3/4-9J/K	13.78	397	HDR-2/ Recreation Center	7,383	J-DU3-4-030, J-DU3-4-030A	101,735	70.6	203,470	141.2	211.8
	DU-3/4-9L	6.13	190	HDR-2/ Recreation Center/ Commerical/ Retail	8,479	J-DU3S-080	51,975	36.1	103,950	72.2	108.3
	DU-3/4-10	12.18	45	MDR-2	924	J-DU3-4-160	11,250	7.8	22,500	15.6	23.4
	DU-3/4-10B	19.20	260	HDR-2/ Commercial/Retail	3,302	J-DU3-4-090, J-DU3-4-100	63,400	44.0	126,800	88.0	132.0
	DU-3/4-11	11.76	41	MDR-2	872	J-DU3-4-160	10,250	7.1	20,500	14.2	21.3
	DU-3/4-12	13.07	45	MDR-2	861	J-DU6-130, J-DU6-170	11,250	7.9	22,500	15.8	23.7
	DU-3/4-13	13.40	44	MDR-2	821	J-DU6-130, J-DU6-170	11,000	7.7	22,000	15.4	23.1
	DU-3/4-14 to 3/4-17	46.90	201	MDR-3	1,071	J-DU6-140, J-DU6-170	50,250	34.9	100,500	69.8	104.7
	DU-3/4-18	10.20	121	HDR-1	2,728	J-DU7-050	27,830	19.3	55,660	38.6	57.9
	DU-3/4-19 to 3/4-22	26.10	–	Great Park	3,434	J-DU3-4-050	89,640	149.4	89,640	149.4	149.4
	DU-3/4-23 to 3/4-27	62.30	217	MDR-1	871	J-DU3-4-040, J-DU7-040	54,250	37.7	108,500	75.3	113.1
	DU-3/4-28 to 3/4-30	56.10	350	MDR-3	1,560	J-DU3-4-070, J-DU3-4-110, J-DU3-4-150	87,500	60.8	175,000	121.5	182.4
	DU-3/4-31 to 3/4-33	44.20	223	MDR-3	1,284	J-DU3-4-080, J-DU3-4-090, J-DU3-4-030,	56,750	39.4	113,500	78.8	118.2
	DU-3/4-34	18.20	276	MDR-2/ Club House	3,910	J-DU3-4-130, J-DU3-4-140	71,160	49.2	142,320	98.8	147.6
	Other	39.90	–	Road ROW	–	–	--	–	--	–	--
Total		**614.50**	**3,488.0**				**1,320,657**	**1,004.7**	**2,551,674**	**1,860.0**	**2,715.3**

TABLE 18 - WATER DEMAND DESIGN FLOWS (FULL BUILD OUT) BY DEVELOPMENT UNIT

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

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
							AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
DU 5E	DU-5A	31.1	–	Industrial/ Low Water Use Landscaping/ Road ROW	932	J-DU5N-030	29,000	20.1	58,000	40.2	60.3
	DU-5B	47.4	–	Industrial/ Low Water Use Landscaping	1,160	J-2340EX, J-110EX	55,000	38.2	110,000	76.4	114.6
	DU-5E North[4]	120.7	–	Industrial/ Low Water Use Landscaping	23,121	J-DU5N-070 (50%), J-DU5N-080 (50%)	2,790,705	1,938.0	2,790,705	1,938.0	1,938.0
	DU-5E1	31.8	625	HDR-2/Road ROW	3,472	J-DU5N-020	110,410	76.7	220,820	153.4	230.1
	DU-5E2	33.1	–	Industrial	1,289	J-DU5N-010	42,660	29.6	85,320	59.2	88.8
Total		**264.1**	**625.0**				**3,027,775**	**2,103**	**3,264,845**	**2,267**	**2,432**
DU-6N	DU-6A[3]	86.5	–	Industrial	23,121	J-DU6-020, J-DU6-060	2,000,000	1,388.8	2,000,000	1,388.9	1,388.9
	DU-6B[3]	50.7	–	Industrial	23,121	J-1130EX (50%), J-2140EX (50%)	1,172,235	814.0	1,172,235	814.1	814.1
	DU-6C	67.3	–	Industrial	1,160	J-DU6-100	78,080	54.2	156,160	108.4	162.6
	Other	3.0	–	Road ROW	–	–	--	–	--	–	--
Total		**207.5**					**3,250,315**	**2,257.0**	**3,328,395**	**2,311.4**	**2,365.6**
DU-6S	6-1/2	32.7	107	MDR-1/ Road ROW/ Low Water Use Landscaping	1,374	J-DU6-160	44,940	31.2	89,880	62.4	93.6
	6-3	18.4	–	Commercial/ Retail/ Low Water Use Landscaping	1,424	J-260EX	26,200	18.2	52,400	36.4	54.6
	6-4, 6-5	36.5	92	MDR-1/ Low Water Use Landscaping	1,059	J-DU6-120	38,640	26.8	77,280	53.7	80.4
	6-6	19.3	58	MDR-1/ Low Water Use Landscaping	1,262	J-DU6-110	24,360	16.9	48,720	33.8	50.7
	6-7	21.0	61	MDR-1	1,220	J-DU6-150 (50%), J-DU6-160 (50%)	25,620	17.8	51,240	35.6	53.4
	6-8	31.0	52	LDR-3/ Low Water Use Landscaping	788	J-DU6-150 (50%), J-DU6-160 (50%)	24,440	17.0	48,880	33.9	51.0
	6-9, 6-17	25.4	116	MDR-3/ Low Water Use Landscaping	1,827	J-DU6-110	46,400	32.2	92,800	64.4	96.6
	6-10 through 6-12	41.9	171	MDR-2	1,714	J-DU6-140 (50%), J-DU6-150 (50%)	71,820	49.8	143,640	99.8	149.4
	6-13 through 6-15	50.2	161	MDR-1	1,347	J-DU6-120 (50%), J-DU6-140 (50%)	67,620	47.0	135,240	93.9	141.0
	6-16 through 6-18	36.7	114	MDR-1	1,305	J-DU6-130	47,880	33.3	95,760	66.5	99.9
	6-19 through 6-23	76.8	291	MDR-2/ Low Water Use Landscaping	1,591	J-DU3-4-170	122,220	84.9	244,440	169.8	254.7
	DU-6D	85.3	302	MDR-1/MDR-3/ Low Water Use Landscaping	1,449	J-DU6-080	123,620	85.8	247,240	171.6	257.4
Total		**475.2**	**1,525**				**663,760**	**460.9**	**1,080,280**	**921.8**	**1,382.7**

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

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-DU7-190	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-DU7-190	22,351	15.5	44,702	31.0	46.5
	7-8	23.5	120	MDR-3	1,602	J-1990EX	37,647	26.1	75,294	52.3	78.3
	7-9	23.1	81	MDR-1	834	J-DU7-080	19,265	13.4	38,530	26.8	40.2
	7-10	7.5	–	CHURCH	1,500	J-250EX	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
	7-25	1.7	–	CIVIC	1,500	J-DU7-130	2,550	1.8	5,100	3.5	5.4
	7-26	2.0	–	COMMERICAL/ RESTAURANT	1,700	J-DU7-010	3,400	2.4	6,800	4.7	7.2
	7-50	5.0	–	EDUCATION	1,500	J-DU7-140	7,500	5.2	15,000	10.4	15.6
	7-51	8.0	–	EDUCATION	1,500	J-DU7-150	12,000	8.3	24,000	16.7	24.9
	7-53	14.5	135	HDR-1	1,936	J-DU7-150	28,072	19.5	56,144	39.0	58.5
	7-52, 7-54	48.0	–	GREAT PARK	1,558	J-DU7-030	74,800	125.0	74,800	125	125
	7-52, 7-54	--	–	PUBLIC RESTROOM	–	J-DU7-140	1,000	0.7	2,000	1.4	2.1
	R.O.W.	33.0	–	Road R.O.W.	–	–	--	–	--	–	--
Total		**575.5**	**1,873**				**585,144**	**479.4**	**1,095,488**	**833.8**	**1,188.2**

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
							AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
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
	8-3B	6.7	9	MDR-1 / PARK	2,176	J-DU8-110	14,580	10.1	29,160	20.3	30.3
	8-4	21.0	42	MDR-1	600	J-DU8-080, J-DU8-090	12,600	8.8	25,200	17.5	26.4
	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**	**544**				**182,490**	**126.7**	**364,980**	**253.5**	**380.1**

DU-9	9-1	57.2	189	MDR-1	991	J-DU9-010, J-DU9-020	56,700	39.4	113,400	78.8	118.2
	9-2	25.6	99	MDR-1	1,160	J-DU9-020, J-DU9-030	29,700	20.6	59,400	41.3	61.8
	9-3	11.2	–	Civic	1,500	J-DU9-020, J-DU9-030	16,800	11.7	33,600	23.3	35.1
	9-4	49.4	158	MDR-1	960	J-DU9-030, J-DU9-070	47,400	32.9	94,800	65.8	98.7
	9-5	39.8	144	MDR-1	1,085	J-DU9-070, J-DU9-080	43,200	30.0	86,400	60.0	90.0
	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
	Other	61.9	–	Drainage Channel/Road ROW	–	--	--	–	--	–	--
Total		**328.2**	**906**				**284,100**	**197.3**	**568,200**	**394.7**	**591.9**
EASTMARK TOTAL		**3,152.1**					**10,440,422**	**7,411.1**	**16,437,665**	**11,748.4**	**15,746.1**

TABLE 19

WATER DEMAND DESIGN FLOWS (FULL BUILDOUT) BY JUNCTION NODE

WOOD/PATEL **TABLE 19 - WATER DEMAND DESIGN FLOWS BY JUNCTION NODE**

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark

Location: Mesa, Arizona

References: City of Mesa Engineering Design Standards

	WATER DEMAND (GPM)		
HYDRAULIC MODEL NODE	**AVE. DAY**	**MAX DAY**	**PEAK HOUR**
J-DU3S-010	10.20	20.40	30.60
J-DU3S-020	11.00	22.00	33.00
J-DU3S-030	15.00	30.00	45.00
J-DU3S-040	11.00	22.00	33.00
J-DU3S-050	12.10	24.20	36.30
J-DU3S-060	11.80	23.60	35.40
J-DU3S-070	7.00	14.00	21.00
J-DU3S-080	70.60	141.20	211.80
J-DU3-4-010	53.80	107.60	161.40
J-DU3-4-020	53.80	107.60	161.40
J-DU3-4-030	72.20	144.40	216.60
J-DU3-4-030A	83.90	167.80	251.70
J-DU3-4-040	35.80	71.60	107.40
J-DU3-4-050	149.40	149.40	149.40
J-DU3-4-060	--	--	–
J-DU3-4-070	20.30	40.60	60.90
J-DU3-4-080	13.10	26.20	39.30
J-DU3-4-090	35.10	70.20	105.30
J-DU3-4-100	45.40	90.80	136.20
J-DU3-4-110	20.30	40.60	60.90
J-DU3-4-120	--	--	–
J-DU3-4-130	24.70	49.40	74.10
J-DU3-4-140	34.40	68.80	103.20
J-DU3-4-150	29.80	59.60	89.40
J-DU3-4-160	14.90	29.80	44.70
J-DU3-4-170	84.90	169.80	254.70
J-DU3-4-200	23.30	46.60	69.90
J-DU3-4-210	94.10	188.20	282.30
J-DU5N-010	29.60	59.20	88.80
J-DU5N-020	76.70	153.40	230.10
J-DU5N-030	20.10	40.20	60.30
J-DU5N-040	--	--	–
J-DU5N-050	352.00	1,375	2,228.00
J-DU5N-060	--	--	–
J-DU5N-070	969.00	969.00	969.00
J-DU5N-080	969.00	969.00	969.00
J-DU6-010	--	--	–
J-DU6-020	694.40	694.40	694.40
J-DU6-050	--	--	–
J-DU6-060	694.40	694.40	694.40
J-DU6-070	--	--	–
J-DU6-080	85.80	171.60	257.40
J-DU6-090	--	--	–
J-DU6-100	54.20	108.40	162.60
J-DU6-110	49.10	98.20	147.30
J-DU6-120	50.30	100.60	150.90
J-DU6-130	41.10	82.20	123.30
J-DU6-140	66.00	132.00	198.00
J-DU6-150	42.30	84.60	126.90
J-DU6-160	48.60	97.20	145.80
J-DU6-170	25.30	50.60	75.90
J-DU6-180	--	--	–

J-DU7-010	2.40	4.80	7.20
J-DU7-020	23.30	46.60	69.90
J-DU7-030	125.00	125.00	125.00
J-DU7-040	18.80	37.60	56.40
J-DU7-050	19.30	38.60	57.90
J-DU7-060	11.10	22.20	33.30
J-DU7-070	--	--	–
J-DU7-080	40.50	81.00	121.50
J-DU7-090	--	--	–
J-DU7-100	28.90	57.80	86.70
J-DU7-110	28.80	57.60	86.40
J-DU7-120	--	--	–
J-DU7-130	1.80	3.60	5.40
J-DU7-140	35.00	70.00	105.00
J-DU7-150	37.80	75.60	113.40
J-DU7-160	24.00	48.00	72.00
J-DU7-170	10.70	21.40	32.10
J-DU7-180	18.70	37.40	56.10
J-DU7-190	30.10	60.20	90.30
J-DU7-200	50.70	101.40	152.10
J-DU8-010	--	--	–
J-DU8-020	--	--	–
J-DU8-030	--	--	–
J-DU8-040	6.70	13.40	20.10
J-DU8-050	--	--	–
J-DU8-060	9.00	18.00	27.00
J-DU8-070	15.40	30.80	46.20
J-DU8-080	4.40	8.80	13.20
J-DU8-090	11.00	22.00	33.00
J-DU8-100	9.20	18.40	27.60
J-DU8-110	33.00	66.00	99.00
J-DU8-120	17.10	34.20	51.30
J-DU8-130	21.00	42.00	63.00
J-DU9-010	19.70	39.40	59.10
J-DU9-020	35.80	71.60	107.40
J-DU9-030	32.60	65.20	97.80
J-DU9-040	7.80	15.60	23.40
J-DU9-050	--	--	–
J-DU9-060	31.40	62.80	94.20
J-DU9-070	31.50	63.00	94.50
J-DU9-080	38.50	77.00	115.50
J-300EX	17.70	35.40	53.10
J-250EX	7.80	15.60	23.40
J-260EX	18.20	36.40	54.60
J-DU2-010	--	--	–
J-960EX	--	--	–
J-970EX	--	--	–
J-110EX	19.10	38.20	57.30
J-1220EX	--	--	–
J-1240EX	--	--	–
J-2140EX	407.00	407.00	407.00
J-DU2-020	--	--	–
J-360EX	352.00	1,375.00	2,228.00
J-1130EX	407.00	407.00	407.00
J-1990EX	26.10	52.20	78.30
J-2340EX	19.10	38.20	57.30

EASTMARK TOTAL	**7,410.80**	**11,748.40**	**15,746.00**

TABLE 20

CITY OF MESA GROUNDWATER WELLS INVENTORY

WOOD/PATEL **TABLE 20 - City of Mesa Groundwater Wells Inventory**

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Master Water Report Update
Location: Mesa, Arizona
References: 2012 City of Mesa Well Inventory

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)=	*3,013.9*	*3,013.9*	*3,013.9*	*3,013.9*	*3,013.9*	
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)=	*4,173.6*	*4,173.6*	*4,173.6*	*9,104.2*	***13,270.8***	
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)=	*6,263.9*	*7,652.8*	*7,652.8*	*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 2040. Therefore, the capacity of the Desert Wells GWF and Signal Butte GWF in 2040 were used in the water model analysis.

TABLE 21

INTERIM EASTMARK MODELED LAND USE

Project: Eastmark
Location: Mesa, Arizona

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	0.0	50.2	1,073.9	301.1	324.8	40.0	24.7	72.2	**1,886.9**	0.0	–
Dwelling Units	0	91	3,572	1,226	1,684	251	256	1,644	**8,724**	0	**8,724**

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) [3]	Development Unit Flow Area (AC)	Unit Daily Water Demand (GPD/AC)
1, 2, & 5W	383.3	0.0	--	0	0.0	3,000,000	--	0.0	0.0	3.8	1,013,760	383.3	2,644.8
3S	92.3	92.3	388	0	0.0	--	0.0	0.0	0.0	0.0	112,421	92.3	1,218.0
3/4	615.5	435.3	3,488	234	42.9	901,274	60.8	5.5	2.3	71.0	1,320,657	615.5	2,145.7
5E	31.1	0.0	0	0	25.0	390,000	0.0	0.0	0.0	6.1	29,000	31.1	932.5
6N	89.5	0.0	--	0	86.5	1,340,000	0.0	0.0	0.0	3.0	2,000,000	89.5	22,346.4
6S	475.2	437.8	1,525	0	17.9	131,000	0.0	0.0	0.0	19.5	663,760	475.2	1,396.8
7	575.5	470.3	1,873	0	2.0	265,000	13.0	7.5	1.7	81.0	585,144	575.5	1,016.8
8	198.8	196.1	544	0	0.0	--	0.0	0.0	0.0	2.7	182,490	198.8	918.0
9	328.2	255.1	906	0	0.0	200,000	0.0	0.0	11.2	61.9	284,100	328.2	865.6
Subtotal:	**2,789.4**	**1886.9**	**8,724**	**234**	**174.3**	**6,227,274**	**73.8**	**13.0**	**15.2**	**249.0**	**6,191,332**	**2,789.4**	--

Notes:

[1] Anticipated number of "Keys" represents hotel and resort uses. This includes approximately 6.5 acres within DU-3/4.

[2] Non-residential water demands are calculated based on actual land use where detailed information is known and estimated square feet on the remainder.

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

TABLE 22

WATER DEMAND DESIGN FLOWS (INTERIM)
BY DEVELOPMENT UNIT

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

Eastmark

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-2, & DU-5W	DU-1, DU-2, & DU-5W	383.3	–	Industrial/ROW	2,644.82	J-360EX (50%), J-DU5N-050 (50%)	1,013,760	704.0	3,958,961	2,750.0	4,456.0
Total		**383.3**					**1,013,760**	**704.0**	**3,958,961**	**2,750.0**	**4,456.0**
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	113	MDR-2	1,218	J-DU3S-020, J-DU3S-030, J-DU3S-050, J-DU3S-060	38,245	26.6	76,490	53.1	79.8
	3S-3	30.0	138	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**	**388**				**112,421**	**78.1**	**224,842**	**156.2**	**234.3**
DU-3/4	DU-3/4-1 to DU-3/4-3	55.00	416	MDR-4 / HDR-2 /Open Space	1,831	J-DU3-4-200, J-DU3-4-210, J-DU7-020	100,700	69.9	201,400	139.9	209.7
	DU-3/4-4	34.00	195	MDR-3	1,434	J-DU3-4-040, J-DU3-4-210	48,750	34.0	97,500	67.7	102.0
	DU-3/4-6	60.80	–	High School/ Aquatic Center	3,823	J-DU3-4-010, J-DU3-4-020, J-DU3-4-210	232,440	161.4	464,880	322.8	484.2
	DU-3/4-7	5.50	–	Church	1,228	J-DU3-4-030	6,754	4.7	13,508	9.4	14.1
	DU-3/4-8	10.51	56	MDR-2	1,332	J-DU3-4-140	14,000	9.8	28,000	19.6	29.4
	DU-3/4-8B	8.50	216	HDR-2	5,845	J-DU3S-080	49,680	34.5	99,360	69.0	103.5
	DU-3/4-9	10.73	55	MDR-2	1,281	J-DU3-4-150	13,750	9.6	27,500	19.2	28.8
	DU-3/4-9A	7.19	–	Office/ Restaurant	4,490	J-DU3-4-100	32,280	22.5	64,560	45.0	67.5
	DU-3/4-9B	7.37	–	Office	3,691	J-DU3-4-030	27,200	18.9	54,400	37.8	56.7
	DU-3/4-9C	2.22	–	Restaurant	677	J-DU3-4-100	1,504	1.1	3,008	2.2	3.3
	DU-3/4-9D	4.35	–	Hotel/ Theater/ Entertainment Center Restaurant	7,335	J-DU3-4-030A	31,909	22.2	63,818	44.4	66.6
	DU-3/4-9E	2.11	–	Hotel	8,104	J-300EX	17,100	11.9	34,200	23.8	35.7
	DU-3/4-9F	5.95	–	Commercial/ Retail/ Restaurant	1,398	J-300EX	8,320	5.8	16,640	11.6	17.4
	DU-3/4-9G	1.83	–	Restaurant	1,137	J-DU3-4-030A	2,080	1.5	4,160	3.0	4.5
	DU-3/4-9H	5.00	140	HDR-2/ Recreation Center	7,190	J-DU3-4-030A	35,950	25.0	71,900	50.0	75.0
	DU-3/4-9J/K	13.78	397	HDR-2/ Recreation Center	7,383	J-DU3-4-030, J-DU3-4-030A	101,735	70.6	203,470	141.2	211.8
	DU-3/4-9L	6.13	190	HDR-2/ Recreation Center/ Commerical/ Retail	8,479	J-DU3S-080	51,975	36.1	103,950	72.2	108.3
	DU-3/4-10	12.18	45	MDR-2	924	J-DU3-4-160	11,250	7.8	22,500	15.6	23.4
	DU-3/4-10B	19.20	260	HDR-2/ Commercial/Retail	3,302	J-DU3-4-090, J-DU3-4-100	63,400	44.0	126,800	88.0	132.0
	DU-3/4-11	11.76	41	MDR-2	872	J-DU3-4-160	10,250	7.1	20,500	14.2	21.3
	DU-3/4-12	13.07	45	MDR-2	861	J-DU6-130, J-DU6-170	11,250	7.9	22,500	15.8	23.7
	DU-3/4-13	13.40	44	MDR-2	821	J-DU6-130, J-DU6-170	11,000	7.7	22,000	15.4	23.1
	DU-3/4-14 to 3/4-17	46.90	201	MDR-3	1,071	J-DU6-140, J-DU6-170	50,250	34.9	100,500	69.8	104.7
	DU-3/4-18	10.20	121	HDR-1	2,728	J-DU7-050	27,830	19.3	55,660	38.6	57.9
	DU-3/4-19 to 3/4-22	26.10	–	Great Park	3,434	J-DU3-4-050	89,640	149.4	89,640	149.4	149.4
	DU-3/4-23 to 3/4-27	62.30	217	MDR-1	871	J-DU3-4-040, J-DU7-040	54,250	37.7	108,500	75.3	113.1
	DU-3/4-28 to 3/4-30	56.10	350	MDR-3	1,560	J-DU3-4-070, J-DU3-4-110, J-DU3-4-150	87,500	60.8	175,000	121.5	182.4
	DU-3/4-31 to 3/4-33	44.20	223	MDR/Fire Station	1,284	J-DU3-4-080, J-DU3-4-090, J-DU3-4-030,	56,750	39.4	113,500	78.8	118.2
	DU-3/4-34	18.20	276	MDR-2/ Club House	3,910	J-DU3-4-130, J-DU3-4-140	71,160	49.2	142,320	98.8	147.6
	Other	40.90	–	Road ROW	–	–	--	–	--	–	--
Total		**615.50**	**3,488.0**				**1,320,657**	**1,004.7**	**2,551,674**	**1,860.0**	**2,715.3**

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

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
							AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
DU 5E	DU-5A	31.1	–	Industrial/ Low Water Use Landscaping/ Road ROW	932	J-DU5N-030	29,000	20.1	58,000	40.3	60.3
Total		**31.1**					**29,000**	**20**	**58,000**	**40**	**60**
DU-6N	DU-6A[3]	86.5	–	Industrial	23,121	J-DU6-020, J-DU6-060	2,000,000	1,388.8	2,000,000	1,388.9	1,388.9
	Other	3.0	–	Road ROW	–	–	--	–	--	–	--
Total		**89.5**					**2,000,000**	**1,388.8**	**2,000,000**	**1,388.9**	**1,388.9**
DU-6S	6-1/2	32.7	107	MDR-1/ Road ROW/ Low Water Use Landscaping	1,374	J-DU6-160	44,940	31.2	89,880	62.4	93.6
	6-3	18.4	–	Commercial/ Retail/ Low Water Use Landscaping	1,424	J-260EX	26,200	18.2	52,400	36.4	54.6
	6-4, 6-5	36.5	92	MDR-1/ Low Water Use Landscaping	1,059	J-DU6-120	38,640	26.8	77,280	53.7	80.4
	6-6	19.3	58	MDR-1/ Low Water Use Landscaping	1,262	J-DU6-110	24,360	16.9	48,720	33.8	50.7
	6-7	21.0	61	MDR-1	1,220	J-DU6-150 (50%), J-DU6-160 (50%)	25,620	17.8	51,240	35.6	53.4
	6-8	31.0	52	LDR-3/ Low Water Use Landscaping	788	J-DU6-150 (50%), J-DU6-160 (50%)	24,440	17.0	48,880	33.9	51.0
	6-9, 6-17	25.4	116	MDR-3/ Low Water Use Landscaping	1,827	J-DU6-110	46,400	32.2	92,800	64.4	96.6
	6-10 through 6-12	41.9	171	MDR-2	1,714	J-DU6-140 (50%), J-DU6-150 (50%)	71,820	49.8	143,640	99.8	149.4
	6-13 through 6-15	50.2	161	MDR-1	1,347	J-DU6-120 (50%), J-DU6-140 (50%)	67,620	47.0	135,240	93.9	141.0
	6-16 through 6-18	36.7	114	MDR-1	1,305	J-DU6-130	47,880	33.3	95,760	66.5	99.9
	6-19 through 6-23	76.8	291	MDR-2/ Low Water Use Landscaping	1,591	J-DU3-4-170	122,220	84.9	244,440	169.8	254.7
	DU-6D	85.3	302	MDR-1/MDR-3/ Low Water Use Landscaping	1,449	J-DU6-080	123,620	85.8	247,240	171.6	257.4
Total		**475.2**	**1,525**				**663,760**	**460.9**	**1,080,280**	**921.8**	**1,382.7**
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-DU7-190	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-DU7-190	22,351	15.5	44,702	31.0	46.5
	7-8	23.5	120	MDR-3	1,602	J-1990EX	37,647	26.1	75,294	52.3	78.3
	7-9	23.1	81	MDR-1	834	J-DU7-080	19,265	13.4	38,530	26.8	40.2
	7-10	7.5	–	CHURCH	1,500	J-250EX	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
	7-25	1.7	–	CIVIC	1,500	J-DU7-130	2,550	1.8	5,100	3.5	5.4
	7-26	2.0	–	COMMERICAL/ RESTAURANT	1,700	J-DU7-010	3,400	2.4	6,800	4.7	7.2
	7-50	5.0	–	EDUCATION	1,500	J-DU7-140	7,500	5.2	15,000	10.4	15.6
	7-51	8.0	–	EDUCATION	1,500	J-DU7-150	12,000	8.3	24,000	16.7	24.9
	7-53	14.5	135	HDR-1	1,936	J-DU7-150	28,072	19.5	56,144	39.0	58.5
	7-52, 7-54	48.0	–	GREAT PARK	1,558	J-DU7-030	74,800	125.0	74,800	125	125
	7-52, 7-54	--	–	PUBLIC RESTROOM	–	J-DU7-140	1,000	0.7	2,000	1.4	2.1
	R.O.W.	33.0	–	Road R.O.W.	–	–	--	–	--	–	--
Total		**575.5**	**1,873**				**585,144**	**479.4**	**1,095,488**	**833.8**	**1,188.2**

TABLE 22 - WATER DEMAND DESIGN FLOWS (INTERIM) BY DEVELOPMENT UNIT

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

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
							AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
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
	8-3B	6.7	9	MDR-1 / PARK	2,176	J-DU8-110	14,580	10.1	29,160	20.3	30.3
	8-4	21.0	42	MDR-1	600	J-DU8-080, J-DU8-090	12,600	8.8	25,200	17.5	26.4
	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**	**544**				**182,490**	**126.7**	**364,980**	**253.5**	**380.1**
DU-9	9-1	57.2	189	MDR-1	991	J-DU9-010, J-DU9-020	56,700	39.4	113,400	78.8	118.2
	9-2	25.6	99	MDR-1	1,160	J-DU9-020, J-DU9-030	29,700	20.6	59,400	41.3	61.8
	9-3	11.2	–	Civic	1,500	J-DU9-020, J-DU9-030	16,800	11.7	33,600	23.3	35.1
	9-4	49.4	158	MDR-1	960	J-DU9-030, J-DU9-070	47,400	32.9	94,800	65.8	98.7
	9-5	39.8	144	MDR-1	1,085	J-DU9-070, J-DU9-080	43,200	30.0	86,400	60.0	90.0
	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
	Other	61.9	–	Drainage Channel/Road ROW	–	--	--	–	--	–	--
Total		**328.2**	**906**				**284,100**	**197.3**	**568,200**	**394.7**	**591.9**
EASTMARK TOTAL		**2,789.4**					**6,191,332**	**4,459.9**	**11,902,425**	**8,598.9**	**12,397.4**

TABLE 23

WATER DEMAND DESIGN FLOWS (INTERIM)
BY JUNCTION NODE

WOOD/PATEL

TABLE 23 - WATER DEMAND DESIGN FLOWS (INTERIM) BY JUNCTION NODE

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark

Location: Mesa, Arizona

References: City of Mesa Engineering Design Standards

	WATER DEMAND (GPM)		
HYDRAULIC MODEL NODE	**AVE. DAY**	**MAX DAY**	**PEAK HOUR**
J-DU3S-010	10.20	20.40	30.60
J-DU3S-020	11.00	22.00	33.00
J-DU3S-030	15.00	30.00	45.00
J-DU3S-040	11.00	22.00	33.00
J-DU3S-050	12.10	24.20	36.30
J-DU3S-060	11.80	23.60	35.40
J-DU3S-070	7.00	14.00	21.00
J-DU3S-080	70.60	141.20	211.80
J-DU3-4-010	53.80	107.60	161.40
J-DU3-4-020	53.80	107.60	161.40
J-DU3-4-030	72.20	144.40	216.60
J-DU3-4-030A	83.90	167.80	251.70
J-DU3-4-040	35.80	71.60	107.40
J-DU3-4-050	149.40	149.40	149.40
J-DU3-4-060	–	–	--
J-DU3-4-070	20.30	40.60	60.90
J-DU3-4-080	13.10	26.20	39.30
J-DU3-4-090	35.10	70.20	105.30
J-DU3-4-100	45.40	90.80	136.20
J-DU3-4-110	20.30	40.60	60.90
J-DU3-4-120	–	–	--
J-DU3-4-130	24.70	49.40	74.10
J-DU3-4-140	34.40	68.80	103.20
J-DU3-4-150	29.80	59.60	89.40
J-DU3-4-160	14.90	29.80	44.70
J-DU3-4-170	84.90	169.80	254.70
J-DU3-4-200	23.30	46.60	69.90
J-DU3-4-210	94.10	188.20	282.30
J-DU5N-010	–	–	--
J-DU5N-020	–	–	--
J-DU5N-030	20.10	40.30	60.30
J-DU5N-040	–	–	--
J-DU5N-050	345.00	1,375	2,228.00
J-DU5N-060	--	–	--
J-DU6-010	--	–	--
J-DU6-020	694.40	694.40	694.40
J-DU6-050	--	–	--
J-DU6-060	694.40	694.40	694.40
J-DU6-070	–	–	--
J-DU6-080	85.80	171.60	257.40
J-DU6-090	–	–	--
J-DU6-100	–	–	--
J-DU6-110	49.10	98.20	147.30
J-DU6-120	50.30	100.60	150.90
J-DU6-130	41.10	82.20	123.30
J-DU6-140	66.00	132.00	198.00
J-DU6-150	42.30	84.60	126.90
J-DU6-160	48.60	97.20	145.80
J-DU6-170	25.30	50.60	75.90
J-DU6-180	--	–	--

J-DU7-010	2.40	4.80	7.20
J-DU7-020	23.30	46.60	69.90
J-DU7-030	125.00	125.00	125.00
J-DU7-040	18.80	37.60	56.40
J-DU7-050	19.30	38.60	57.90
J-DU7-060	11.10	22.20	33.30
J-DU7-070	--	--	--
J-DU7-080	40.50	81.00	121.50
J-DU7-090	--	--	--
J-DU7-100	28.90	57.80	86.70
J-DU7-110	28.80	57.60	86.40
J-DU7-120	--	--	--
J-DU7-130	1.80	3.60	5.40
J-DU7-140	35.00	70.00	105.00
J-DU7-150	37.80	75.60	113.40
J-DU7-160	24.00	48.00	72.00
J-DU7-170	10.70	21.40	32.10
J-DU7-180	18.70	37.40	56.10
J-DU7-190	30.10	60.20	90.30
J-DU7-200	50.70	101.40	152.10
J-DU8-010	--	--	--
J-DU8-020	--	--	--
J-DU8-030	--	--	--
J-DU8-040	6.70	13.40	20.10
J-DU8-050	--	--	--
J-DU8-060	9.00	18.00	27.00
J-DU8-070	15.40	30.80	46.20
J-DU8-080	4.40	8.80	13.20
J-DU8-090	11.00	22.00	33.00
J-DU8-100	9.20	18.40	27.60
J-DU8-110	33.00	66.00	99.00
J-DU8-120	17.10	34.20	51.30
J-DU8-130	21.00	42.00	63.00
J-DU9-010	19.70	39.40	59.10
J-DU9-020	35.80	71.60	107.40
J-DU9-030	32.60	65.20	97.80
J-DU9-040	7.80	15.60	23.40
J-DU9-050	--	--	--
J-DU9-060	31.40	62.80	94.20
J-DU9-070	31.50	63.00	94.50
J-DU9-080	38.50	77.00	115.50
J-300EX	17.70	35.40	53.10
J-250EX	7.80	15.60	23.40
J-260EX	18.20	36.40	54.60
J-DU2-010	–	–	--
J-960EX	–	–	--
J-970EX	–	–	--
J-110EX	–	–	--
J-1220EX	–	–	--
J-1240EX	–	–	--
J-2140EX	–	–	--
J-DU2-020	–	–	--
J-360EX	345.00	1,375.00	2,228.00
J-1130EX	--	–	--
J-1990EX	26.10	52.20	78.30
J-2340EX	--	–	--

EASTMARK TOTAL	**4,446.10**	**8,599.10**	**12,397.90**

APPENDIX A

HYDRAULIC MODELING RESULTS
SERVED BY SOUTH C.A.P. WATER TREATMENT PLANT
(INTERIM NON-DROUGHT CONDITION)

Average-Day Demand

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	588.82	1,634.0
SCAP DWPS	1,634.0	3,871.28	1,634.0

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	98.1	1,632.7
J-110EX	1,418.0	Desert Wells	0.00	92.9	1,632.7
J-120EX	1,462.0	Desert Wells	0.00	74.4	1,633.9
J-135EX	1,460.0	Desert Wells	0.00	75.1	1,633.6
J-150EX	1,472.0	Desert Wells	0.00	69.8	1,633.2
J-160EX	1,435.0	Desert Wells	0.00	85.5	1,632.6
J-170EX	1,430.0	Desert Wells	0.00	87.7	1,632.6
J-180EX	1,410.0	Desert Wells	0.00	96.3	1,632.6
J-190EX	1,395.0	Desert Wells	0.00	102.8	1,632.6
J-200EX	1,385.0	Desert Wells	0.00	107.1	1,632.5
J-220EX	1,480.0	Desert Wells	0.00	66.5	1,633.6
J-230EX	1,475.0	Desert Wells	0.00	68.5	1,633.4
J-250EX	1,452.0	Desert Wells	7.80	78.4	1,633.3
J-260EX	1,453.0	Desert Wells	18.20	78.0	1,633.3
J-270EX	1,429.0	Desert Wells	0.00	88.1	1,632.6
J-280EX	1,460.0	Desert Wells	0.00	74.7	1,632.6
J-300EX	1,392.0	Desert Wells	17.70	104.0	1,632.5
J-320EX	1,422.0	Desert Wells	0.00	91.1	1,632.6
J-330EX	1,455.0	Desert Wells	0.00	76.9	1,632.8
J-340EX	1,440.0	Desert Wells	0.00	83.4	1,632.7
J-360EX	1,400.0	Desert Wells	352.00	100.6	1,632.5
J-550EX	1,425.0	Desert Wells	0.00	89.8	1,632.6
J-590EX	1,413.0	Desert Wells	0.00	95.1	1,632.7
J-920EX	1,434.0	Desert Wells	0.00	86.0	1,632.7
J-960EX	1,402.0	Desert Wells	0.00	99.8	1,632.6
J-970EX	1,397.0	Desert Wells	0.00	101.9	1,632.5
J-1000EX	1,455.0	Desert Wells	0.00	77.4	1,633.9
J-1010EX	1,485.0	Desert Wells	0.00	64.4	1,633.9
J-1020EX	1,425.0	Desert Wells	0.00	90.2	1,633.5
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	81.3	1,633.0
J-1120EX	1,456.0	Desert Wells	0.00	76.7	1,633.4
J-1130EX	1,445.0	Desert Wells	0.00	81.3	1,633.0
J-1160EX	1,445.0	Desert Wells	0.00	81.7	1,633.9
J-1170EX	1,470.0	Desert Wells	0.00	70.9	1,633.9
J-1180EX	1,440.0	Desert Wells	0.00	83.8	1,633.7
J-1190EX	1,420.0	Desert Wells	0.00	92.2	1,633.1
J-1200EX	1,445.0	Desert Wells	0.00	81.7	1,633.7
J-1210EX	1,455.0	Desert Wells	0.00	77.4	1,633.9
J-1220EX	1,475.0	Desert Wells	0.00	68.8	1,633.9
J-1230EX	1,460.0	Desert Wells	0.00	74.7	1,632.7
J-1235EX	1,440.0	Desert Wells	0.00	83.4	1,632.8
J-1240EX	1,455.0	Desert Wells	0.00	77.0	1,632.9
J-1280	1,410.0	Desert Wells	0.00	96.3	1,632.6
J-1290EX	1,480.0	Desert Wells	0.00	66.6	1,633.9
J-1300EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1310EX	1,480.0	Desert Wells	0.00	66.6	1,633.9
J-1330EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1340EX	1,450.0	Desert Wells	0.00	79.6	1,633.9
J-1350EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1360EX	1,445.0	Desert Wells	0.00	81.7	1,633.9
J-1370EX	1,430.0	Desert Wells	0.00	88.1	1,633.7
J-1380EX	1,450.0	Desert Wells	0.00	79.5	1,633.8

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	88.1	1,633.7
J-1400EX	1,430.0	Desert Wells	0.00	88.1	1,633.7
J-1410	1,458.0	Desert Wells	0.00	75.9	1,633.5
J-1410EX	1,420.0	Desert Wells	0.00	92.3	1,633.3
J-1420EX	1,460.0	Desert Wells	0.00	75.0	1,633.4
J-1430EX	1,455.0	Desert Wells	0.00	77.2	1,633.4
J-1440EX	1,478.0	Desert Wells	0.00	67.3	1,633.5
J-1680EX	1,401.0	Desert Wells	0.00	100.2	1,632.6
J-1990EX	1,447.0	Desert Wells	26.10	80.5	1,633.1
J-2000EX	1,442.0	Desert Wells	0.00	82.6	1,632.9
J-2010EX	1,419.0	Desert Wells	0.00	92.4	1,632.6
J-2040EX	1,427.0	Desert Wells	0.00	89.0	1,632.6
J-2120EX	1,453.0	Desert Wells	0.00	77.9	1,633.2
J-2140EX	1,450.0	Desert Wells	0.00	79.2	1,633.1
J-2295	1,415.0	Desert Wells	0.00	94.1	1,632.6
J-2340EX	1,434.0	Desert Wells	0.00	86.0	1,632.7
J-2353	1,456.0	Desert Wells	0.00	76.8	1,633.4
J-2361	1,456.9	Desert Wells	0.00	76.4	1,633.5
J-2364	1,457.4	Desert Wells	0.00	76.1	1,633.4
J-DU2-020	1,411.5	Desert Wells	0.00	95.6	1,632.5
J-DU2-030	1,408.0	Desert Wells	0.00	97.1	1,632.5
J-DU3-4-010	1,405.0	Desert Wells	53.80	98.4	1,632.5
J-DU3-4-020	1,402.0	Desert Wells	53.80	99.7	1,632.5
J-DU3-4-030	1,392.0	Desert Wells	72.20	104.0	1,632.5
J-DU3-4-030A	1,394.5	Desert Wells	83.90	103.0	1,632.5
J-DU3-4-040	1,403.0	Desert Wells	35.80	99.3	1,632.5
J-DU3-4-050	1,408.0	Desert Wells	149.40	97.1	1,632.5
J-DU3-4-060	1,408.0	Desert Wells	0.00	97.1	1,632.5
J-DU3-4-070	1,404.0	Desert Wells	20.30	98.9	1,632.5
J-DU3-4-080	1,400.0	Desert Wells	13.10	100.6	1,632.5
J-DU3-4-090	1,393.0	Desert Wells	35.10	103.6	1,632.5
J-DU3-4-100	1,391.0	Desert Wells	45.40	104.5	1,632.5
J-DU3-4-110	1,393.0	Desert Wells	20.30	103.6	1,632.5
J-DU3-4-120	1,393.0	Desert Wells	0.00	103.6	1,632.5
J-DU3-4-130	1,395.0	Desert Wells	24.70	102.7	1,632.5
J-DU3-4-140	1,403.0	Desert Wells	34.40	99.3	1,632.5
J-DU3-4-150	1,407.0	Desert Wells	29.80	97.6	1,632.5
J-DU3-4-160	1,406.0	Desert Wells	14.90	98.0	1,632.5
J-DU3-4-170	1,410.0	Desert Wells	84.90	96.3	1,632.5
J-DU3-4-200	1,412.5	Desert Wells	23.30	95.2	1,632.5
J-DU3-4-210	1,406.0	Desert Wells	94.10	98.0	1,632.5
J-DU3S-010	1,412.0	Desert Wells	10.20	95.4	1,632.5
J-DU3S-020	1,407.0	Desert Wells	11.00	97.6	1,632.5
J-DU3S-030	1,401.0	Desert Wells	15.00	100.1	1,632.5
J-DU3S-040	1,399.0	Desert Wells	11.00	101.0	1,632.5
J-DU3S-050	1,404.0	Desert Wells	12.10	98.8	1,632.5
J-DU3S-060	1,410.0	Desert Wells	11.80	96.3	1,632.5
J-DU3S-070	1,417.0	Desert Wells	7.00	93.2	1,632.5
J-DU3S-080	1,396.0	Desert Wells	70.60	102.3	1,632.5
J-DU5N-010	1,436.0	Desert Wells	0.00	85.1	1,632.6
J-DU5N-020	1,424.5	Desert Wells	0.00	90.1	1,632.6
J-DU5N-030	1,426.0	Desert Wells	20.10	89.4	1,632.6
J-DU5N-040	1,414.0	Desert Wells	0.00	94.5	1,632.5

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	352.00	94.5	1,632.5
J-DU5N-060	1,417.0	Desert Wells	0.00	93.3	1,632.6
J-DU6-010	1,459.0	Desert Wells	0.00	75.4	1,633.2
J-DU6-020	1,453.0	Desert Wells	694.40	77.9	1,633.1
J-DU6-050	1,448.0	Desert Wells	0.00	80.1	1,633.2
J-DU6-060	1,458.0	Desert Wells	694.40	75.8	1,633.3
J-DU6-080	1,444.6	Desert Wells	85.80	81.6	1,633.4
J-DU6-090	1,439.0	Desert Wells	0.00	84.0	1,633.1
J-DU6-100	1,439.0	Desert Wells	0.00	84.1	1,633.4
J-DU6-110	1,432.0	Desert Wells	49.10	86.8	1,632.6
J-DU6-120	1,422.0	Desert Wells	50.30	91.1	1,632.6
J-DU6-130	1,416.0	Desert Wells	41.10	93.7	1,632.5
J-DU6-140	1,417.0	Desert Wells	66.00	93.3	1,632.6
J-DU6-150	1,427.0	Desert Wells	42.30	89.0	1,632.7
J-DU6-160	1,436.0	Desert Wells	48.60	85.2	1,632.9
J-DU6-170	1,416.5	Desert Wells	25.30	93.5	1,632.6
J-DU7-010	1,415.0	Desert Wells	2.40	94.1	1,632.5
J-DU7-020	1,425.0	Desert Wells	23.30	89.8	1,632.5
J-DU7-030	1,416.0	Desert Wells	125.00	93.7	1,632.5
J-DU7-040	1,409.0	Desert Wells	18.80	96.7	1,632.5
J-DU7-050	1,416.0	Desert Wells	19.30	93.7	1,632.6
J-DU7-060	1,423.0	Desert Wells	11.10	90.7	1,632.7
J-DU7-070	1,430.0	Desert Wells	0.00	87.7	1,632.8
J-DU7-080	1,434.0	Desert Wells	40.50	86.1	1,632.9
J-DU7-090	1,437.0	Desert Wells	0.00	84.7	1,632.7
J-DU7-100	1,435.0	Desert Wells	28.90	85.5	1,632.6
J-DU7-110	1,435.0	Desert Wells	28.80	85.5	1,632.6
J-DU7-120	1,420.0	Desert Wells	0.00	92.0	1,632.6
J-DU7-130	1,420.0	Desert Wells	1.80	92.0	1,632.6
J-DU7-140	1,425.0	Desert Wells	35.00	89.8	1,632.6
J-DU7-150	1,419.0	Desert Wells	37.80	92.4	1,632.6
J-DU7-160	1,435.0	Desert Wells	24.00	85.5	1,632.7
J-DU7-170	1,432.0	Desert Wells	10.70	86.8	1,632.7
J-DU7-180	1,433.0	Desert Wells	18.70	86.4	1,632.7
J-DU7-190	1,437.0	Desert Wells	30.10	84.7	1,632.8
J-DU7-200	1,432.0	Desert Wells	50.70	86.8	1,632.6
J-DU8-010	1,420.0	Desert Wells	0.00	92.0	1,632.6
J-DU8-020	1,419.5	Desert Wells	0.00	92.2	1,632.6
J-DU8-030	1,421.0	Desert Wells	0.00	91.5	1,632.6
J-DU8-040	1,418.0	Desert Wells	6.70	92.8	1,632.6
J-DU8-050	1,422.0	Desert Wells	0.00	91.1	1,632.6
J-DU8-060	1,420.0	Desert Wells	9.00	92.0	1,632.6
J-DU8-070	1,420.0	Desert Wells	15.40	92.0	1,632.6
J-DU8-080	1,422.0	Desert Wells	4.40	91.1	1,632.6
J-DU8-090	1,424.0	Desert Wells	11.00	90.2	1,632.6
J-DU8-100	1,425.0	Desert Wells	9.20	89.8	1,632.6
J-DU8-110	1,430.0	Desert Wells	33.00	87.6	1,632.6
J-DU8-120	1,431.0	Desert Wells	17.10	87.2	1,632.5
J-DU8-130	1,427.0	Desert Wells	21.00	88.9	1,632.6
J-DU9-010	1,419.0	Desert Wells	19.70	92.4	1,632.6
J-DU9-020	1,415.0	Desert Wells	35.80	94.1	1,632.5
J-DU9-030	1,416.0	Desert Wells	32.60	93.7	1,632.5
J-DU9-040	1,416.0	Desert Wells	7.80	93.7	1,632.5

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-050	1,419.0	Desert Wells	0.00	92.4	1,632.5
J-DU9-060	1,422.0	Desert Wells	31.40	91.1	1,632.5
J-DU9-070	1,414.0	Desert Wells	31.50	94.5	1,632.5
J-DU9-080	1,419.0	Desert Wells	38.50	92.4	1,632.5
J-DU9-090	1,414.0	Desert Wells	0.00	94.6	1,632.6
J-DU9-100	1,414.0	Desert Wells	0.00	94.6	1,632.6

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	40.02	0.06
P-170EX	16.0	5,365.91	120.0	40.02	0.06
P-180EX	16.0	5,395.89	120.0	87.29	0.14
P-190EX	16.0	5,727.93	120.0	87.29	0.14
P-200EX	16.0	888.87	120.0	-366.48	0.58
P-210EX	16.0	509.51	120.0	-366.48	0.58
P-220EX	16.0	2,908.75	120.0	357.16	0.57
P-240EX	16.0	1,386.71	120.0	-861.43	1.37
P-250EX	16.0	2,610.66	120.0	256.55	0.41
P-340EX	16.0	5,775.00	120.0	40.02	0.06
P-410EX	16.0	5,368.22	120.0	87.29	0.14
P-970	24.0	1,001.45	120.0	288.13	0.20
P-980	24.0	1,934.58	120.0	70.49	0.05
P-1060EX	16.0	1,328.19	120.0	125.76	0.20
P-1070EX	16.0	2,607.17	120.0	125.76	0.20
P-1630EX	16.0	1,793.28	120.0	-11.00	0.02
P-1640EX	16.0	1,447.45	120.0	57.88	0.09
P-1780	24.0	1,527.79	120.0	288.13	0.20
P-1790	24.0	1,115.45	120.0	288.13	0.20
P-1940EX	16.0	1,171.38	120.0	-15.35	0.02
P-1950EX	16.0	1,440.76	120.0	-15.35	0.02
P-1970EX	16.0	816.47	120.0	-10.62	0.02
P-1980EX	16.0	1,103.17	120.0	-30.92	0.05
P-2040EX	16.0	10,634.81	120.0	-71.39	0.11
P-2055EX	16.0	10,453.02	120.0	230.56	0.37
P-2070EX	24.0	5,328.61	120.0	-286.88	0.20
P-2500EX	24.0	2,750.22	120.0	87.79	0.06
P-2510EX	24.0	2,726.43	120.0	69.01	0.05
P-2540EX	12.0	2,624.38	120.0	148.86	0.42
P-2570EX	16.0	2,640.03	120.0	439.55	0.70
P-2655EX	16.0	2,870.17	120.0	140.58	0.22
P-2660EX	24.0	2,796.67	120.0	149.27	0.11
P-2665EX	16.0	2,715.77	120.0	140.58	0.22
P-2690EX	16.0	2,914.43	120.0	109.79	0.18
P-2700EX	16.0	3,115.09	120.0	366.34	0.58
P-2710EX	16.0	1,822.64	120.0	303.32	0.48
P-2720EX	12.0	3,042.02	120.0	-63.01	0.18
P-2800	24.0	5,785.85	120.0	-47.28	0.03
P-2830	16.0	2,890.37	120.0	162.75	0.26
P-2860EX	24.0	761.21	120.0	149.27	0.11
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-3.47	0.02
P-2900	24.0	1,422.97	120.0	140.40	0.10
P-2910EX	24.0	496.51	120.0	145.80	0.10
P-2950	12.0	1,088.63	120.0	18.78	0.05
P-2970EX	12.0	1,118.68	120.0	34.65	0.10
P-2990EX	8.0	2,810.72	120.0	3.18	0.02
P-3010EX	12.0	471.37	120.0	3.47	0.01
P-3020EX	12.0	1,167.01	120.0	37.83	0.11
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	6.73	0.04
P-3060EX	12.0	595.31	120.0	0.00	0.00
P-3070EX	8.0	2,921.51	120.0	44.55	0.28

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3080EX	12.0	1,396.97	120.0	164.44	0.47
P-3090EX	12.0	1,108.96	120.0	130.64	0.37
P-3100EX	12.0	694.82	120.0	-18.22	0.05
P-3110EX	12.0	664.35	120.0	15.58	0.04
P-3120EX	8.0	1,851.06	120.0	33.80	0.22
P-3130EX	12.0	1,154.91	120.0	-44.55	0.13
P-3140EX	16.0	1,782.97	120.0	379.42	0.61
P-3150EX	16.0	958.12	120.0	439.55	0.70
P-3160EX	8.0	3,801.45	120.0	60.13	0.38
P-3170EX	8.0	2,837.60	120.0	-5.40	0.03
P-3180EX	8.0	735.68	120.0	10.19	0.07
P-3190EX	30.0	2,558.57	120.0	2,250.49	1.02
P-3240EX	16.0	810.36	120.0	-241.78	0.39
P-3240EX(2)	16.0	452.50	120.0	256.82	0.41
P-3250EX	12.0	844.21	120.0	-100.61	0.29
P-3260EX	16.0	1,108.49	120.0	357.16	0.57
P-3270EX	16.0	1,509.41	120.0	267.81	0.43
P-3280EX	12.0	2,890.26	120.0	-89.36	0.25
P-3290EX	12.0	2,432.48	120.0	11.26	0.03
P-3930EX	16.0	794.17	120.0	-313.79	0.50
P-3940EX	16.0	509.16	120.0	-313.79	0.50
P-3970EX	16.0	1,445.13	120.0	313.79	0.50
P-4720EX	16.0	1,215.66	120.0	462.12	0.74
P-4730EX	16.0	455.51	120.0	436.02	0.70
P-4750EX	16.0	715.18	120.0	436.02	0.70
P-4760EX	16.0	774.38	120.0	261.90	0.42
P-4780EX	24.0	2,143.12	120.0	171.06	0.12
P-4790EX	16.0	1,816.22	120.0	324.91	0.52
P-4860EX	24.0	985.98	120.0	-171.06	0.12
P-4870EX	24.0	619.54	120.0	-171.06	0.12
P-5700EX	16.0	1,175.56	120.0	551.46	0.88
P-5710EX	16.0	1,171.19	120.0	551.46	0.88
P-5740	24.0	1,547.92	120.0	-171.06	0.12
P-5780	16.0	683.67	120.0	238.62	0.38
P-6064	16.0	846.07	120.0	-123.78	0.20
P-6065	16.0	3,442.89	120.0	-123.78	0.20
P-6070	16.0	247.15	120.0	-120.31	0.19
P-6166EX	16.0	1,496.42	130.0	-274.83	0.44
P-6167EX	16.0	2,351.14	120.0	-366.48	0.58
P-6198	30.0	559.22	120.0	2,250.49	1.02
P-6218	30.0	458.03	120.0	1,583.53	0.72
P-6219	30.0	1,679.89	120.0	-1,583.53	0.72
P-6223	16.0	1,042.80	120.0	-256.82	0.41
P-6226	16.0	139.10	120.0	666.96	1.06
P-6236EX	24.0	2,939.36	130.0	-100.56	0.07
P-7000	12.0	741.92	120.0	-56.56	0.16
P-COMWTREX	36.0	1,202.28	120.0	588.82	0.19
P-DU-3-4-080	12.0	797.04	120.0	-0.01	0.00
P-DU-3-4-090	12.0	702.19	120.0	20.29	0.06
P-DU-3-4-100	12.0	909.19	120.0	-33.39	0.09
P-DU-3-4-110	16.0	597.34	120.0	-15.57	0.02
P-DU-3-4-120	16.0	1,153.09	120.0	-40.27	0.06
P-DU-3-4-130	12.0	706.88	120.0	52.10	0.15

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-70	12.0	1,647.45	120.0	22.29	0.06
P-DU-3S-130	16.0	2,122.39	120.0	-152.49	0.24
P-DU2-060	12.0	1,914.95	120.0	-53.55	0.15
P-DU2-070	12.0	951.56	120.0	-53.55	0.15
P-DU2-080	20.0	631.03	120.0	-4.97	0.01
P-DU2-090	20.0	1,106.44	120.0	-4.97	0.01
P-DU3-4-010A	12.0	1,447.93	120.0	45.55	0.13
P-DU3-4-010B	12.0	847.20	120.0	-38.35	0.11
P-DU3-4-020	24.0	1,289.68	120.0	-114.28	0.08
P-DU3-4-060	12.0	733.41	120.0	-127.11	0.36
P-DU3-4-160	12.0	578.86	120.0	22.30	0.06
P-DU3-4-170	16.0	1,187.74	120.0	-126.77	0.20
P-DU3-4-180	16.0	876.41	120.0	-141.67	0.23
P-DU3-4-190	20.0	1,405.86	120.0	-231.53	0.24
P-DU3-4-200	8.0	1,000.70	120.0	37.86	0.24
P-DU3-4-210	8.0	1,083.47	120.0	-32.68	0.21
P-DU3-4-220	8.0	2,361.07	120.0	23.55	0.15
P-DU3-4-30	24.0	1,116.54	120.0	-232.03	0.16
P-DU3-4-40	24.0	496.31	120.0	-285.83	0.20
P-DU3-4-50	24.0	1,092.47	120.0	-359.49	0.25
P-DU3S-010	8.0	260.69	120.0	63.75	0.41
P-DU3S-020	8.0	1,373.83	120.0	25.19	0.16
P-DU3S-030	8.0	1,542.05	120.0	14.19	0.09
P-DU3S-040	8.0	1,241.65	120.0	-0.81	0.01
P-DU3S-050	8.0	1,016.55	120.0	14.35	0.09
P-DU3S-060	8.0	974.34	120.0	2.54	0.02
P-DU3S-070	8.0	1,383.69	120.0	-9.56	0.06
P-DU3S-080	8.0	1,241.43	120.0	-21.36	0.14
P-DU3S-090	8.0	620.85	120.0	-28.36	0.18
P-DU3S-100	16.0	788.42	120.0	-80.60	0.13
P-DU3S-110	16.0	1,850.66	120.0	-42.70	0.07
P-DU3S-120	16.0	822.09	120.0	-96.50	0.15
P-DU5N-030	16.0	528.70	120.0	-71.56	0.11
P-DU5N-040	12.0	2,743.45	120.0	-91.66	0.26
P-DU5N-050	20.0	416.37	120.0	-4.97	0.01
P-DU5N-060	20.0	1,208.29	120.0	-400.58	0.41
P-DU5N-070	20.0	1,779.99	120.0	-400.58	0.41
P-DU6-010	12.0	1,162.55	120.0	99.60	0.28
P-DU6-020	16.0	123.88	120.0	494.94	0.79
P-DU6-050	12.0	2,221.22	120.0	-99.86	0.28
P-DU6-060	12.0	2,209.31	120.0	99.60	0.28
P-DU6-070	16.0	142.12	120.0	893.86	1.43
P-DU6-080	12.0	1,134.59	120.0	99.86	0.28
P-DU6-130	16.0	1,866.29	120.0	-168.36	0.27
P-DU6-140	16.0	823.26	120.0	0.00	0.00
P-DU6-150	8.0	1,139.37	120.0	-82.56	0.53
P-DU6-180	12.0	1,701.72	120.0	-49.10	0.14
P-DU6-190	12.0	1,447.65	120.0	126.77	0.36
P-DU6-200	12.0	1,510.55	120.0	-98.92	0.28
P-DU6-210	20.0	548.31	120.0	-173.71	0.18
P-DU6-220	20.0	1,003.42	120.0	-222.50	0.23
P-DU6-230	8.0	2,333.32	120.0	42.51	0.27
P-DU6-240	12.0	696.34	120.0	157.69	0.45

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-250	8.0	2,342.14	120.0	-53.89	0.34
P-DU6-260	8.0	656.01	120.0	-19.93	0.13
P-DU6-270	12.0	803.20	120.0	0.00	0.00
P-DU6-290	8.0	936.11	120.0	-82.56	0.53
P-DU6-300	20.0	514.67	120.0	-199.01	0.20
P-DU6-310	12.0	1,616.85	120.0	71.56	0.20
P-DU7-010	12.0	1,114.60	120.0	92.05	0.26
P-DU7-020	12.0	1,146.78	120.0	-45.19	0.13
P-DU7-030	12.0	1,044.06	120.0	79.81	0.23
P-DU7-040	24.0	1,409.98	120.0	-585.21	0.42
P-DU7-050	24.0	1,075.39	120.0	-898.45	0.64
P-DU7-060	24.0	1,253.80	120.0	-909.55	0.65
P-DU7-070	24.0	1,205.32	120.0	-1,182.01	0.84
P-DU7-080	24.0	2,338.72	120.0	-1,242.44	0.88
P-DU7-090	16.0	941.19	120.0	-199.53	0.32
P-DU7-100	16.0	1,562.41	120.0	-170.63	0.27
P-DU7-110	16.0	1,741.52	120.0	-141.92	0.23
P-DU7-120	16.0	778.48	120.0	190.38	0.30
P-DU7-130	20.0	316.65	120.0	61.30	0.06
P-DU7-140	20.0	1,206.89	120.0	63.10	0.06
P-DU7-150	20.0	1,235.71	120.0	33.64	0.03
P-DU7-160	20.0	891.94	120.0	71.44	0.07
P-DU7-170	12.0	1,072.99	120.0	-114.78	0.33
P-DU7-180	12.0	827.71	120.0	90.78	0.26
P-DU7-190	12.0	398.61	120.0	-35.09	0.10
P-DU7-200	12.0	2,378.07	120.0	90.24	0.26
P-DU7-210	12.0	1,048.78	120.0	-174.13	0.49
P-DU7-220	12.0	1,053.72	120.0	-144.03	0.41
P-DU7-230	12.0	1,714.23	120.0	-115.16	0.33
P-DU7-240	12.0	1,014.45	120.0	-64.46	0.18
P-DU8-010	16.0	1,107.48	120.0	12.85	0.02
P-DU8-020	16.0	713.88	120.0	-25.84	0.04
P-DU8-030	16.0	1,312.24	120.0	-59.30	0.09
P-DU8-040	16.0	1,371.08	120.0	-105.58	0.17
P-DU8-050	16.0	520.30	120.0	-139.93	0.22
P-DU8-060	16.0	1,021.04	120.0	-217.63	0.35
P-DU8-070	8.0	541.92	120.0	-7.48	0.05
P-DU8-080	8.0	253.35	120.0	-0.92	0.01
P-DU8-090	8.0	1,138.34	120.0	-16.32	0.10
P-DU8-100	12.0	598.81	120.0	90.15	0.26
P-DU8-110	12.0	709.10	120.0	40.03	0.11
P-DU8-120	8.0	678.33	120.0	-15.56	0.10
P-DU8-130	8.0	1,315.41	120.0	24.61	0.16
P-DU8-140	8.0	965.85	120.0	20.07	0.13
P-DU8-150	6.0	737.49	120.0	9.77	0.11
P-DU8-160	8.0	1,265.36	120.0	13.41	0.09
P-DU8-170	8.0	2,613.46	120.0	5.02	0.03
P-DU8-180	8.0	1,777.60	120.0	-12.08	0.08
P-DU8-190	8.0	1,184.98	120.0	-5.43	0.03
P-DU8-200	8.0	1,054.34	120.0	27.65	0.18
P-DU9-010	16.0	903.69	120.0	3.47	0.01
P-DU9-020	8.0	226.81	120.0	-38.68	0.25
P-DU9-030	8.0	1,616.12	120.0	22.45	0.14

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU9-040	8.0	745.70	120.0	-40.94	0.26
P-DU9-050	8.0	868.53	120.0	27.59	0.18
P-DU9-060	8.0	1,549.98	120.0	-36.51	0.23
P-DU9-070	8.0	1,000.62	120.0	16.12	0.10
P-DU9-080	8.0	643.77	120.0	8.32	0.05
P-DU9-090	8.0	3,091.64	120.0	15.38	0.10
P-DU9-100	8.0	1,618.99	120.0	-16.24	0.10
P-DU9-110	8.0	3,057.43	120.0	0.12	0.00
P-DU9-120	8.0	901.10	120.0	22.29	0.14
P-DU9-130	8.0	878.92	120.0	-30.21	0.19
P-DU9-140	8.0	429.87	120.0	-77.70	0.50
P-DU9-150	8.0	4,470.55	120.0	-16.09	0.10
P-SCAP	48.0	1,752.16	120.0	-3,871.28	0.69

Max-Day Demand

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,237.39	1,634.0
SCAP DWPS	1,634.0	7,361.71	1,634.0

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	96.1	1,628.2
J-110EX	1,418.0	Desert Wells	0.00	90.9	1,628.0
J-120EX	1,462.0	Desert Wells	0.00	74.3	1,633.8
J-135EX	1,460.0	Desert Wells	0.00	74.8	1,632.9
J-150EX	1,472.0	Desert Wells	0.00	68.9	1,631.2
J-160EX	1,435.0	Desert Wells	0.00	83.6	1,628.3
J-170EX	1,430.0	Desert Wells	0.00	85.8	1,628.3
J-180EX	1,410.0	Desert Wells	0.00	94.4	1,628.3
J-190EX	1,395.0	Desert Wells	0.00	100.8	1,628.0
J-200EX	1,385.0	Desert Wells	0.00	105.0	1,627.8
J-220EX	1,480.0	Desert Wells	0.00	66.1	1,632.7
J-230EX	1,475.0	Desert Wells	0.00	67.9	1,632.0
J-250EX	1,452.0	Desert Wells	15.60	77.6	1,631.3
J-260EX	1,453.0	Desert Wells	36.40	77.2	1,631.5
J-270EX	1,429.0	Desert Wells	0.00	86.3	1,628.4
J-280EX	1,460.0	Desert Wells	0.00	72.9	1,628.4
J-300EX	1,392.0	Desert Wells	35.40	101.9	1,627.6
J-320EX	1,422.0	Desert Wells	0.00	89.3	1,628.3
J-330EX	1,455.0	Desert Wells	0.00	75.2	1,628.9
J-340EX	1,440.0	Desert Wells	0.00	81.5	1,628.4
J-360EX	1,400.0	Desert Wells	1,375.00	98.2	1,626.9
J-550EX	1,425.0	Desert Wells	0.00	88.0	1,628.4
J-590EX	1,413.0	Desert Wells	0.00	93.1	1,628.1
J-920EX	1,434.0	Desert Wells	0.00	84.1	1,628.5
J-960EX	1,402.0	Desert Wells	0.00	97.6	1,627.5
J-970EX	1,397.0	Desert Wells	0.00	99.6	1,627.1
J-1000EX	1,455.0	Desert Wells	0.00	77.4	1,633.8
J-1010EX	1,485.0	Desert Wells	0.00	64.4	1,633.8
J-1020EX	1,425.0	Desert Wells	0.00	89.5	1,631.8
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	80.1	1,630.0
J-1120EX	1,456.0	Desert Wells	0.00	76.1	1,631.9
J-1130EX	1,445.0	Desert Wells	0.00	80.3	1,630.6
J-1160EX	1,445.0	Desert Wells	0.00	81.7	1,633.7
J-1170EX	1,470.0	Desert Wells	0.00	70.9	1,633.8
J-1180EX	1,440.0	Desert Wells	0.00	83.4	1,632.8
J-1190EX	1,420.0	Desert Wells	0.00	90.9	1,630.1
J-1200EX	1,445.0	Desert Wells	0.00	81.3	1,632.8
J-1210EX	1,455.0	Desert Wells	0.00	77.4	1,633.8
J-1220EX	1,475.0	Desert Wells	0.00	68.7	1,633.8
J-1230EX	1,460.0	Desert Wells	0.00	73.0	1,628.6
J-1235EX	1,440.0	Desert Wells	0.00	81.9	1,629.3
J-1240EX	1,455.0	Desert Wells	0.00	75.5	1,629.6
J-1280	1,410.0	Desert Wells	0.00	94.4	1,628.3
J-1290EX	1,480.0	Desert Wells	0.00	66.5	1,633.8
J-1300EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1310EX	1,480.0	Desert Wells	0.00	66.5	1,633.8
J-1330EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1340EX	1,450.0	Desert Wells	0.00	79.5	1,633.8
J-1350EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1360EX	1,445.0	Desert Wells	0.00	81.7	1,633.7
J-1370EX	1,430.0	Desert Wells	0.00	87.8	1,632.8
J-1380EX	1,450.0	Desert Wells	0.00	79.2	1,633.1

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.7	1,632.8
J-1400EX	1,430.0	Desert Wells	0.00	87.7	1,632.8
J-1410	1,458.0	Desert Wells	0.00	75.5	1,632.4
J-1410EX	1,420.0	Desert Wells	0.00	91.2	1,630.8
J-1420EX	1,460.0	Desert Wells	0.00	74.4	1,632.0
J-1430EX	1,455.0	Desert Wells	0.00	76.6	1,632.0
J-1440EX	1,478.0	Desert Wells	0.00	66.8	1,632.3
J-1680EX	1,401.0	Desert Wells	0.00	97.9	1,627.3
J-1990EX	1,447.0	Desert Wells	52.20	79.3	1,630.4
J-2000EX	1,442.0	Desert Wells	0.00	81.1	1,629.5
J-2010EX	1,419.0	Desert Wells	0.00	90.6	1,628.3
J-2040EX	1,427.0	Desert Wells	0.00	87.1	1,628.4
J-2120EX	1,453.0	Desert Wells	0.00	77.3	1,631.7
J-2140EX	1,450.0	Desert Wells	0.00	78.4	1,631.3
J-2295	1,415.0	Desert Wells	0.00	92.1	1,627.9
J-2340EX	1,434.0	Desert Wells	0.00	84.2	1,628.7
J-2353	1,456.0	Desert Wells	0.00	76.1	1,631.9
J-2361	1,456.9	Desert Wells	0.00	75.8	1,632.1
J-2364	1,457.4	Desert Wells	0.00	75.5	1,632.0
J-DU2-020	1,411.5	Desert Wells	0.00	93.4	1,627.4
J-DU2-030	1,408.0	Desert Wells	0.00	94.8	1,627.0
J-DU3-4-010	1,405.0	Desert Wells	107.60	96.3	1,627.6
J-DU3-4-020	1,402.0	Desert Wells	107.60	97.6	1,627.6
J-DU3-4-030	1,392.0	Desert Wells	144.40	101.9	1,627.6
J-DU3-4-030A	1,394.5	Desert Wells	167.80	100.8	1,627.6
J-DU3-4-040	1,403.0	Desert Wells	71.60	97.2	1,627.7
J-DU3-4-050	1,408.0	Desert Wells	149.40	95.0	1,627.5
J-DU3-4-060	1,408.0	Desert Wells	0.00	94.9	1,627.4
J-DU3-4-070	1,404.0	Desert Wells	40.60	96.6	1,627.4
J-DU3-4-080	1,400.0	Desert Wells	26.20	98.4	1,627.4
J-DU3-4-090	1,393.0	Desert Wells	70.20	101.4	1,627.4
J-DU3-4-100	1,391.0	Desert Wells	90.80	102.4	1,627.6
J-DU3-4-110	1,393.0	Desert Wells	40.60	101.4	1,627.3
J-DU3-4-120	1,393.0	Desert Wells	0.00	101.4	1,627.3
J-DU3-4-130	1,395.0	Desert Wells	49.40	100.5	1,627.3
J-DU3-4-140	1,403.0	Desert Wells	68.80	97.0	1,627.3
J-DU3-4-150	1,407.0	Desert Wells	59.60	95.3	1,627.3
J-DU3-4-160	1,406.0	Desert Wells	29.80	95.8	1,627.4
J-DU3-4-170	1,410.0	Desert Wells	169.80	94.1	1,627.4
J-DU3-4-200	1,412.5	Desert Wells	46.60	93.1	1,627.7
J-DU3-4-210	1,406.0	Desert Wells	188.20	95.8	1,627.5
J-DU3S-010	1,412.0	Desert Wells	20.40	93.4	1,627.8
J-DU3S-020	1,407.0	Desert Wells	22.00	95.5	1,627.6
J-DU3S-030	1,401.0	Desert Wells	30.00	98.0	1,627.6
J-DU3S-040	1,399.0	Desert Wells	22.00	98.9	1,627.6
J-DU3S-050	1,404.0	Desert Wells	24.20	96.7	1,627.6
J-DU3S-060	1,410.0	Desert Wells	23.60	94.1	1,627.6
J-DU3S-070	1,417.0	Desert Wells	14.00	91.2	1,627.7
J-DU3S-080	1,396.0	Desert Wells	141.20	100.2	1,627.6
J-DU5N-010	1,436.0	Desert Wells	0.00	83.1	1,628.0
J-DU5N-020	1,424.5	Desert Wells	0.00	88.2	1,628.3
J-DU5N-030	1,426.0	Desert Wells	40.30	87.5	1,628.3
J-DU5N-040	1,414.0	Desert Wells	0.00	92.3	1,627.3

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	1,375.00	92.3	1,627.2
J-DU5N-060	1,417.0	Desert Wells	0.00	91.1	1,627.6
J-DU6-010	1,459.0	Desert Wells	0.00	74.7	1,631.8
J-DU6-020	1,453.0	Desert Wells	694.40	77.3	1,631.7
J-DU6-050	1,448.0	Desert Wells	0.00	79.5	1,631.8
J-DU6-060	1,458.0	Desert Wells	694.40	75.2	1,631.9
J-DU6-080	1,444.6	Desert Wells	171.60	81.0	1,631.8
J-DU6-090	1,439.0	Desert Wells	0.00	82.9	1,630.6
J-DU6-100	1,439.0	Desert Wells	0.00	83.4	1,631.8
J-DU6-110	1,432.0	Desert Wells	98.20	84.8	1,628.0
J-DU6-120	1,422.0	Desert Wells	100.60	89.2	1,628.1
J-DU6-130	1,416.0	Desert Wells	82.20	91.6	1,627.7
J-DU6-140	1,417.0	Desert Wells	132.00	91.2	1,627.8
J-DU6-150	1,427.0	Desert Wells	84.60	87.2	1,628.6
J-DU6-160	1,436.0	Desert Wells	97.20	83.8	1,629.7
J-DU6-170	1,416.5	Desert Wells	50.60	91.4	1,627.8
J-DU7-010	1,415.0	Desert Wells	4.80	92.1	1,627.9
J-DU7-020	1,425.0	Desert Wells	46.60	87.7	1,627.8
J-DU7-030	1,416.0	Desert Wells	125.00	91.6	1,627.7
J-DU7-040	1,409.0	Desert Wells	37.60	94.6	1,627.8
J-DU7-050	1,416.0	Desert Wells	38.60	91.7	1,628.0
J-DU7-060	1,423.0	Desert Wells	22.20	88.9	1,628.4
J-DU7-070	1,430.0	Desert Wells	0.00	86.1	1,628.9
J-DU7-080	1,434.0	Desert Wells	81.00	84.7	1,629.7
J-DU7-090	1,437.0	Desert Wells	0.00	82.9	1,628.5
J-DU7-100	1,435.0	Desert Wells	57.80	83.7	1,628.4
J-DU7-110	1,435.0	Desert Wells	57.60	83.6	1,628.2
J-DU7-120	1,420.0	Desert Wells	0.00	90.0	1,628.0
J-DU7-130	1,420.0	Desert Wells	3.60	90.0	1,628.0
J-DU7-140	1,425.0	Desert Wells	70.00	87.8	1,628.0
J-DU7-150	1,419.0	Desert Wells	75.60	90.4	1,628.0
J-DU7-160	1,435.0	Desert Wells	48.00	83.8	1,628.7
J-DU7-170	1,432.0	Desert Wells	21.40	85.0	1,628.5
J-DU7-180	1,433.0	Desert Wells	37.40	84.6	1,628.6
J-DU7-190	1,437.0	Desert Wells	60.20	83.1	1,629.0
J-DU7-200	1,432.0	Desert Wells	101.40	84.8	1,628.1
J-DU8-010	1,420.0	Desert Wells	0.00	90.0	1,628.0
J-DU8-020	1,419.5	Desert Wells	0.00	90.2	1,628.0
J-DU8-030	1,421.0	Desert Wells	0.00	89.6	1,628.0
J-DU8-040	1,418.0	Desert Wells	13.40	90.9	1,628.1
J-DU8-050	1,422.0	Desert Wells	0.00	89.2	1,628.2
J-DU8-060	1,420.0	Desert Wells	18.00	90.0	1,628.0
J-DU8-070	1,420.0	Desert Wells	30.80	90.0	1,628.0
J-DU8-080	1,422.0	Desert Wells	8.80	89.2	1,628.1
J-DU8-090	1,424.0	Desert Wells	22.00	88.3	1,628.0
J-DU8-100	1,425.0	Desert Wells	18.40	87.9	1,628.1
J-DU8-110	1,430.0	Desert Wells	66.00	85.7	1,628.0
J-DU8-120	1,431.0	Desert Wells	34.20	85.2	1,628.0
J-DU8-130	1,427.0	Desert Wells	42.00	87.0	1,628.0
J-DU9-010	1,419.0	Desert Wells	39.40	90.4	1,628.0
J-DU9-020	1,415.0	Desert Wells	71.60	92.1	1,627.9
J-DU9-030	1,416.0	Desert Wells	65.20	91.6	1,627.8
J-DU9-040	1,416.0	Desert Wells	15.60	91.6	1,627.8

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-050	1,419.0	Desert Wells	0.00	90.3	1,627.8
J-DU9-060	1,422.0	Desert Wells	62.80	89.1	1,627.9
J-DU9-070	1,414.0	Desert Wells	63.00	92.5	1,627.7
J-DU9-080	1,419.0	Desert Wells	77.00	90.3	1,627.7
J-DU9-090	1,414.0	Desert Wells	0.00	92.6	1,628.0
J-DU9-100	1,414.0	Desert Wells	0.00	92.6	1,628.0

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,722.00	120.0	94.36	0.15
P-170EX	16.0	5,366.00	120.0	94.36	0.15
P-180EX	16.0	5,396.00	120.0	211.81	0.34
P-190EX	16.0	5,728.00	120.0	211.81	0.34
P-200EX	16.0	889.00	120.0	-1,049.83	1.68
P-210EX	16.0	510.00	120.0	-1,049.83	1.68
P-220EX	16.0	2,909.00	120.0	686.21	1.09
P-240EX	16.0	1,387.00	120.0	-1,472.94	2.35
P-250EX	16.0	2,611.00	120.0	614.58	0.98
P-340EX	16.0	5,775.00	120.0	94.36	0.15
P-410EX	16.0	5,368.00	120.0	211.81	0.34
P-970	24.0	1,001.00	120.0	664.78	0.47
P-980	24.0	1,935.00	120.0	173.82	0.12
P-1060EX	16.0	1,328.00	120.0	186.58	0.30
P-1070EX	16.0	2,607.00	120.0	186.58	0.30
P-1630EX	16.0	1,793.00	120.0	84.17	0.13
P-1640EX	16.0	1,447.00	120.0	410.13	0.65
P-1780	24.0	1,528.00	120.0	664.78	0.47
P-1790	24.0	1,115.00	120.0	664.78	0.47
P-1940EX	16.0	1,171.00	120.0	436.88	0.70
P-1950EX	16.0	1,441.00	120.0	436.88	0.70
P-1970EX	16.0	816.00	120.0	300.48	0.48
P-1980EX	16.0	1,103.00	120.0	259.88	0.41
P-2040EX	16.0	10,635.00	120.0	-140.57	0.22
P-2055EX	16.0	10,453.00	120.0	520.12	0.83
P-2070EX	24.0	5,329.00	120.0	-577.72	0.41
P-2500EX	24.0	2,750.00	120.0	129.18	0.09
P-2510EX	24.0	2,726.00	120.0	93.01	0.07
P-2540EX	12.0	2,624.00	120.0	340.16	0.96
P-2570EX	16.0	2,640.00	120.0	997.18	1.59
P-2655EX	16.0	2,870.00	120.0	323.93	0.52
P-2660EX	24.0	2,797.00	120.0	241.22	0.17
P-2665EX	16.0	2,716.00	120.0	323.93	0.52
P-2690EX	16.0	2,914.00	120.0	228.29	0.36
P-2700EX	16.0	3,115.00	120.0	842.87	1.34
P-2710EX	16.0	1,823.00	120.0	697.99	1.11
P-2720EX	12.0	3,042.00	120.0	-144.88	0.41
P-2800	24.0	5,786.00	120.0	-117.45	0.08
P-2830	16.0	2,890.00	120.0	374.06	0.60
P-2860EX	24.0	761.00	120.0	241.22	0.17
P-2880EX	12.0	383.00	120.0	0.00	0.00
P-2890EX	8.0	3,148.00	120.0	-0.59	0.00
P-2900	24.0	1,423.00	120.0	233.57	0.17
P-2910EX	24.0	497.00	120.0	240.63	0.17
P-2950	12.0	1,089.00	120.0	36.18	0.10
P-2970EX	12.0	1,119.00	120.0	73.42	0.21
P-2990EX	8.0	2,811.00	120.0	10.55	0.07
P-3010EX	12.0	471.00	120.0	0.59	0.00
P-3020EX	12.0	1,167.00	120.0	83.98	0.24
P-3030EX	12.0	378.00	120.0	0.00	0.00
P-3040EX	8.0	3,081.00	120.0	17.97	0.11
P-3060EX	12.0	595.00	120.0	0.00	0.00
P-3070EX	8.0	2,922.00	120.0	101.95	0.65

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3080EX	12.0	1,397.00	120.0	375.11	1.06
P-3090EX	12.0	1,109.00	120.0	298.02	0.85
P-3100EX	12.0	695.00	120.0	-42.14	0.12
P-3110EX	12.0	664.00	120.0	34.95	0.10
P-3120EX	8.0	1,851.00	120.0	77.09	0.49
P-3130EX	12.0	1,155.00	120.0	-101.95	0.29
P-3140EX	16.0	1,783.00	120.0	860.28	1.37
P-3150EX	16.0	958.00	120.0	997.18	1.59
P-3160EX	8.0	3,801.00	120.0	136.90	0.87
P-3170EX	8.0	2,838.00	120.0	-7.05	0.05
P-3180EX	8.0	736.00	120.0	18.57	0.12
P-3190EX	30.0	2,559.00	120.0	4,431.58	2.01
P-3240EX	16.0	810.00	120.0	117.12	0.19
P-3240EX(2)	16.0	452.00	120.0	641.94	1.02
P-3250EX	12.0	844.00	120.0	-71.63	0.20
P-3260EX	16.0	1,108.00	120.0	686.21	1.09
P-3270EX	16.0	1,509.00	120.0	531.58	0.85
P-3280EX	12.0	2,890.00	120.0	-154.63	0.44
P-3290EX	12.0	2,432.00	120.0	-83.00	0.24
P-3930EX	16.0	794.00	120.0	-810.61	1.29
P-3940EX	16.0	509.00	120.0	-810.61	1.29
P-3970EX	16.0	1,445.00	120.0	810.61	1.29
P-4720EX	16.0	1,216.00	120.0	1,050.81	1.68
P-4730EX	16.0	456.00	120.0	998.61	1.59
P-4750EX	16.0	715.00	120.0	998.61	1.59
P-4760EX	16.0	774.00	120.0	602.59	0.96
P-4780EX	24.0	2,143.00	120.0	403.39	0.29
P-4790EX	16.0	1,816.00	120.0	747.48	1.19
P-4860EX	24.0	986.00	120.0	-403.39	0.29
P-4870EX	24.0	620.00	120.0	-403.39	0.29
P-5700EX	16.0	1,176.00	120.0	1,011.18	1.61
P-5710EX	16.0	1,171.00	120.0	1,011.18	1.61
P-5740	24.0	1,548.00	120.0	-403.39	0.29
P-5780	16.0	684.00	120.0	605.54	0.97
P-6064	16.0	846.00	120.0	-285.94	0.46
P-6065	16.0	3,443.00	120.0	-285.94	0.46
P-6070	16.0	247.00	120.0	-277.43	0.44
P-6166EX	16.0	1,496.00	130.0	-842.74	1.34
P-6167EX	16.0	2,351.00	120.0	-1,049.83	1.68
P-6198	30.0	559.00	120.0	4,431.58	2.01
P-6218	30.0	458.00	120.0	3,540.67	1.61
P-6219	30.0	1,680.00	120.0	-3,540.67	1.61
P-6223	16.0	1,043.00	120.0	-641.94	1.02
P-6226	16.0	139.00	120.0	890.91	1.42
P-6236EX	24.0	2,939.00	130.0	-229.57	0.16
P-7000	12.0	742.00	120.0	-133.91	0.38
P-COMWTREX	36.0	10.00	120.0	1,238.41	0.39
P-DU-3-4-080	12.0	797.00	120.0	-27.34	0.08
P-DU-3-4-090	12.0	702.00	120.0	13.26	0.04
P-DU-3-4-100	12.0	909.00	120.0	-39.46	0.11
P-DU-3-4-110	16.0	597.00	120.0	-177.01	0.28
P-DU-3-4-120	16.0	1,153.00	120.0	-226.41	0.36
P-DU-3-4-130	12.0	707.00	120.0	-70.58	0.20

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-70	12.0	1,647.00	120.0	-157.53	0.45
P-DU-3S-130	16.0	2,122.00	120.0	-361.39	0.58
P-DU2-060	10.0	1,915.00	120.0	-127.51	0.52
P-DU2-070	10.0	952.00	120.0	-127.51	0.52
P-DU2-080	20.0	631.00	120.0	-473.19	0.48
P-DU2-090	20.0	1,106.00	120.0	-473.19	0.48
P-DU3-4-010A	12.0	1,448.00	120.0	84.77	0.24
P-DU3-4-010B	12.0	847.00	120.0	-83.03	0.24
P-DU3-4-020	24.0	1,290.00	120.0	-416.76	0.30
P-DU3-4-060	12.0	733.00	120.0	-306.93	0.87
P-DU3-4-160	12.0	579.00	120.0	-130.18	0.37
P-DU3-4-170	16.0	1,188.00	120.0	-224.62	0.36
P-DU3-4-180	16.0	876.00	120.0	-254.42	0.41
P-DU3-4-190	20.0	1,406.00	120.0	-897.41	0.92
P-DU3-4-200	8.0	1,001.00	120.0	69.03	0.44
P-DU3-4-210	8.0	1,083.00	120.0	-62.51	0.40
P-DU3-4-220	8.0	2,361.00	120.0	56.66	0.36
P-DU3-4-30	24.0	1,117.00	120.0	-645.93	0.46
P-DU3-4-40	24.0	496.00	120.0	-753.53	0.53
P-DU3-4-50	24.0	1,092.00	120.0	-894.16	0.63
P-DU3S-010	8.0	261.00	120.0	143.52	0.92
P-DU3S-020	8.0	1,374.00	120.0	58.45	0.37
P-DU3S-030	8.0	1,542.00	120.0	36.45	0.23
P-DU3S-040	8.0	1,242.00	120.0	6.45	0.04
P-DU3S-050	8.0	1,017.00	120.0	12.68	0.08
P-DU3S-060	8.0	974.00	120.0	-2.87	0.02
P-DU3S-070	8.0	1,384.00	120.0	-27.07	0.17
P-DU3S-080	8.0	1,241.00	120.0	-50.67	0.32
P-DU3S-090	8.0	621.00	120.0	-64.67	0.41
P-DU3S-100	16.0	788.00	120.0	-92.24	0.15
P-DU3S-110	16.0	1,851.00	120.0	-144.67	0.23
P-DU3S-120	16.0	822.00	120.0	-252.27	0.40
P-DU5N-030	16.0	529.00	120.0	-166.79	0.27
P-DU5N-040	12.0	2,743.00	120.0	-207.09	0.59
P-DU5N-050	20.0	416.00	120.0	-473.19	0.48
P-DU5N-060	20.0	1,208.00	120.0	-1,029.32	1.05
P-DU5N-070	20.0	1,780.00	120.0	-1,029.32	1.05
P-DU6-010	12.0	1,163.00	120.0	135.47	0.38
P-DU6-020	16.0	124.00	120.0	423.10	0.68
P-DU6-050	12.0	2,221.00	120.0	-135.82	0.39
P-DU6-060	12.0	2,209.00	120.0	135.47	0.38
P-DU6-070	16.0	142.00	120.0	965.70	1.54
P-DU6-080	12.0	1,135.00	120.0	135.82	0.39
P-DU6-130	16.0	1,866.00	120.0	-366.09	0.58
P-DU6-140	16.0	823.00	120.0	0.00	0.00
P-DU6-150	8.0	1,139.00	120.0	-194.49	1.24
P-DU6-180	12.0	1,702.00	120.0	-98.20	0.28
P-DU6-190	12.0	1,448.00	120.0	309.93	0.88
P-DU6-200	12.0	1,511.00	120.0	-277.92	0.79
P-DU6-210	20.0	548.00	120.0	-701.69	0.72
P-DU6-220	20.0	1,003.00	120.0	-779.54	0.80
P-DU6-230	8.0	2,333.00	120.0	104.75	0.67
P-DU6-240	12.0	696.00	120.0	372.03	1.06

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-250	8.0	2,342.00	120.0	-127.25	0.81
P-DU6-260	8.0	656.00	120.0	-29.96	0.19
P-DU6-270	12.0	803.00	120.0	0.00	0.00
P-DU6-290	8.0	936.00	120.0	-194.49	1.24
P-DU6-300	20.0	515.00	120.0	-752.29	0.77
P-DU6-310	12.0	1,617.00	120.0	166.79	0.47
P-DU7-010	12.0	1,115.00	120.0	169.78	0.48
P-DU7-020	12.0	1,147.00	120.0	-66.53	0.19
P-DU7-030	12.0	1,044.00	120.0	58.47	0.17
P-DU7-040	24.0	1,410.00	120.0	-1,297.16	0.92
P-DU7-050	24.0	1,075.00	120.0	-2,095.65	1.49
P-DU7-060	24.0	1,254.00	120.0	-2,117.85	1.50
P-DU7-070	24.0	1,205.00	120.0	-2,740.56	1.94
P-DU7-080	24.0	2,339.00	120.0	-2,851.51	2.02
P-DU7-090	16.0	941.00	120.0	-456.76	0.73
P-DU7-100	16.0	1,562.00	120.0	-398.96	0.64
P-DU7-110	16.0	1,742.00	120.0	-353.02	0.56
P-DU7-120	16.0	778.00	120.0	402.06	0.64
P-DU7-130	20.0	317.00	120.0	-0.09	0.00
P-DU7-140	20.0	1,207.00	120.0	3.51	0.00
P-DU7-150	20.0	1,236.00	120.0	-95.25	0.10
P-DU7-160	20.0	892.00	120.0	-19.65	0.02
P-DU7-170	12.0	1,073.00	120.0	-250.67	0.71
P-DU7-180	12.0	828.00	120.0	202.67	0.57
P-DU7-190	12.0	399.00	120.0	-88.89	0.25
P-DU7-200	12.0	2,378.00	120.0	209.52	0.59
P-DU7-210	12.0	1,049.00	120.0	-396.01	1.12
P-DU7-220	12.0	1,054.00	120.0	-335.81	0.95
P-DU7-230	12.0	1,714.00	120.0	-270.16	0.77
P-DU7-240	12.0	1,014.00	120.0	-168.76	0.48
P-DU8-010	16.0	1,107.00	120.0	-49.13	0.08
P-DU8-020	16.0	714.00	120.0	-122.39	0.20
P-DU8-030	16.0	1,312.00	120.0	-170.33	0.27
P-DU8-040	16.0	1,371.00	120.0	-259.22	0.41
P-DU8-050	16.0	520.00	120.0	-330.82	0.53
P-DU8-060	16.0	1,021.00	120.0	-490.95	0.78
P-DU8-070	8.0	542.00	120.0	-31.99	0.20
P-DU8-080	8.0	253.00	120.0	-9.06	0.06
P-DU8-090	8.0	1,138.00	120.0	-39.86	0.25
P-DU8-100	12.0	599.00	120.0	197.86	0.56
P-DU8-110	12.0	709.00	120.0	89.74	0.25
P-DU8-120	8.0	678.00	120.0	-40.93	0.26
P-DU8-130	8.0	1,315.00	120.0	49.86	0.32
P-DU8-140	8.0	966.00	120.0	40.01	0.26
P-DU8-150	6.0	737.00	120.0	16.13	0.18
P-DU8-160	8.0	1,265.00	120.0	26.04	0.17
P-DU8-170	8.0	2,613.00	120.0	9.90	0.06
P-DU8-180	8.0	1,778.00	120.0	-24.30	0.16
P-DU8-190	8.0	1,185.00	120.0	-8.10	0.05
P-DU8-200	8.0	1,054.00	120.0	58.20	0.37
P-DU9-010	16.0	904.00	120.0	8.52	0.01
P-DU9-020	8.0	227.00	120.0	-73.27	0.47
P-DU9-030	8.0	1,616.00	120.0	42.38	0.27

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU9-040	8.0	746.00	120.0	-79.93	0.51
P-DU9-050	8.0	869.00	120.0	50.71	0.32
P-DU9-060	8.0	1,550.00	120.0	-72.75	0.46
P-DU9-070	8.0	1,001.00	120.0	28.92	0.18
P-DU9-080	8.0	644.00	120.0	13.32	0.09
P-DU9-090	8.0	3,092.00	120.0	29.34	0.19
P-DU9-100	8.0	1,619.00	120.0	-32.60	0.21
P-DU9-110	8.0	3,057.00	120.0	-1.05	0.01
P-DU9-120	8.0	901.00	120.0	44.66	0.29
P-DU9-130	8.0	879.00	120.0	-63.94	0.41
P-DU9-140	8.0	430.00	120.0	-160.13	1.02
P-DU9-150	8.0	4,471.00	120.0	-33.39	0.21
P-SCAP	48.0	1,752.00	120.0	-7,360.70	1.31

Peak-Hour Demand

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,834.24	1,634.0
SCAP DWPS	1,634.0	10,563.66	1,634.0

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	93.2	1,621.5
J-110EX	1,418.0	Desert Wells	0.00	87.9	1,621.2
J-120EX	1,462.0	Desert Wells	0.00	74.2	1,633.5
J-135EX	1,460.0	Desert Wells	0.00	74.4	1,631.9
J-150EX	1,472.0	Desert Wells	0.00	67.6	1,628.3
J-160EX	1,435.0	Desert Wells	0.00	80.9	1,622.1
J-170EX	1,430.0	Desert Wells	0.00	83.1	1,622.0
J-180EX	1,410.0	Desert Wells	0.00	91.7	1,621.9
J-190EX	1,395.0	Desert Wells	0.00	98.0	1,621.4
J-200EX	1,385.0	Desert Wells	0.00	102.1	1,620.9
J-220EX	1,480.0	Desert Wells	0.00	65.5	1,631.5
J-230EX	1,475.0	Desert Wells	0.00	67.1	1,630.0
J-250EX	1,452.0	Desert Wells	23.40	76.4	1,628.6
J-260EX	1,453.0	Desert Wells	54.60	76.2	1,629.0
J-270EX	1,429.0	Desert Wells	0.00	83.6	1,622.1
J-280EX	1,460.0	Desert Wells	0.00	70.2	1,622.2
J-300EX	1,392.0	Desert Wells	53.10	98.8	1,620.4
J-320EX	1,422.0	Desert Wells	0.00	86.6	1,622.1
J-330EX	1,455.0	Desert Wells	0.00	72.8	1,623.3
J-340EX	1,440.0	Desert Wells	0.00	78.9	1,622.3
J-360EX	1,400.0	Desert Wells	2,228.00	94.6	1,618.6
J-550EX	1,425.0	Desert Wells	0.00	85.3	1,622.2
J-590EX	1,413.0	Desert Wells	0.00	90.2	1,621.4
J-920EX	1,434.0	Desert Wells	0.00	81.5	1,622.4
J-960EX	1,402.0	Desert Wells	0.00	94.3	1,620.0
J-970EX	1,397.0	Desert Wells	0.00	96.1	1,619.1
J-1000EX	1,455.0	Desert Wells	0.00	77.3	1,633.6
J-1010EX	1,485.0	Desert Wells	0.00	64.3	1,633.6
J-1020EX	1,425.0	Desert Wells	0.00	88.3	1,629.2
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	78.2	1,625.8
J-1120EX	1,456.0	Desert Wells	0.00	75.2	1,629.8
J-1130EX	1,445.0	Desert Wells	0.00	78.8	1,627.2
J-1160EX	1,445.0	Desert Wells	0.00	81.5	1,633.5
J-1170EX	1,470.0	Desert Wells	0.00	70.8	1,633.6
J-1180EX	1,440.0	Desert Wells	0.00	82.8	1,631.4
J-1190EX	1,420.0	Desert Wells	0.00	88.9	1,625.6
J-1200EX	1,445.0	Desert Wells	0.00	80.7	1,631.5
J-1210EX	1,455.0	Desert Wells	0.00	77.3	1,633.6
J-1220EX	1,475.0	Desert Wells	0.00	68.6	1,633.6
J-1230EX	1,460.0	Desert Wells	0.00	70.4	1,622.7
J-1235EX	1,440.0	Desert Wells	0.00	79.7	1,624.2
J-1240EX	1,455.0	Desert Wells	0.00	73.4	1,624.7
J-1280	1,410.0	Desert Wells	0.00	91.7	1,621.9
J-1290EX	1,480.0	Desert Wells	0.00	66.4	1,633.6
J-1300EX	1,465.0	Desert Wells	0.00	72.9	1,633.6
J-1310EX	1,480.0	Desert Wells	0.00	66.4	1,633.6
J-1330EX	1,465.0	Desert Wells	0.00	72.9	1,633.6
J-1340EX	1,450.0	Desert Wells	0.00	79.4	1,633.6
J-1350EX	1,465.0	Desert Wells	0.00	72.9	1,633.6
J-1360EX	1,445.0	Desert Wells	0.00	81.5	1,633.5
J-1370EX	1,430.0	Desert Wells	0.00	87.2	1,631.5
J-1380EX	1,450.0	Desert Wells	0.00	78.8	1,632.2

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.2	1,631.4
J-1400EX	1,430.0	Desert Wells	0.00	87.1	1,631.4
J-1410	1,458.0	Desert Wells	0.00	74.8	1,630.8
J-1410EX	1,420.0	Desert Wells	0.00	89.6	1,627.1
J-1420EX	1,460.0	Desert Wells	0.00	73.6	1,630.2
J-1430EX	1,455.0	Desert Wells	0.00	75.8	1,630.2
J-1440EX	1,478.0	Desert Wells	0.00	66.1	1,630.7
J-1680EX	1,401.0	Desert Wells	0.00	94.5	1,619.4
J-1990EX	1,447.0	Desert Wells	78.30	77.7	1,626.5
J-2000EX	1,442.0	Desert Wells	0.00	79.0	1,624.7
J-2010EX	1,419.0	Desert Wells	0.00	87.8	1,622.0
J-2040EX	1,427.0	Desert Wells	0.00	84.4	1,622.1
J-2120EX	1,453.0	Desert Wells	0.00	76.5	1,629.8
J-2140EX	1,450.0	Desert Wells	0.00	77.4	1,628.8
J-2295	1,415.0	Desert Wells	0.00	89.2	1,621.2
J-2340EX	1,434.0	Desert Wells	0.00	81.7	1,622.8
J-2353	1,456.0	Desert Wells	0.00	75.2	1,629.9
J-2361	1,456.9	Desert Wells	0.00	75.0	1,630.2
J-2364	1,457.4	Desert Wells	0.00	74.7	1,630.1
J-DU2-020	1,411.5	Desert Wells	0.00	90.1	1,619.7
J-DU2-030	1,408.0	Desert Wells	0.00	91.2	1,618.9
J-DU3-4-010	1,405.0	Desert Wells	161.40	93.2	1,620.5
J-DU3-4-020	1,402.0	Desert Wells	161.40	94.6	1,620.6
J-DU3-4-030	1,392.0	Desert Wells	216.60	98.8	1,620.5
J-DU3-4-030A	1,394.5	Desert Wells	251.70	97.7	1,620.4
J-DU3-4-040	1,403.0	Desert Wells	107.40	94.2	1,620.6
J-DU3-4-050	1,408.0	Desert Wells	149.40	91.9	1,620.4
J-DU3-4-060	1,408.0	Desert Wells	0.00	91.7	1,619.9
J-DU3-4-070	1,404.0	Desert Wells	60.90	93.4	1,619.9
J-DU3-4-080	1,400.0	Desert Wells	39.30	95.1	1,619.9
J-DU3-4-090	1,393.0	Desert Wells	105.30	98.2	1,619.9
J-DU3-4-100	1,391.0	Desert Wells	136.20	99.2	1,620.4
J-DU3-4-110	1,393.0	Desert Wells	60.90	98.1	1,619.7
J-DU3-4-120	1,393.0	Desert Wells	0.00	98.0	1,619.6
J-DU3-4-130	1,395.0	Desert Wells	74.10	97.2	1,619.6
J-DU3-4-140	1,403.0	Desert Wells	103.20	93.8	1,619.7
J-DU3-4-150	1,407.0	Desert Wells	89.40	92.1	1,619.8
J-DU3-4-160	1,406.0	Desert Wells	44.70	92.5	1,619.8
J-DU3-4-170	1,410.0	Desert Wells	254.70	90.8	1,619.9
J-DU3-4-200	1,412.5	Desert Wells	69.90	90.0	1,620.6
J-DU3-4-210	1,406.0	Desert Wells	282.30	92.7	1,620.3
J-DU3S-010	1,412.0	Desert Wells	30.60	90.4	1,620.9
J-DU3S-020	1,407.0	Desert Wells	33.00	92.4	1,620.6
J-DU3S-030	1,401.0	Desert Wells	45.00	94.9	1,620.4
J-DU3S-040	1,399.0	Desert Wells	33.00	95.8	1,620.4
J-DU3S-050	1,404.0	Desert Wells	36.30	93.6	1,620.4
J-DU3S-060	1,410.0	Desert Wells	35.40	91.1	1,620.5
J-DU3S-070	1,417.0	Desert Wells	21.00	88.1	1,620.7
J-DU3S-080	1,396.0	Desert Wells	211.80	97.1	1,620.4
J-DU5N-010	1,436.0	Desert Wells	0.00	80.2	1,621.4
J-DU5N-020	1,424.5	Desert Wells	0.00	85.4	1,621.9
J-DU5N-030	1,426.0	Desert Wells	60.30	84.8	1,621.9
J-DU5N-040	1,414.0	Desert Wells	0.00	88.9	1,619.5

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	2,228.00	88.9	1,619.4
J-DU5N-060	1,417.0	Desert Wells	0.00	87.9	1,620.2
J-DU6-010	1,459.0	Desert Wells	0.00	73.9	1,629.9
J-DU6-020	1,453.0	Desert Wells	694.40	76.5	1,629.8
J-DU6-050	1,448.0	Desert Wells	0.00	78.7	1,630.0
J-DU6-060	1,458.0	Desert Wells	694.40	74.5	1,630.1
J-DU6-080	1,444.6	Desert Wells	257.40	80.0	1,629.6
J-DU6-090	1,439.0	Desert Wells	0.00	81.4	1,627.1
J-DU6-100	1,439.0	Desert Wells	0.00	82.5	1,629.6
J-DU6-110	1,432.0	Desert Wells	147.30	81.9	1,621.4
J-DU6-120	1,422.0	Desert Wells	150.90	86.3	1,621.5
J-DU6-130	1,416.0	Desert Wells	123.30	88.5	1,620.6
J-DU6-140	1,417.0	Desert Wells	198.00	88.2	1,620.9
J-DU6-150	1,427.0	Desert Wells	126.90	84.6	1,622.6
J-DU6-160	1,436.0	Desert Wells	145.80	81.8	1,625.0
J-DU6-170	1,416.5	Desert Wells	75.90	88.4	1,620.7
J-DU7-010	1,415.0	Desert Wells	7.20	89.2	1,621.1
J-DU7-020	1,425.0	Desert Wells	69.90	84.7	1,620.9
J-DU7-030	1,416.0	Desert Wells	125.00	88.6	1,620.8
J-DU7-040	1,409.0	Desert Wells	56.40	91.7	1,620.8
J-DU7-050	1,416.0	Desert Wells	57.90	88.8	1,621.3
J-DU7-060	1,423.0	Desert Wells	33.30	86.2	1,622.2
J-DU7-070	1,430.0	Desert Wells	0.00	83.6	1,623.3
J-DU7-080	1,434.0	Desert Wells	121.50	82.7	1,625.0
J-DU7-090	1,437.0	Desert Wells	0.00	80.3	1,622.5
J-DU7-100	1,435.0	Desert Wells	86.70	81.0	1,622.2
J-DU7-110	1,435.0	Desert Wells	86.40	80.8	1,621.7
J-DU7-120	1,420.0	Desert Wells	0.00	87.1	1,621.3
J-DU7-130	1,420.0	Desert Wells	5.40	87.1	1,621.3
J-DU7-140	1,425.0	Desert Wells	105.00	84.9	1,621.3
J-DU7-150	1,419.0	Desert Wells	113.40	87.5	1,621.3
J-DU7-160	1,435.0	Desert Wells	72.00	81.3	1,622.8
J-DU7-170	1,432.0	Desert Wells	32.10	82.4	1,622.5
J-DU7-180	1,433.0	Desert Wells	56.10	82.0	1,622.6
J-DU7-190	1,437.0	Desert Wells	90.30	80.7	1,623.5
J-DU7-200	1,432.0	Desert Wells	152.10	82.0	1,621.6
J-DU8-010	1,420.0	Desert Wells	0.00	87.1	1,621.3
J-DU8-020	1,419.5	Desert Wells	0.00	87.3	1,621.4
J-DU8-030	1,421.0	Desert Wells	0.00	86.7	1,621.4
J-DU8-040	1,418.0	Desert Wells	20.10	88.1	1,621.6
J-DU8-050	1,422.0	Desert Wells	0.00	86.4	1,621.7
J-DU8-060	1,420.0	Desert Wells	27.00	87.1	1,621.4
J-DU8-070	1,420.0	Desert Wells	46.20	87.1	1,621.4
J-DU8-080	1,422.0	Desert Wells	13.20	86.3	1,621.5
J-DU8-090	1,424.0	Desert Wells	33.00	85.4	1,621.4
J-DU8-100	1,425.0	Desert Wells	27.60	85.0	1,621.5
J-DU8-110	1,430.0	Desert Wells	99.00	82.8	1,621.3
J-DU8-120	1,431.0	Desert Wells	51.30	82.3	1,621.3
J-DU8-130	1,427.0	Desert Wells	63.00	84.1	1,621.4
J-DU9-010	1,419.0	Desert Wells	59.10	87.5	1,621.3
J-DU9-020	1,415.0	Desert Wells	107.40	89.1	1,621.1
J-DU9-030	1,416.0	Desert Wells	97.80	88.6	1,620.9
J-DU9-040	1,416.0	Desert Wells	23.40	88.6	1,620.8

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-050	1,419.0	Desert Wells	0.00	87.3	1,620.8
J-DU9-060	1,422.0	Desert Wells	94.20	86.1	1,621.1
J-DU9-070	1,414.0	Desert Wells	94.50	89.4	1,620.7
J-DU9-080	1,419.0	Desert Wells	115.50	87.3	1,620.7
J-DU9-090	1,414.0	Desert Wells	0.00	89.7	1,621.3
J-DU9-100	1,414.0	Desert Wells	0.00	89.7	1,621.4

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	143.42	0.23
P-170EX	16.0	5,365.91	120.0	143.42	0.23
P-180EX	16.0	5,395.89	120.0	322.10	0.51
P-190EX	16.0	5,727.93	120.0	322.10	0.51
P-200EX	16.0	888.87	120.0	-1,660.87	2.65
P-210EX	16.0	509.51	120.0	-1,660.87	2.65
P-220EX	16.0	2,908.75	120.0	987.58	1.58
P-240EX	16.0	1,386.71	120.0	-2,031.96	3.24
P-250EX	16.0	2,610.66	120.0	942.21	1.50
P-340EX	16.0	5,775.00	120.0	143.42	0.23
P-410EX	16.0	5,368.22	120.0	322.10	0.51
P-970	24.0	1,001.45	120.0	1,009.40	0.72
P-980	24.0	1,934.58	120.0	264.43	0.19
P-1060EX	16.0	1,328.19	120.0	277.07	0.44
P-1070EX	16.0	2,607.17	120.0	277.07	0.44
P-1630EX	16.0	1,793.28	120.0	139.47	0.22
P-1640EX	16.0	1,447.45	120.0	669.91	1.07
P-1780	24.0	1,527.79	120.0	1,009.40	0.72
P-1790	24.0	1,115.45	120.0	1,009.40	0.72
P-1940EX	16.0	1,171.38	120.0	704.64	1.12
P-1950EX	16.0	1,440.76	120.0	704.64	1.12
P-1970EX	16.0	816.47	120.0	506.57	0.81
P-1980EX	16.0	1,103.17	120.0	445.67	0.71
P-2040EX	16.0	10,634.81	120.0	-204.06	0.33
P-2055EX	16.0	10,453.02	120.0	785.44	1.25
P-2070EX	24.0	5,328.61	120.0	-844.74	0.60
P-2500EX	24.0	2,750.22	120.0	166.51	0.12
P-2510EX	24.0	2,726.43	120.0	103.04	0.07
P-2540EX	12.0	2,624.38	120.0	515.28	1.46
P-2570EX	16.0	2,640.03	120.0	1,507.92	2.41
P-2655EX	16.0	2,870.17	120.0	492.12	0.79
P-2660EX	24.0	2,796.67	120.0	326.32	0.23
P-2665EX	16.0	2,715.77	120.0	492.12	0.79
P-2690EX	16.0	2,914.43	120.0	338.78	0.54
P-2700EX	16.0	3,115.09	120.0	1,281.00	2.04
P-2710EX	16.0	1,822.64	120.0	1,060.52	1.69
P-2720EX	12.0	3,042.02	120.0	-220.48	0.63
P-2800	24.0	5,785.85	120.0	-178.68	0.13
P-2830	16.0	2,890.37	120.0	568.40	0.91
P-2860EX	24.0	761.21	120.0	326.32	0.23
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	6.50	0.04
P-2900	24.0	1,422.97	120.0	307.10	0.22
P-2910EX	24.0	496.51	120.0	332.83	0.24
P-2950	12.0	1,088.63	120.0	63.47	0.18
P-2970EX	12.0	1,118.68	120.0	110.21	0.31
P-2990EX	8.0	2,810.72	120.0	15.91	0.10
P-3010EX	12.0	471.37	120.0	-6.50	0.02
P-3020EX	12.0	1,167.01	120.0	126.12	0.36
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	28.34	0.18
P-3060EX	12.0	595.31	120.0	0.00	0.00
P-3070EX	8.0	2,921.51	120.0	154.46	0.99

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3080EX	12.0	1,396.97	120.0	568.02	1.61
P-3090EX	12.0	1,108.96	120.0	451.28	1.28
P-3100EX	12.0	694.82	120.0	-63.99	0.18
P-3110EX	12.0	664.35	120.0	52.74	0.15
P-3120EX	8.0	1,851.06	120.0	116.73	0.75
P-3130EX	12.0	1,154.91	120.0	-154.46	0.44
P-3140EX	16.0	1,782.97	120.0	1,300.72	2.08
P-3150EX	16.0	958.12	120.0	1,507.92	2.41
P-3160EX	8.0	3,801.45	120.0	207.20	1.32
P-3170EX	8.0	2,837.60	120.0	-25.73	0.16
P-3180EX	8.0	735.68	120.0	21.84	0.14
P-3190EX	30.0	2,558.57	120.0	6,438.74	2.92
P-3240EX	16.0	810.36	120.0	459.36	0.73
P-3240EX(2)	16.0	452.50	120.0	990.72	1.58
P-3250EX	12.0	844.21	120.0	-45.36	0.13
P-3260EX	16.0	1,108.49	120.0	987.58	1.58
P-3270EX	16.0	1,509.41	120.0	782.18	1.25
P-3280EX	12.0	2,890.26	120.0	-205.39	0.58
P-3290EX	12.0	2,432.48	120.0	-160.03	0.45
P-3930EX	16.0	794.17	120.0	-1,230.85	1.96
P-3940EX	16.0	509.16	120.0	-1,230.85	1.96
P-3970EX	16.0	1,445.13	120.0	1,230.85	1.96
P-4720EX	16.0	1,215.66	120.0	1,594.27	2.54
P-4730EX	16.0	455.51	120.0	1,515.97	2.42
P-4750EX	16.0	715.18	120.0	1,515.97	2.42
P-4760EX	16.0	774.38	120.0	914.72	1.46
P-4780EX	24.0	2,143.12	120.0	613.13	0.43
P-4790EX	16.0	1,816.22	120.0	1,135.20	1.81
P-4860EX	24.0	985.98	120.0	-613.13	0.43
P-4870EX	24.0	619.54	120.0	-613.13	0.43
P-5700EX	16.0	1,175.56	120.0	1,431.70	2.28
P-5710EX	16.0	1,171.19	120.0	1,431.70	2.28
P-5740	24.0	1,547.92	120.0	-613.13	0.43
P-5780	16.0	683.67	120.0	936.12	1.49
P-6064	16.0	846.07	120.0	-434.44	0.69
P-6065	16.0	3,442.89	120.0	-434.44	0.69
P-6070	16.0	247.15	120.0	-419.18	0.67
P-6166EX	16.0	1,496.42	130.0	-1,348.15	2.15
P-6167EX	16.0	2,351.14	120.0	-1,660.87	2.65
P-6198	30.0	559.22	120.0	6,438.74	2.92
P-6218	30.0	458.03	120.0	5,352.99	2.43
P-6219	30.0	1,679.89	120.0	-5,352.99	2.43
P-6223	16.0	1,042.80	120.0	-990.72	1.58
P-6226	16.0	139.10	120.0	1,085.75	1.73
P-6236EX	24.0	2,939.36	130.0	-348.70	0.25
P-7000	12.0	741.92	120.0	-202.05	0.57
P-COMWTREX	36.0	1,202.28	120.0	1,834.24	0.58
P-DU-3-4-080	12.0	797.04	120.0	-42.16	0.12
P-DU-3-4-090	12.0	702.19	120.0	18.74	0.05
P-DU-3-4-100	12.0	909.19	120.0	-58.04	0.16
P-DU-3-4-110	16.0	597.34	120.0	-258.96	0.41
P-DU-3-4-120	16.0	1,153.09	120.0	-333.06	0.53
P-DU-3-4-130	12.0	706.88	120.0	-156.52	0.44

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-70	12.0	1,647.45	120.0	-288.09	0.82
P-DU-3S-130	16.0	2,122.39	120.0	-547.95	0.87
P-DU2-060	12.0	1,914.95	120.0	-292.51	0.83
P-DU2-070	12.0	951.56	120.0	-292.51	0.83
P-DU2-080	20.0	631.03	120.0	-895.29	0.91
P-DU2-090	20.0	1,106.44	120.0	-895.29	0.91
P-DU3-4-010A	12.0	1,447.93	120.0	126.91	0.36
P-DU3-4-010B	12.0	847.20	120.0	-124.79	0.35
P-DU3-4-020	24.0	1,289.68	120.0	-666.64	0.47
P-DU3-4-060	12.0	733.41	120.0	-437.49	1.24
P-DU3-4-160	12.0	578.86	120.0	-245.92	0.70
P-DU3-4-170	16.0	1,187.74	120.0	-279.74	0.45
P-DU3-4-180	16.0	876.41	120.0	-324.44	0.52
P-DU3-4-190	20.0	1,405.86	120.0	-1,474.43	1.51
P-DU3-4-200	8.0	1,000.70	120.0	102.89	0.66
P-DU3-4-210	8.0	1,083.47	120.0	-92.43	0.59
P-DU3-4-220	8.0	2,361.07	120.0	86.98	0.56
P-DU3-4-30	24.0	1,116.54	120.0	-1,010.15	0.72
P-DU3-4-40	24.0	496.31	120.0	-1,171.55	0.83
P-DU3-4-50	24.0	1,092.47	120.0	-1,381.84	0.98
P-DU3S-010	8.0	260.69	120.0	217.14	1.39
P-DU3S-020	8.0	1,373.83	120.0	88.60	0.57
P-DU3S-030	8.0	1,542.05	120.0	55.60	0.35
P-DU3S-040	8.0	1,241.65	120.0	10.60	0.07
P-DU3S-050	8.0	1,016.55	120.0	17.16	0.11
P-DU3S-060	8.0	974.34	120.0	-5.24	0.03
P-DU3S-070	8.0	1,383.69	120.0	-41.54	0.27
P-DU3S-080	8.0	1,241.43	120.0	-76.94	0.49
P-DU3S-090	8.0	620.85	120.0	-97.94	0.63
P-DU3S-100	16.0	788.42	120.0	-129.53	0.21
P-DU3S-110	16.0	1,850.66	120.0	-224.22	0.36
P-DU3S-120	16.0	822.09	120.0	-385.62	0.62
P-DU5N-030	16.0	528.70	120.0	-252.41	0.40
P-DU5N-040	12.0	2,743.45	120.0	-312.71	0.89
P-DU5N-050	20.0	416.37	120.0	-895.29	0.91
P-DU5N-060	20.0	1,208.29	120.0	-1,625.22	1.66
P-DU5N-070	20.0	1,779.99	120.0	-1,625.22	1.66
P-DU6-010	12.0	1,162.55	120.0	161.44	0.46
P-DU6-020	16.0	123.88	120.0	371.10	0.59
P-DU6-050	12.0	2,221.22	120.0	-161.86	0.46
P-DU6-060	12.0	2,209.31	120.0	161.44	0.46
P-DU6-070	16.0	142.12	120.0	1,017.70	1.62
P-DU6-080	12.0	1,134.59	120.0	161.86	0.46
P-DU6-130	16.0	1,866.29	120.0	-554.39	0.88
P-DU6-140	16.0	823.26	120.0	0.00	0.00
P-DU6-150	8.0	1,139.37	120.0	-296.99	1.90
P-DU6-180	12.0	1,701.72	120.0	-147.30	0.42
P-DU6-190	12.0	1,447.65	120.0	479.76	1.36
P-DU6-200	12.0	1,510.55	120.0	-433.97	1.23
P-DU6-210	20.0	548.31	120.0	-1,163.76	1.19
P-DU6-220	20.0	1,003.42	120.0	-1,276.89	1.30
P-DU6-230	8.0	2,333.32	120.0	160.77	1.03
P-DU6-240	12.0	696.34	120.0	572.98	1.63

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-250	8.0	2,342.14	120.0	-194.45	1.24
P-DU6-260	8.0	656.01	120.0	-43.25	0.28
P-DU6-270	12.0	803.20	120.0	0.00	0.00
P-DU6-290	8.0	936.11	120.0	-296.99	1.90
P-DU6-300	20.0	514.67	120.0	-1,239.66	1.27
P-DU6-310	12.0	1,616.85	120.0	252.41	0.72
P-DU7-010	12.0	1,114.60	120.0	243.67	0.69
P-DU7-020	12.0	1,146.78	120.0	-86.79	0.25
P-DU7-030	12.0	1,044.06	120.0	38.21	0.11
P-DU7-040	24.0	1,409.98	120.0	-1,913.94	1.36
P-DU7-050	24.0	1,075.39	120.0	-3,183.57	2.26
P-DU7-060	24.0	1,253.80	120.0	-3,216.87	2.28
P-DU7-070	24.0	1,205.32	120.0	-4,167.90	2.96
P-DU7-080	24.0	2,338.72	120.0	-4,332.65	3.07
P-DU7-090	16.0	941.19	120.0	-694.20	1.11
P-DU7-100	16.0	1,562.41	120.0	-607.50	0.97
P-DU7-110	16.0	1,741.52	120.0	-540.31	0.86
P-DU7-120	16.0	778.48	120.0	596.78	0.95
P-DU7-130	20.0	316.65	120.0	-30.42	0.03
P-DU7-140	20.0	1,206.89	120.0	-25.02	0.03
P-DU7-150	20.0	1,235.71	120.0	-178.56	0.18
P-DU7-160	20.0	891.94	120.0	-65.16	0.07
P-DU7-170	12.0	1,072.99	120.0	-378.05	1.07
P-DU7-180	12.0	827.71	120.0	306.05	0.87
P-DU7-190	12.0	398.61	120.0	-136.69	0.39
P-DU7-200	12.0	2,378.07	120.0	318.16	0.90
P-DU7-210	12.0	1,048.78	120.0	-601.25	1.71
P-DU7-220	12.0	1,053.72	120.0	-510.95	1.45
P-DU7-230	12.0	1,714.23	120.0	-410.64	1.16
P-DU7-240	12.0	1,014.45	120.0	-258.54	0.73
P-DU8-010	16.0	1,107.48	120.0	-86.88	0.14
P-DU8-020	16.0	713.88	120.0	-194.10	0.31
P-DU8-030	16.0	1,312.24	120.0	-263.33	0.42
P-DU8-040	16.0	1,371.08	120.0	-396.07	0.63
P-DU8-050	16.0	520.30	120.0	-504.01	0.80
P-DU8-060	16.0	1,021.04	120.0	-744.97	1.19
P-DU8-070	8.0	541.92	120.0	-50.17	0.32
P-DU8-080	8.0	253.35	120.0	-14.51	0.09
P-DU8-090	8.0	1,138.34	120.0	-60.71	0.39
P-DU8-100	12.0	598.81	120.0	298.95	0.85
P-DU8-110	12.0	709.10	120.0	135.81	0.39
P-DU8-120	8.0	678.33	120.0	-62.66	0.40
P-DU8-130	8.0	1,315.41	120.0	74.84	0.48
P-DU8-140	8.0	965.85	120.0	59.95	0.38
P-DU8-150	6.0	737.49	120.0	23.67	0.27
P-DU8-160	8.0	1,265.36	120.0	38.97	0.25
P-DU8-170	8.0	2,613.46	120.0	14.81	0.09
P-DU8-180	8.0	1,777.60	120.0	-36.49	0.23
P-DU8-190	8.0	1,184.98	120.0	-11.64	0.07
P-DU8-200	8.0	1,054.34	120.0	87.85	0.56
P-DU9-010	16.0	903.69	120.0	15.26	0.02
P-DU9-020	8.0	226.81	120.0	-107.22	0.68
P-DU9-030	8.0	1,616.12	120.0	63.38	0.40

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (Interim Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU9-040	8.0	745.70	120.0	-119.40	0.76
P-DU9-050	8.0	868.53	120.0	75.38	0.48
P-DU9-060	8.0	1,549.98	120.0	-109.06	0.70
P-DU9-070	8.0	1,000.62	120.0	42.85	0.27
P-DU9-080	8.0	643.77	120.0	19.45	0.12
P-DU9-090	8.0	3,091.64	120.0	43.80	0.28
P-DU9-100	8.0	1,618.99	120.0	-48.93	0.31
P-DU9-110	8.0	3,057.43	120.0	-1.78	0.01
P-DU9-120	8.0	901.10	120.0	66.99	0.43
P-DU9-130	8.0	878.92	120.0	-96.47	0.62
P-DU9-140	8.0	429.87	120.0	-240.96	1.54
P-DU9-150	8.0	4,470.55	120.0	-50.28	0.32
P-SCAP	48.0	1,752.16	120.0	-10,563.66	1.87

Max-Day Demand Plus Fire Flow

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	4,000.00	20.0	89.9	J-1010EX	3.32	P-240EX
J-110EX	1,418.0	True	4,000.00	5,000.00	20.0	83.9	J-1010EX	3.93	P-6166EX
J-120EX	1,462.0	True	2,000.00	4,000.00	20.0	74.2	J-1010EX	2.35	P-240EX
J-135EX	1,460.0	True	2,000.00	4,000.00	20.0	72.7	J-1010EX	4.32	P-5700EX
J-150EX	1,472.0	True	2,000.00	4,000.00	20.0	65.1	J-1010EX	3.17	P-240EX
J-160EX	1,435.0	True	2,000.00	4,000.00	20.0	71.1	J-1010EX	3.52	P-340EX
J-170EX	1,430.0	True	2,000.00	4,000.00	20.0	73.3	J-1010EX	3.50	P-170EX
J-180EX	1,410.0	True	2,000.00	4,000.00	20.0	88.0	J-1010EX	3.24	P-240EX
J-190EX	1,395.0	True	2,000.00	4,000.00	20.0	87.7	J-1010EX	3.75	P-180EX
J-200EX	1,385.0	True	2,000.00	4,000.00	20.0	92.1	J-1010EX	3.73	P-410EX
J-220EX	1,480.0	True	2,000.00	4,000.00	20.0	61.9	J-1440EX	3.77	P-220EX
J-230EX	1,475.0	True	2,000.00	4,000.00	20.0	63.8	J-1440EX	3.11	P-240EX
J-250EX	1,452.0	True	4,015.60	5,015.60	20.0	75.4	J-1010EX	3.43	P-6198
J-260EX	1,453.0	True	4,036.40	5,036.40	20.0	73.8	J-1010EX	4.39	P-5780
J-270EX	1,429.0	True	2,000.00	4,000.00	20.0	81.6	J-1010EX	3.23	P-240EX
J-280EX	1,460.0	True	2,000.00	4,000.00	20.0	67.6	J-1010EX	3.23	P-240EX
J-300EX	1,392.0	True	4,035.40	5,035.40	20.0	94.0	J-1010EX	3.51	P-1630EX
J-320EX	1,422.0	True	2,000.00	4,000.00	20.0	84.2	J-1010EX	3.23	P-240EX
J-330EX	1,455.0	True	2,000.00	4,000.00	20.0	70.0	J-1010EX	3.22	P-240EX
J-340EX	1,440.0	True	2,000.00	4,000.00	20.0	77.1	J-1010EX	3.23	P-240EX
J-360EX	1,400.0	True	5,375.00	8,375.00	20.0	81.0	J-1010EX	5.39	P-3970EX
J-550EX	1,425.0	True	2,000.00	4,000.00	20.0	83.5	J-1010EX	3.23	P-240EX
J-590EX	1,413.0	True	4,000.00	5,000.00	20.0	83.3	J-1010EX	4.27	P-1060EX
J-920EX	1,434.0	True	2,000.00	4,000.00	20.0	79.7	J-1010EX	3.23	P-240EX
J-960EX	1,402.0	True	2,000.00	4,000.00	20.0	90.0	J-1010EX	4.26	P-3970EX
J-970EX	1,397.0	True	2,000.00	4,000.00	20.0	92.2	J-1010EX	4.14	P-1940EX
J-1000EX	1,455.0	True	2,000.00	4,000.00	20.0	76.3	J-1010EX	2.39	P-240EX
J-1010EX	1,485.0	True	2,000.00	4,000.00	20.0	63.4	J-1310EX	2.37	P-240EX
J-1020EX	1,425.0	True	2,000.00	4,000.00	20.0	82.5	J-1010EX	3.25	P-2540EX
J-1030EX	1,480.0	True	2,000.00	4,000.00	20.0	66.6	J-1010EX	2.35	P-240EX
J-1050EX	1,445.0	True	2,000.00	4,000.00	20.0	75.7	J-1010EX	4.42	P-4720EX
J-1120EX	1,456.0	True	2,000.00	4,000.00	20.0	73.9	J-1010EX	4.64	P-3240EX(2)
J-1130EX	1,445.0	True	4,000.00	6,000.00	20.0	71.3	J-1010EX	6.56	P-210EX
J-1160EX	1,445.0	True	2,000.00	4,000.00	20.0	59.3	J-1010EX	11.35	P-3030EX
J-1170EX	1,470.0	True	2,000.00	4,000.00	20.0	69.7	J-1010EX	2.37	P-240EX
J-1180EX	1,440.0	True	2,000.00	4,000.00	20.0	73.9	J-1010EX	5.54	P-3080EX
J-1190EX	1,420.0	True	2,000.00	4,000.00	20.0	83.5	J-1010EX	3.97	P-3150EX
J-1200EX	1,445.0	True	2,000.00	4,000.00	20.0	45.5	J-1370EX	11.35	P-3060EX
J-1210EX	1,455.0	True	2,000.00	3,750.63	20.0	42.9	J-1300EX	12.00	P-3180EX
J-1220EX	1,475.0	True	2,000.00	4,000.00	20.0	67.9	J-1010EX	2.36	P-240EX
J-1230EX	1,460.0	True	2,000.00	4,000.00	20.0	65.5	J-1010EX	3.25	P-2655EX
J-1235EX	1,440.0	True	2,000.00	4,000.00	20.0	77.3	J-1010EX	3.47	P-4760EX
J-1240EX	1,455.0	True	2,000.00	4,000.00	20.0	70.4	J-1010EX	3.33	P-2700EX
J-1280	1,410.0	True	2,000.00	4,000.00	20.0	89.1	J-1010EX	3.24	P-240EX
J-1290EX	1,480.0	True	2,000.00	4,000.00	20.0	65.7	J-1010EX	2.36	P-240EX
J-1300EX	1,465.0	True	2,000.00	3,750.63	20.0	44.2	J-1350EX	12.00	P-3180EX
J-1310EX	1,480.0	True	2,000.00	4,000.00	20.0	65.6	J-1010EX	2.36	P-240EX
J-1330EX	1,465.0	True	2,000.00	4,000.00	20.0	65.3	J-1010EX	6.75	P-2950
J-1340EX	1,450.0	True	2,000.00	4,000.00	20.0	70.3	J-1010EX	7.36	P-2970EX
J-1350EX	1,465.0	True	2,000.00	3,663.86	20.0	48.2	J-1300EX	12.00	P-3180EX
J-1360EX	1,445.0	True	2,000.00	4,000.00	20.0	65.6	J-1010EX	7.54	P-3020EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1370EX	1,430.0	True	2,000.00	4,000.00	20.0	61.8	J-1200EX	8.65	P-3130EX
J-1380EX	1,450.0	True	2,000.00	4,000.00	20.0	70.2	J-1010EX	6.76	P-3080EX
J-1390EX	1,430.0	True	2,000.00	4,000.00	20.0	75.3	J-1010EX	6.72	P-3100EX
J-1400EX	1,430.0	True	2,000.00	4,000.00	20.0	71.5	J-1010EX	7.71	P-3110EX
J-1410	1,458.0	True	2,000.00	4,000.00	20.0	74.4	J-1010EX	3.32	P-3190EX
J-1410EX	1,420.0	True	2,000.00	4,000.00	20.0	83.9	J-1010EX	3.70	P-3140EX
J-1420EX	1,460.0	True	2,000.00	4,000.00	20.0	72.7	J-1010EX	3.98	P-6226
J-1430EX	1,455.0	True	2,000.00	4,000.00	20.0	71.3	J-1010EX	5.88	P-3250EX
J-1440EX	1,478.0	True	2,000.00	4,000.00	20.0	62.8	J-220EX	3.25	P-3250EX
J-1680EX	1,401.0	True	4,000.00	5,000.00	20.0	87.3	J-1010EX	4.70	P-3970EX
J-1990EX	1,447.0	True	2,052.20	4,052.20	20.0	75.2	J-1010EX	4.88	P-4720EX
J-2000EX	1,442.0	True	2,000.00	4,000.00	20.0	76.8	J-1010EX	3.81	P-4720EX
J-2010EX	1,419.0	True	2,000.00	4,000.00	20.0	85.3	J-1010EX	3.24	P-240EX
J-2040EX	1,427.0	True	2,000.00	4,000.00	20.0	82.3	J-1010EX	3.23	P-240EX
J-2120EX	1,453.0	True	2,000.00	4,000.00	20.0	74.2	J-1010EX	5.24	P-240EX
J-2140EX	1,450.0	True	2,000.00	4,000.00	20.0	74.4	J-1010EX	5.64	P-210EX
J-2295	1,415.0	True	2,000.00	4,000.00	20.0	86.0	J-1010EX	5.47	P-DU9-020
J-2340EX	1,434.0	True	4,000.00	6,000.00	20.0	74.9	J-1010EX	4.65	P-6167EX
J-2353	1,456.0	True	2,000.00	4,000.00	20.0	74.8	J-1010EX	3.21	P-6198
J-2361	1,456.9	True	2,000.00	4,000.00	20.0	74.7	J-1010EX	3.23	P-6198
J-2364	1,457.4	True	2,000.00	4,000.00	20.0	74.2	J-1010EX	5.02	P-6226
J-DU2-020	1,411.5	True	2,000.00	4,000.00	20.0	88.4	J-1010EX	3.36	P-240EX
J-DU2-030	1,408.0	True	4,000.00	6,318.09	20.0	70.5	J-1010EX	10.00	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	5,107.60	20.0	86.5	J-1010EX	4.23	P-DU3S-120
J-DU3-4-020	1,402.0	True	4,107.60	5,107.60	20.0	91.8	J-1010EX	3.50	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	5,144.40	20.0	95.9	J-1010EX	3.50	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	4,167.80	20.0	90.7	J-1010EX	6.54	P-DU3-4-010B
J-DU3-4-040	1,403.0	True	4,071.60	5,071.60	20.0	91.5	J-1010EX	3.50	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	4,149.40	20.0	85.4	J-1010EX	7.64	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	4,000.00	20.0	86.3	J-1010EX	4.64	P-DU-3-4-130
J-DU3-4-070	1,404.0	True	2,040.60	4,040.60	20.0	85.4	J-1010EX	6.22	P-DU-3-4-080
J-DU3-4-080	1,400.0	True	4,026.20	5,026.20	20.0	82.9	J-1010EX	8.43	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	5,070.20	20.0	93.4	J-1010EX	4.24	P-1640EX
J-DU3-4-100	1,391.0	True	4,090.80	5,090.80	20.0	96.1	J-1010EX	3.50	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	5,040.60	20.0	92.7	J-1010EX	4.39	P-1970EX
J-DU3-4-120	1,393.0	True	4,000.00	5,000.00	20.0	93.2	J-1010EX	3.56	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	5,049.40	20.0	91.8	J-1010EX	4.27	P-DU-3-4-110
J-DU3-4-140	1,403.0	True	4,068.80	5,068.80	20.0	88.9	J-1010EX	3.60	P-DU3-4-180
J-DU3-4-150	1,407.0	True	2,059.60	4,059.60	20.0	86.3	J-1010EX	6.30	P-DU-3-4-130
J-DU3-4-160	1,406.0	True	2,029.80	4,029.80	20.0	89.9	J-1010EX	3.99	P-DU3-4-180
J-DU3-4-170	1,410.0	True	2,169.80	4,169.80	20.0	89.4	J-1010EX	3.34	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	4,046.60	20.0	86.4	J-1010EX	3.41	P-DU-3S-130
J-DU3-4-210	1,406.0	True	2,188.20	4,188.20	20.0	69.3	J-1010EX	10.40	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,398.50	20.0	83.1	J-1010EX	12.00	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,750.12	20.0	52.7	J-1010EX	12.00	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	3,171.88	20.0	41.5	J-DU3S-020	12.00	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	3,386.93	20.0	65.2	J-1010EX	12.00	P-DU3S-050
J-DU3S-050	1,404.0	True	2,024.20	3,034.54	20.0	47.1	J-DU3S-060	12.00	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,852.13	20.0	44.7	J-1010EX	12.00	P-DU3S-010
J-DU3S-070	1,417.0	True	2,014.00	2,592.68	20.0	62.6	J-1010EX	12.00	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	5,141.20	20.0	92.0	J-1010EX	3.81	P-DU3S-100

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU5N-010	1,436.0	True	4,000.00	4,131.93	20.0	28.9	J-DU6-110	12.00	P-DU6-180
J-DU5N-020	1,424.5	True	4,000.00	5,000.00	20.0	66.4	J-1010EX	7.79	P-DU6-310
J-DU5N-030	1,426.0	True	4,040.30	5,040.30	20.0	65.5	J-1010EX	7.60	P-DU6-310
J-DU5N-040	1,414.0	True	4,000.00	5,000.00	20.0	85.1	J-1010EX	3.64	P-240EX
J-DU5N-050	1,414.0	True	5,375.00	6,375.00	20.0	85.0	J-1010EX	3.65	P-240EX
J-DU5N-060	1,417.0	True	4,000.00	5,000.00	20.0	83.7	J-1010EX	3.67	P-240EX
J-DU6-010	1,459.0	True	2,000.00	4,000.00	20.0	65.5	J-1010EX	6.38	P-DU6-010
J-DU6-020	1,453.0	True	4,694.40	7,694.40	20.0	70.2	J-1010EX	8.63	P-DU6-020
J-DU6-050	1,448.0	True	4,000.00	5,000.00	20.0	66.4	J-1010EX	8.45	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,694.40	20.0	72.3	J-1010EX	7.56	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	5,171.60	20.0	69.6	J-1010EX	7.30	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	3,654.83	20.0	46.7	J-1010EX	12.00	P-DU6-150
J-DU6-100	1,439.0	True	4,000.00	5,000.00	20.0	66.9	J-1010EX	7.98	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	4,098.20	20.0	46.9	J-DU5N-010	11.63	P-DU6-180
J-DU6-120	1,422.0	True	2,100.60	4,100.60	20.0	80.8	J-1010EX	4.64	P-DU6-190
J-DU6-130	1,416.0	True	2,082.20	4,082.20	20.0	87.3	J-1010EX	3.32	P-240EX
J-DU6-140	1,417.0	True	4,132.00	5,132.00	20.0	85.8	J-1010EX	3.55	P-DU6-220
J-DU6-150	1,427.0	True	2,084.60	4,084.60	20.0	80.5	J-1010EX	6.30	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	3,852.73	20.0	62.2	J-1010EX	12.00	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	4,050.60	20.0	87.2	J-1010EX	3.31	P-240EX
J-DU7-010	1,415.0	True	2,004.80	4,004.80	20.0	87.4	J-1010EX	3.36	P-DU7-120
J-DU7-020	1,425.0	True	2,046.60	4,046.60	20.0	77.9	J-1010EX	6.07	P-DU7-010
J-DU7-030	1,416.0	True	2,125.00	4,125.00	20.0	81.0	J-1010EX	6.85	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	5,037.60	20.0	89.4	J-1010EX	3.51	P-DU7-080
J-DU7-050	1,416.0	True	4,038.60	5,038.60	20.0	87.0	J-1010EX	3.56	P-DU7-080
J-DU7-060	1,423.0	True	2,022.20	4,022.20	20.0	85.3	J-1010EX	3.34	P-DU7-080
J-DU7-070	1,430.0	True	2,000.00	4,000.00	20.0	82.8	J-1010EX	3.48	P-DU7-080
J-DU7-080	1,434.0	True	2,081.00	4,081.00	20.0	81.7	J-1010EX	3.76	P-DU7-080
J-DU7-090	1,437.0	True	2,000.00	4,000.00	20.0	78.7	J-1010EX	3.23	P-240EX
J-DU7-100	1,435.0	True	2,057.80	4,057.80	20.0	78.3	J-1010EX	3.92	P-DU7-090
J-DU7-110	1,435.0	True	2,057.60	4,057.60	20.0	78.6	J-1010EX	3.24	P-240EX
J-DU7-120	1,420.0	True	2,000.00	4,000.00	20.0	85.9	J-1010EX	3.25	P-240EX
J-DU7-130	1,420.0	True	4,003.60	5,003.60	20.0	84.4	J-1010EX	3.48	P-240EX
J-DU7-140	1,425.0	True	4,070.00	5,070.00	20.0	82.3	J-1010EX	3.49	P-DU7-080
J-DU7-150	1,419.0	True	2,075.60	4,075.60	20.0	86.4	J-1010EX	3.26	P-240EX
J-DU7-160	1,435.0	True	2,048.00	4,048.00	20.0	75.3	J-1010EX	6.10	P-DU7-170
J-DU7-170	1,432.0	True	2,021.40	4,021.40	20.0	78.2	J-1010EX	5.00	P-DU7-190
J-DU7-180	1,433.0	True	2,037.40	4,037.40	20.0	77.7	J-1010EX	4.94	P-DU7-190
J-DU7-190	1,437.0	True	2,060.20	4,060.20	20.0	73.9	J-1010EX	6.30	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	4,101.40	20.0	74.7	J-1010EX	6.74	P-DU7-240
J-DU8-010	1,420.0	True	2,000.00	4,000.00	20.0	84.8	J-1010EX	4.18	P-DU9-020
J-DU8-020	1,419.5	True	2,000.00	4,000.00	20.0	84.6	J-1010EX	3.46	P-DU8-020
J-DU8-030	1,421.0	True	2,000.00	4,000.00	20.0	83.2	J-1010EX	3.24	P-240EX
J-DU8-040	1,418.0	True	2,013.40	4,013.40	20.0	84.7	J-1010EX	3.71	P-DU8-060
J-DU8-050	1,422.0	True	2,000.00	4,000.00	20.0	83.3	J-1010EX	4.10	P-DU8-060
J-DU8-060	1,420.0	True	2,018.00	4,018.00	20.0	71.7	J-1010EX	11.08	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,952.39	20.0	73.6	J-1010EX	12.00	P-DU8-080
J-DU8-080	1,422.0	True	2,008.80	4,008.80	20.0	76.2	J-1010EX	6.96	P-DU8-100
J-DU8-090	1,424.0	True	2,022.00	4,022.00	20.0	64.1	J-1010EX	9.46	P-DU8-150
J-DU8-100	1,425.0	True	2,018.40	4,018.40	20.0	78.8	J-1010EX	7.55	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	4,066.00	20.0	45.4	J-DU8-120	11.05	P-DU8-130

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-120	1,431.0	True	2,034.20	3,293.60	20.0	20.0	J-1010EX	11.55	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	4,042.00	20.0	51.2	J-DU8-120	11.95	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	4,039.40	20.0	83.4	J-1010EX	7.67	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,468.82	20.0	64.7	J-1010EX	12.00	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	4,988.47	20.0	50.9	J-DU9-040	12.00	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	3,622.15	20.0	47.1	J-1010EX	12.00	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	3,375.66	20.0	60.1	J-DU9-080	12.00	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,726.05	20.0	73.4	J-1010EX	12.00	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	3,816.56	20.0	30.8	J-DU9-080	12.00	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	3,303.79	20.0	45.2	J-1010EX	12.00	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	4,000.00	20.0	86.6	J-1010EX	5.79	P-DU9-020
J-DU9-100	1,414.0	True	2,000.00	4,000.00	20.0	85.8	J-1010EX	5.07	P-DU9-020

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	2,188.20	20.0	93.2	J-1010EX	2.90	P-240EX
J-110EX	1,418.0	True	4,000.00	4,001.00	20.0	85.7	J-1010EX	3.45	P-240EX
J-120EX	1,462.0	True	2,000.00	2,188.20	20.0	74.3	J-1010EX	2.35	P-240EX
J-135EX	1,460.0	True	2,000.00	2,188.20	20.0	73.9	J-1010EX	3.07	P-5700EX
J-150EX	1,472.0	True	2,000.00	2,188.20	20.0	67.0	J-1010EX	2.77	P-240EX
J-160EX	1,435.0	True	2,000.00	2,188.20	20.0	78.9	J-1010EX	2.83	P-240EX
J-170EX	1,430.0	True	2,000.00	2,188.20	20.0	81.0	J-1010EX	2.83	P-240EX
J-180EX	1,410.0	True	2,000.00	2,188.20	20.0	91.7	J-1010EX	2.83	P-240EX
J-190EX	1,395.0	True	2,000.00	2,188.20	20.0	95.9	J-1010EX	2.84	P-240EX
J-200EX	1,385.0	True	2,000.00	2,188.20	20.0	100.1	J-1010EX	2.84	P-240EX
J-220EX	1,480.0	True	2,000.00	2,188.20	20.0	64.4	J-1010EX	2.65	P-240EX
J-230EX	1,475.0	True	2,000.00	2,188.20	20.0	66.2	J-1010EX	2.74	P-240EX
J-250EX	1,452.0	True	4,015.60	4,031.20	20.0	75.9	J-1010EX	3.16	P-6198
J-260EX	1,453.0	True	4,036.40	4,072.80	20.0	74.8	J-1010EX	3.44	P-5780
J-270EX	1,429.0	True	2,000.00	2,188.20	20.0	84.1	J-1010EX	2.83	P-240EX
J-280EX	1,460.0	True	2,000.00	2,188.20	20.0	70.5	J-1010EX	2.83	P-240EX
J-300EX	1,392.0	True	4,035.40	4,069.80	20.0	96.1	J-1010EX	3.27	P-240EX
J-320EX	1,422.0	True	2,000.00	2,188.20	20.0	87.0	J-1010EX	2.83	P-240EX
J-330EX	1,455.0	True	2,000.00	2,188.20	20.0	72.9	J-1010EX	2.82	P-240EX
J-340EX	1,440.0	True	2,000.00	2,188.20	20.0	79.4	J-1010EX	2.83	P-240EX
J-360EX	1,400.0	True	5,375.00	6,750.00	20.0	86.5	J-1010EX	4.41	P-3970EX
J-550EX	1,425.0	True	2,000.00	2,188.20	20.0	85.8	J-1010EX	2.83	P-240EX
J-590EX	1,413.0	True	4,000.00	4,001.00	20.0	86.0	J-1010EX	3.43	P-1060EX
J-920EX	1,434.0	True	2,000.00	2,188.20	20.0	82.0	J-1010EX	2.83	P-240EX
J-960EX	1,402.0	True	2,000.00	2,188.20	20.0	94.2	J-1010EX	2.90	P-240EX
J-970EX	1,397.0	True	2,000.00	2,188.20	20.0	96.3	J-1010EX	2.89	P-240EX
J-1000EX	1,455.0	True	2,000.00	2,188.20	20.0	76.9	J-1010EX	2.36	P-240EX
J-1010EX	1,485.0	True	2,000.00	2,188.20	20.0	64.0	J-220EX	2.36	P-240EX
J-1020EX	1,425.0	True	2,000.00	2,188.20	20.0	86.2	J-1010EX	2.69	P-240EX
J-1030EX	1,480.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	2.35	P-240EX
J-1050EX	1,445.0	True	2,000.00	2,188.20	20.0	77.9	J-1010EX	3.26	P-4720EX
J-1120EX	1,456.0	True	2,000.00	2,188.20	20.0	75.1	J-1010EX	2.94	P-3240EX(2)
J-1130EX	1,445.0	True	4,000.00	4,001.00	20.0	75.3	J-1010EX	4.87	P-210EX
J-1160EX	1,445.0	True	2,000.00	2,188.20	20.0	74.2	J-1010EX	6.21	P-3030EX
J-1170EX	1,470.0	True	2,000.00	2,188.20	20.0	70.5	J-1010EX	2.36	P-240EX
J-1180EX	1,440.0	True	2,000.00	2,188.20	20.0	79.6	J-1010EX	3.50	P-3080EX
J-1190EX	1,420.0	True	2,000.00	2,188.20	20.0	87.6	J-1010EX	2.87	P-3150EX
J-1200EX	1,445.0	True	2,000.00	2,188.20	20.0	69.0	J-1010EX	6.21	P-3060EX
J-1210EX	1,455.0	True	2,000.00	2,188.20	20.0	64.6	J-1300EX	7.01	P-3180EX
J-1220EX	1,475.0	True	2,000.00	2,188.20	20.0	68.4	J-1010EX	2.35	P-240EX
J-1230EX	1,460.0	True	2,000.00	2,188.20	20.0	69.8	J-1010EX	2.83	P-240EX
J-1235EX	1,440.0	True	2,000.00	2,188.20	20.0	79.7	J-1010EX	2.81	P-240EX
J-1240EX	1,455.0	True	2,000.00	2,188.20	20.0	73.2	J-1010EX	2.81	P-240EX
J-1280	1,410.0	True	2,000.00	2,188.20	20.0	92.0	J-1010EX	2.83	P-240EX
J-1290EX	1,480.0	True	2,000.00	2,188.20	20.0	66.2	J-1010EX	2.35	P-240EX
J-1300EX	1,465.0	True	2,000.00	2,188.20	20.0	62.3	J-1350EX	7.01	P-3180EX
J-1310EX	1,480.0	True	2,000.00	2,188.20	20.0	66.2	J-1010EX	2.35	P-240EX
J-1330EX	1,465.0	True	2,000.00	2,188.20	20.0	70.4	J-1010EX	3.71	P-2950
J-1340EX	1,450.0	True	2,000.00	2,188.20	20.0	76.4	J-1010EX	4.08	P-2970EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1350EX	1,465.0	True	2,000.00	2,188.20	20.0	63.4	J-1300EX	7.17	P-3180EX
J-1360EX	1,445.0	True	2,000.00	2,188.20	20.0	76.2	J-1010EX	4.18	P-3020EX
J-1370EX	1,430.0	True	2,000.00	2,188.20	20.0	78.7	J-1010EX	4.66	P-3130EX
J-1380EX	1,450.0	True	2,000.00	2,188.20	20.0	75.7	J-1010EX	4.15	P-3080EX
J-1390EX	1,430.0	True	2,000.00	2,188.20	20.0	83.1	J-1010EX	3.63	P-3100EX
J-1400EX	1,430.0	True	2,000.00	2,188.20	20.0	81.8	J-1010EX	4.22	P-3110EX
J-1410	1,458.0	True	2,000.00	2,188.20	20.0	74.9	J-1010EX	2.74	P-3190EX
J-1410EX	1,420.0	True	2,000.00	2,188.20	20.0	87.9	J-1010EX	2.76	P-240EX
J-1420EX	1,460.0	True	2,000.00	2,188.20	20.0	73.7	J-1010EX	2.98	P-240EX
J-1430EX	1,455.0	True	2,000.00	2,188.20	20.0	74.6	J-1010EX	3.32	P-3250EX
J-1440EX	1,478.0	True	2,000.00	2,188.20	20.0	65.1	J-1010EX	2.70	P-240EX
J-1680EX	1,401.0	True	4,000.00	4,001.00	20.0	90.2	J-1010EX	3.99	P-3970EX
J-1990EX	1,447.0	True	2,052.20	2,240.40	20.0	77.3	J-1010EX	3.60	P-4720EX
J-2000EX	1,442.0	True	2,000.00	2,188.20	20.0	79.0	J-1010EX	2.87	P-4720EX
J-2010EX	1,419.0	True	2,000.00	2,188.20	20.0	88.2	J-1010EX	2.83	P-240EX
J-2040EX	1,427.0	True	2,000.00	2,188.20	20.0	84.9	J-1010EX	2.83	P-240EX
J-2120EX	1,453.0	True	2,000.00	2,188.20	20.0	75.7	J-1010EX	4.02	P-240EX
J-2140EX	1,450.0	True	2,000.00	2,188.20	20.0	76.4	J-1010EX	4.13	P-210EX
J-2295	1,415.0	True	2,000.00	2,188.20	20.0	89.5	J-1010EX	3.16	P-DU9-020
J-2340EX	1,434.0	True	4,000.00	4,001.00	20.0	79.0	J-1010EX	3.66	P-240EX
J-2353	1,456.0	True	2,000.00	2,188.20	20.0	75.5	J-1010EX	2.71	P-240EX
J-2361	1,456.9	True	2,000.00	2,188.20	20.0	75.2	J-1010EX	2.70	P-240EX
J-2364	1,457.4	True	2,000.00	2,188.20	20.0	74.9	J-1010EX	3.51	P-6226
J-DU2-020	1,411.5	True	2,000.00	2,188.20	20.0	91.0	J-1010EX	2.90	P-240EX
J-DU2-030	1,408.0	True	4,000.00	4,001.00	20.0	83.1	J-1010EX	6.23	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	4,215.20	20.0	89.0	J-1010EX	3.51	P-DU3S-120
J-DU3-4-020	1,402.0	True	4,107.60	4,215.20	20.0	93.1	J-1010EX	3.29	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	4,288.80	20.0	97.2	J-1010EX	3.30	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	2,356.00	20.0	96.7	J-1010EX	3.69	P-DU3-4-010B
J-DU3-4-040	1,403.0	True	4,071.60	4,143.20	20.0	92.8	J-1010EX	3.28	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	2,337.60	20.0	91.1	J-1010EX	4.39	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	2,188.20	20.0	91.3	J-1010EX	2.87	P-240EX
J-DU3-4-070	1,404.0	True	2,040.60	2,228.80	20.0	92.2	J-1010EX	3.45	P-DU-3-4-080
J-DU3-4-080	1,400.0	True	4,026.20	4,052.40	20.0	87.4	J-1010EX	6.80	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	4,140.40	20.0	95.4	J-1010EX	3.54	P-1640EX
J-DU3-4-100	1,391.0	True	4,090.80	4,181.60	20.0	97.6	J-1010EX	3.29	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	4,081.20	20.0	95.0	J-1010EX	3.61	P-1970EX
J-DU3-4-120	1,393.0	True	4,000.00	4,001.00	20.0	95.3	J-1010EX	3.32	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	4,098.80	20.0	94.0	J-1010EX	3.43	P-DU-3-4-110
J-DU3-4-140	1,403.0	True	4,068.80	4,137.60	20.0	90.9	J-1010EX	3.34	P-240EX
J-DU3-4-150	1,407.0	True	2,059.60	2,247.80	20.0	91.6	J-1010EX	3.45	P-DU-3-4-130
J-DU3-4-160	1,406.0	True	2,029.80	2,218.00	20.0	93.1	J-1010EX	2.89	P-240EX
J-DU3-4-170	1,410.0	True	2,169.80	2,358.00	20.0	91.8	J-1010EX	2.89	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	2,234.80	20.0	90.2	J-1010EX	2.85	P-240EX
J-DU3-4-210	1,406.0	True	2,188.20	2,376.40	20.0	86.0	J-1010EX	5.90	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,208.60	20.0	84.4	J-1010EX	11.09	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,210.20	20.0	66.5	J-1010EX	9.76	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	2,218.20	20.0	68.2	J-1010EX	8.56	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	2,210.20	20.0	82.8	J-1010EX	7.90	P-DU3S-050

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU3S-050	1,404.0	True	2,024.20	2,212.40	20.0	68.5	J-1010EX	8.76	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,211.80	20.0	62.8	J-1010EX	9.43	P-DU3S-010
J-DU3S-070	1,417.0	True	2,014.00	2,202.20	20.0	69.7	J-1010EX	10.21	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	4,282.40	20.0	93.9	J-1010EX	3.30	P-240EX
J-DU5N-010	1,436.0	True	4,000.00	4,001.00	20.0	31.9	J-DU6-110	11.63	P-DU6-180
J-DU5N-020	1,424.5	True	4,000.00	4,001.00	20.0	73.2	J-1010EX	6.24	P-DU6-310
J-DU5N-030	1,426.0	True	4,040.30	4,080.50	20.0	72.1	J-1010EX	6.14	P-DU6-310
J-DU5N-040	1,414.0	True	4,000.00	4,001.00	20.0	86.9	J-1010EX	3.38	P-240EX
J-DU5N-050	1,414.0	True	5,375.00	6,750.00	20.0	84.2	J-1010EX	3.74	P-240EX
J-DU5N-060	1,417.0	True	4,000.00	4,001.00	20.0	85.6	J-1010EX	3.41	P-240EX
J-DU6-010	1,459.0	True	2,000.00	2,188.20	20.0	71.4	J-1010EX	3.66	P-240EX
J-DU6-020	1,453.0	True	4,694.40	5,388.80	20.0	73.2	J-1010EX	5.90	P-DU6-020
J-DU6-050	1,448.0	True	4,000.00	4,001.00	20.0	70.7	J-1010EX	6.80	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,388.80	20.0	72.6	J-1010EX	7.18	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	4,343.20	20.0	72.6	J-1010EX	6.16	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	2,188.20	20.0	68.5	J-1010EX	7.33	P-DU6-150
J-DU6-100	1,439.0	True	4,000.00	4,001.00	20.0	72.2	J-1010EX	6.38	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	2,286.40	20.0	71.4	J-1010EX	6.49	P-DU6-180
J-DU6-120	1,422.0	True	2,100.60	2,288.80	20.0	85.7	J-1010EX	2.90	P-240EX
J-DU6-130	1,416.0	True	2,082.20	2,270.40	20.0	89.5	J-1010EX	2.88	P-240EX
J-DU6-140	1,417.0	True	4,132.00	4,230.20	20.0	87.0	J-1010EX	3.32	P-240EX
J-DU6-150	1,427.0	True	2,084.60	2,272.80	20.0	84.4	J-1010EX	3.73	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	2,285.40	20.0	75.3	J-1010EX	7.07	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	2,238.80	20.0	89.3	J-1010EX	2.87	P-240EX
J-DU7-010	1,415.0	True	2,004.80	2,193.00	20.0	89.9	J-1010EX	2.84	P-240EX
J-DU7-020	1,425.0	True	2,046.60	2,234.80	20.0	83.8	J-1010EX	3.43	P-DU7-010
J-DU7-030	1,416.0	True	2,125.00	2,313.20	20.0	87.4	J-1010EX	3.85	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	4,075.20	20.0	90.6	J-1010EX	3.28	P-240EX
J-DU7-050	1,416.0	True	4,038.60	4,077.20	20.0	88.1	J-1010EX	3.27	P-240EX
J-DU7-060	1,423.0	True	2,022.20	2,210.40	20.0	87.1	J-1010EX	2.83	P-240EX
J-DU7-070	1,430.0	True	2,000.00	2,188.20	20.0	84.4	J-1010EX	2.84	P-DU7-080
J-DU7-080	1,434.0	True	2,081.00	2,269.20	20.0	83.2	J-1010EX	3.01	P-DU7-080
J-DU7-090	1,437.0	True	2,000.00	2,188.20	20.0	80.8	J-1010EX	2.83	P-240EX
J-DU7-100	1,435.0	True	2,057.80	2,246.00	20.0	81.2	J-1010EX	2.83	P-240EX
J-DU7-110	1,435.0	True	2,057.60	2,245.80	20.0	81.3	J-1010EX	2.83	P-240EX
J-DU7-120	1,420.0	True	2,000.00	2,188.20	20.0	88.0	J-1010EX	2.84	P-240EX
J-DU7-130	1,420.0	True	4,003.60	4,007.20	20.0	85.8	J-1010EX	3.25	P-240EX
J-DU7-140	1,425.0	True	4,070.00	4,140.00	20.0	83.6	J-1010EX	3.27	P-240EX
J-DU7-150	1,419.0	True	2,075.60	2,263.80	20.0	88.5	J-1010EX	2.84	P-240EX
J-DU7-160	1,435.0	True	2,048.00	2,236.20	20.0	80.4	J-1010EX	3.48	P-DU7-170
J-DU7-170	1,432.0	True	2,021.40	2,209.60	20.0	82.2	J-1010EX	2.83	P-240EX
J-DU7-180	1,433.0	True	2,037.40	2,225.60	20.0	81.8	J-1010EX	2.82	P-240EX
J-DU7-190	1,437.0	True	2,060.20	2,248.40	20.0	79.4	J-1010EX	3.65	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	2,289.60	20.0	80.9	J-1010EX	3.69	P-DU7-240
J-DU8-010	1,420.0	True	2,000.00	2,188.20	20.0	87.6	J-1010EX	2.84	P-240EX
J-DU8-020	1,419.5	True	2,000.00	2,188.20	20.0	87.7	J-1010EX	2.83	P-240EX
J-DU8-030	1,421.0	True	2,000.00	2,188.20	20.0	86.8	J-1010EX	2.83	P-240EX
J-DU8-040	1,418.0	True	2,013.40	2,201.60	20.0	88.2	J-1010EX	2.83	P-240EX
J-DU8-050	1,422.0	True	2,000.00	2,188.20	20.0	86.6	J-1010EX	2.83	P-240EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (Interim Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-060	1,420.0	True	2,018.00	2,206.20	20.0	83.3	J-1010EX	6.13	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,219.00	20.0	80.0	J-1010EX	9.02	P-DU8-080
J-DU8-080	1,422.0	True	2,008.80	2,197.00	20.0	84.2	J-1010EX	4.00	P-DU8-100
J-DU8-090	1,424.0	True	2,022.00	2,210.20	20.0	79.5	J-1010EX	5.28	P-DU8-150
J-DU8-100	1,425.0	True	2,018.40	2,206.60	20.0	84.2	J-1010EX	4.29	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	2,254.20	20.0	71.4	J-1010EX	6.17	P-DU8-130
J-DU8-120	1,431.0	True	2,034.20	2,222.40	20.0	53.1	J-1010EX	7.80	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	2,230.20	20.0	74.3	J-1010EX	6.66	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	2,227.60	20.0	87.5	J-1010EX	4.33	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,143.20	20.0	68.1	J-1010EX	11.14	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	4,130.40	20.0	62.3	J-1010EX	9.97	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	2,203.80	20.0	72.8	J-1010EX	7.26	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	2,188.20	20.0	75.7	J-1010EX	8.10	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,251.00	20.0	77.7	J-1010EX	10.01	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	2,251.20	20.0	68.2	J-1010EX	7.39	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	2,265.20	20.0	67.1	J-1010EX	8.43	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	2,188.20	20.0	89.9	J-1010EX	3.34	P-DU9-020
J-DU9-100	1,414.0	True	2,000.00	2,188.20	20.0	89.7	J-1010EX	3.00	P-DU9-020

APPENDIX B

HYDRAULIC MODELING RESULTS
SERVED BY SOUTH C.A.P. WATER TREATMENT PLANT
(FULL BUILDOUT NON-DROUGHT CONDITION)

Average-Day Demand

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	936.97	1,634.0
SCAP DWPS	1,634.0	6,473.83	1,634.0

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	97.4	1,631.2
J-110EX	1,418.0	Desert Wells	19.10	92.1	1,630.8
J-120EX	1,462.0	Desert Wells	0.00	74.3	1,633.8
J-135EX	1,460.0	Desert Wells	0.00	74.9	1,633.1
J-150EX	1,472.0	Desert Wells	0.00	69.3	1,632.2
J-160EX	1,435.0	Desert Wells	0.00	85.1	1,631.7
J-170EX	1,430.0	Desert Wells	0.00	87.3	1,631.7
J-180EX	1,410.0	Desert Wells	0.00	95.9	1,631.7
J-190EX	1,395.0	Desert Wells	0.00	102.3	1,631.5
J-200EX	1,385.0	Desert Wells	0.00	106.6	1,631.3
J-220EX	1,480.0	Desert Wells	0.00	66.2	1,633.0
J-230EX	1,475.0	Desert Wells	0.00	68.2	1,632.5
J-250EX	1,452.0	Desert Wells	7.80	77.9	1,632.2
J-260EX	1,453.0	Desert Wells	18.20	77.5	1,632.2
J-270EX	1,429.0	Desert Wells	0.00	87.7	1,631.8
J-280EX	1,460.0	Desert Wells	0.00	74.3	1,631.8
J-300EX	1,392.0	Desert Wells	17.70	103.5	1,631.1
J-320EX	1,422.0	Desert Wells	0.00	90.7	1,631.7
J-330EX	1,455.0	Desert Wells	0.00	76.6	1,632.0
J-340EX	1,440.0	Desert Wells	0.00	83.0	1,631.8
J-360EX	1,400.0	Desert Wells	352.00	99.9	1,630.9
J-550EX	1,425.0	Desert Wells	0.00	89.5	1,631.8
J-590EX	1,413.0	Desert Wells	0.00	94.3	1,631.1
J-920EX	1,434.0	Desert Wells	0.00	85.6	1,631.9
J-960EX	1,402.0	Desert Wells	0.00	99.1	1,631.0
J-970EX	1,397.0	Desert Wells	0.00	101.2	1,630.9
J-1000EX	1,455.0	Desert Wells	0.00	77.4	1,633.9
J-1010EX	1,485.0	Desert Wells	0.00	64.4	1,633.9
J-1020EX	1,425.0	Desert Wells	0.00	89.9	1,632.9
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	80.9	1,632.0
J-1120EX	1,456.0	Desert Wells	0.00	76.3	1,632.3
J-1130EX	1,445.0	Desert Wells	407.00	80.5	1,631.0
J-1160EX	1,445.0	Desert Wells	0.00	81.7	1,633.8
J-1170EX	1,470.0	Desert Wells	0.00	70.9	1,633.9
J-1180EX	1,440.0	Desert Wells	0.00	83.7	1,633.4
J-1190EX	1,420.0	Desert Wells	0.00	91.8	1,632.1
J-1200EX	1,445.0	Desert Wells	0.00	81.5	1,633.4
J-1210EX	1,455.0	Desert Wells	0.00	77.4	1,633.8
J-1220EX	1,475.0	Desert Wells	0.00	68.7	1,633.8
J-1230EX	1,460.0	Desert Wells	0.00	74.4	1,631.9
J-1235EX	1,440.0	Desert Wells	0.00	83.1	1,632.0
J-1240EX	1,455.0	Desert Wells	0.00	76.6	1,632.0
J-1280	1,410.0	Desert Wells	0.00	95.9	1,631.7
J-1290EX	1,480.0	Desert Wells	0.00	66.6	1,633.8
J-1300EX	1,465.0	Desert Wells	0.00	73.1	1,633.8
J-1310EX	1,480.0	Desert Wells	0.00	66.6	1,633.8
J-1330EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1340EX	1,450.0	Desert Wells	0.00	79.5	1,633.9
J-1350EX	1,465.0	Desert Wells	0.00	73.1	1,633.8
J-1360EX	1,445.0	Desert Wells	0.00	81.7	1,633.8
J-1370EX	1,430.0	Desert Wells	0.00	88.0	1,633.4
J-1380EX	1,450.0	Desert Wells	0.00	79.4	1,633.6

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	88.0	1,633.4
J-1400EX	1,430.0	Desert Wells	0.00	88.0	1,633.4
J-1410	1,458.0	Desert Wells	0.00	75.6	1,632.8
J-1410EX	1,420.0	Desert Wells	0.00	91.9	1,632.4
J-1420EX	1,460.0	Desert Wells	0.00	74.6	1,632.4
J-1430EX	1,455.0	Desert Wells	0.00	76.8	1,632.5
J-1440EX	1,478.0	Desert Wells	0.00	67.0	1,632.8
J-1680EX	1,401.0	Desert Wells	0.00	99.5	1,631.0
J-1990EX	1,447.0	Desert Wells	26.10	80.1	1,632.1
J-2000EX	1,442.0	Desert Wells	0.00	82.2	1,632.0
J-2010EX	1,419.0	Desert Wells	0.00	92.0	1,631.7
J-2040EX	1,427.0	Desert Wells	0.00	88.6	1,631.7
J-2120EX	1,453.0	Desert Wells	0.00	77.4	1,631.8
J-2140EX	1,450.0	Desert Wells	407.00	78.5	1,631.4
J-2295	1,415.0	Desert Wells	0.00	93.6	1,631.4
J-2340EX	1,434.0	Desert Wells	19.10	85.2	1,630.8
J-2353	1,456.0	Desert Wells	0.00	76.3	1,632.5
J-2361	1,456.9	Desert Wells	0.00	76.0	1,632.6
J-2364	1,457.4	Desert Wells	0.00	75.7	1,632.4
J-DU2-020	1,411.5	Desert Wells	0.00	94.9	1,630.8
J-DU2-030	1,408.0	Desert Wells	0.00	96.4	1,630.9
J-DU3-4-010	1,405.0	Desert Wells	53.80	97.8	1,631.2
J-DU3-4-020	1,402.0	Desert Wells	53.80	99.1	1,631.1
J-DU3-4-030	1,392.0	Desert Wells	72.20	103.4	1,631.1
J-DU3-4-030A	1,394.5	Desert Wells	83.90	102.4	1,631.1
J-DU3-4-040	1,403.0	Desert Wells	35.80	98.7	1,631.1
J-DU3-4-050	1,408.0	Desert Wells	149.40	96.5	1,631.0
J-DU3-4-060	1,408.0	Desert Wells	0.00	96.5	1,631.0
J-DU3-4-070	1,404.0	Desert Wells	20.30	98.2	1,631.0
J-DU3-4-080	1,400.0	Desert Wells	13.10	99.9	1,631.0
J-DU3-4-090	1,393.0	Desert Wells	35.10	103.0	1,631.0
J-DU3-4-100	1,391.0	Desert Wells	45.40	103.9	1,631.1
J-DU3-4-110	1,393.0	Desert Wells	20.30	102.9	1,630.9
J-DU3-4-120	1,393.0	Desert Wells	0.00	102.9	1,630.9
J-DU3-4-130	1,395.0	Desert Wells	24.70	102.1	1,630.9
J-DU3-4-140	1,403.0	Desert Wells	34.40	98.6	1,630.9
J-DU3-4-150	1,407.0	Desert Wells	29.80	96.9	1,630.9
J-DU3-4-160	1,406.0	Desert Wells	14.90	97.3	1,630.9
J-DU3-4-170	1,410.0	Desert Wells	84.90	95.6	1,630.9
J-DU3-4-200	1,412.5	Desert Wells	23.30	94.6	1,631.2
J-DU3-4-210	1,406.0	Desert Wells	94.10	97.4	1,631.1
J-DU3S-010	1,412.0	Desert Wells	10.20	94.9	1,631.3
J-DU3S-020	1,407.0	Desert Wells	11.00	97.0	1,631.2
J-DU3S-030	1,401.0	Desert Wells	15.00	99.6	1,631.2
J-DU3S-040	1,399.0	Desert Wells	11.00	100.4	1,631.1
J-DU3S-050	1,404.0	Desert Wells	12.10	98.3	1,631.2
J-DU3S-060	1,410.0	Desert Wells	11.80	95.7	1,631.2
J-DU3S-070	1,417.0	Desert Wells	7.00	92.7	1,631.3
J-DU3S-080	1,396.0	Desert Wells	70.60	101.7	1,631.1
J-DU5N-010	1,436.0	Desert Wells	29.60	84.1	1,630.4
J-DU5N-020	1,424.5	Desert Wells	76.70	89.1	1,630.4
J-DU5N-030	1,426.0	Desert Wells	20.10	88.4	1,630.4
J-DU5N-040	1,414.0	Desert Wells	0.00	93.8	1,630.8

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	352.00	93.8	1,630.8
J-DU5N-060	1,417.0	Desert Wells	0.00	92.5	1,630.8
J-DU5N-070	1,439.5	Desert Wells	969.00	82.4	1,629.9
J-DU5N-080	1,427.3	Desert Wells	969.00	87.6	1,629.9
J-DU6-010	1,459.0	Desert Wells	0.00	74.8	1,632.0
J-DU6-020	1,453.0	Desert Wells	694.40	77.4	1,631.8
J-DU6-050	1,448.0	Desert Wells	0.00	79.7	1,632.1
J-DU6-060	1,458.0	Desert Wells	694.40	75.4	1,632.3
J-DU6-080	1,444.6	Desert Wells	85.80	80.6	1,631.0
J-DU6-090	1,439.0	Desert Wells	0.00	83.1	1,631.2
J-DU6-100	1,439.0	Desert Wells	54.20	82.8	1,630.4
J-DU6-110	1,432.0	Desert Wells	49.10	85.9	1,630.5
J-DU6-120	1,422.0	Desert Wells	50.30	90.3	1,630.7
J-DU6-130	1,416.0	Desert Wells	41.10	93.0	1,630.9
J-DU6-140	1,417.0	Desert Wells	66.00	92.6	1,631.1
J-DU6-150	1,427.0	Desert Wells	42.30	88.3	1,631.2
J-DU6-160	1,436.0	Desert Wells	48.60	84.5	1,631.3
J-DU6-170	1,416.5	Desert Wells	25.30	92.8	1,631.0
J-DU7-010	1,415.0	Desert Wells	2.40	93.6	1,631.3
J-DU7-020	1,425.0	Desert Wells	23.30	89.2	1,631.2
J-DU7-030	1,416.0	Desert Wells	125.00	93.1	1,631.1
J-DU7-040	1,409.0	Desert Wells	18.80	96.1	1,631.1
J-DU7-050	1,416.0	Desert Wells	19.30	93.1	1,631.2
J-DU7-060	1,423.0	Desert Wells	11.10	90.1	1,631.3
J-DU7-070	1,430.0	Desert Wells	0.00	87.2	1,631.4
J-DU7-080	1,434.0	Desert Wells	40.50	85.5	1,631.6
J-DU7-090	1,437.0	Desert Wells	0.00	84.3	1,632.0
J-DU7-100	1,435.0	Desert Wells	28.90	85.1	1,631.8
J-DU7-110	1,435.0	Desert Wells	28.80	85.0	1,631.5
J-DU7-120	1,420.0	Desert Wells	0.00	91.4	1,631.3
J-DU7-130	1,420.0	Desert Wells	1.80	91.4	1,631.3
J-DU7-140	1,425.0	Desert Wells	35.00	89.2	1,631.3
J-DU7-150	1,419.0	Desert Wells	37.80	91.8	1,631.2
J-DU7-160	1,435.0	Desert Wells	24.00	85.0	1,631.4
J-DU7-170	1,432.0	Desert Wells	10.70	86.3	1,631.5
J-DU7-180	1,433.0	Desert Wells	18.70	85.9	1,631.5
J-DU7-190	1,437.0	Desert Wells	30.10	84.2	1,631.7
J-DU7-200	1,432.0	Desert Wells	50.70	86.2	1,631.3
J-DU8-010	1,420.0	Desert Wells	0.00	91.5	1,631.4
J-DU8-020	1,419.5	Desert Wells	0.00	91.7	1,631.4
J-DU8-030	1,421.0	Desert Wells	0.00	91.1	1,631.5
J-DU8-040	1,418.0	Desert Wells	6.70	92.4	1,631.6
J-DU8-050	1,422.0	Desert Wells	0.00	90.7	1,631.6
J-DU8-060	1,420.0	Desert Wells	9.00	91.5	1,631.4
J-DU8-070	1,420.0	Desert Wells	15.40	91.5	1,631.4
J-DU8-080	1,422.0	Desert Wells	4.40	90.6	1,631.5
J-DU8-090	1,424.0	Desert Wells	11.00	89.8	1,631.5
J-DU8-100	1,425.0	Desert Wells	9.20	89.3	1,631.5
J-DU8-110	1,430.0	Desert Wells	33.00	87.2	1,631.5
J-DU8-120	1,431.0	Desert Wells	17.10	86.7	1,631.5
J-DU8-130	1,427.0	Desert Wells	21.00	88.5	1,631.5
J-DU9-010	1,419.0	Desert Wells	19.70	91.9	1,631.4
J-DU9-020	1,415.0	Desert Wells	35.80	93.6	1,631.4

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	32.60	93.2	1,631.4
J-DU9-040	1,416.0	Desert Wells	7.80	93.2	1,631.4
J-DU9-050	1,419.0	Desert Wells	0.00	91.9	1,631.4
J-DU9-060	1,422.0	Desert Wells	31.40	90.6	1,631.5
J-DU9-070	1,414.0	Desert Wells	31.50	94.0	1,631.4
J-DU9-080	1,419.0	Desert Wells	38.50	91.9	1,631.4
J-DU9-090	1,414.0	Desert Wells	0.00	94.1	1,631.4
J-DU9-100	1,414.0	Desert Wells	0.00	94.1	1,631.4

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	83.31	0.13
P-170EX	16.0	5,365.91	120.0	83.31	0.13
P-180EX	16.0	5,395.89	120.0	185.54	0.30
P-190EX	16.0	5,727.93	120.0	185.54	0.30
P-200EX	16.0	888.87	120.0	-715.45	1.14
P-210EX	16.0	509.51	120.0	-1,122.45	1.79
P-220EX	16.0	2,908.75	120.0	578.34	0.92
P-240EX	16.0	1,386.71	120.0	-1,441.69	2.30
P-250EX	16.0	2,610.66	120.0	383.65	0.61
P-310	30.0	4,936.64	120.0	1,104.38	0.50
P-340EX	16.0	5,775.00	120.0	83.31	0.13
P-410EX	16.0	5,368.22	120.0	185.54	0.30
P-970	24.0	1,001.45	120.0	698.40	0.50
P-980	24.0	1,934.58	120.0	263.43	0.19
P-1060EX	16.0	1,328.19	120.0	317.89	0.51
P-1070EX	16.0	2,607.17	120.0	317.89	0.51
P-1630EX	16.0	1,793.28	120.0	145.64	0.23
P-1640EX	16.0	1,447.45	120.0	302.53	0.48
P-1780	24.0	1,527.79	120.0	698.40	0.50
P-1790	24.0	1,115.45	120.0	698.40	0.50
P-1940EX	16.0	1,171.38	120.0	90.93	0.15
P-1950EX	16.0	1,440.76	120.0	90.93	0.15
P-1970EX	16.0	816.47	120.0	203.29	0.32
P-1980EX	16.0	1,103.17	120.0	182.99	0.29
P-2040EX	16.0	10,634.81	120.0	-117.42	0.19
P-2055EX	16.0	10,453.02	120.0	353.38	0.56
P-2070EX	24.0	5,328.61	120.0	-466.17	0.33
P-2500EX	24.0	2,750.22	120.0	160.23	0.11
P-2510EX	24.0	2,726.43	120.0	128.68	0.09
P-2540EX	12.0	2,624.38	120.0	226.36	0.64
P-2570EX	16.0	2,640.03	120.0	671.39	1.07
P-2655EX	16.0	2,870.17	120.0	197.29	0.31
P-2660EX	24.0	2,796.67	120.0	265.58	0.19
P-2665EX	16.0	2,715.77	120.0	197.29	0.31
P-2690EX	16.0	2,914.43	120.0	-126.50	0.20
P-2700EX	16.0	3,115.09	120.0	257.15	0.41
P-2710EX	16.0	1,822.64	120.0	196.04	0.31
P-2720EX	12.0	3,042.02	120.0	-61.11	0.17
P-2800	24.0	5,785.85	120.0	-102.23	0.07
P-2830	16.0	2,890.37	120.0	-1.26	0.00
P-2860EX	24.0	761.21	120.0	265.58	0.19
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-7.48	0.05
P-2900	24.0	1,422.97	120.0	246.10	0.17
P-2910EX	24.0	496.51	120.0	258.09	0.18
P-2950	12.0	1,088.63	120.0	31.55	0.09
P-2970EX	12.0	1,118.68	120.0	55.61	0.16
P-2990EX	8.0	2,810.72	120.0	2.86	0.02
P-3010EX	12.0	471.37	120.0	7.48	0.02
P-3020EX	12.0	1,167.01	120.0	58.47	0.17
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	9.21	0.06
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	67.68	0.43
P-3080EX	12.0	1,396.97	120.0	250.33	0.71
P-3090EX	12.0	1,108.96	120.0	198.87	0.56
P-3100EX	12.0	694.82	120.0	-27.49	0.08
P-3110EX	12.0	664.35	120.0	23.98	0.07
P-3120EX	8.0	1,851.06	120.0	51.46	0.33
P-3130EX	12.0	1,154.91	120.0	-67.67	0.19
P-3140EX	16.0	1,782.97	120.0	579.74	0.93
P-3150EX	16.0	958.12	120.0	671.39	1.07
P-3160EX	8.0	3,801.45	120.0	91.65	0.58
P-3170EX	8.0	2,837.60	120.0	-11.99	0.08
P-3180EX	8.0	735.68	120.0	16.69	0.11
P-3190EX	30.0	2,558.57	120.0	3,809.75	1.73
P-3240EX	16.0	810.36	120.0	34.75	0.06
P-3240EX(2)	16.0	452.50	120.0	352.71	0.56
P-3250EX	12.0	844.21	120.0	-194.69	0.55
P-3260EX	16.0	1,108.49	120.0	578.34	0.92
P-3270EX	16.0	1,509.41	120.0	428.99	0.68
P-3280EX	12.0	2,890.26	120.0	-149.35	0.42
P-3290EX	12.0	2,432.48	120.0	45.33	0.13
P-3930EX	16.0	794.17	120.0	-353.50	0.56
P-3940EX	16.0	509.16	120.0	-353.50	0.56
P-3970EX	16.0	1,445.13	120.0	353.50	0.56
P-4720EX	16.0	1,215.66	120.0	313.01	0.50
P-4730EX	16.0	455.51	120.0	286.91	0.46
P-4750EX	16.0	715.18	120.0	286.91	0.46
P-4760EX	16.0	774.38	120.0	25.06	0.04
P-4780EX	24.0	2,143.12	120.0	377.41	0.27
P-4790EX	16.0	1,816.22	120.0	86.17	0.14
P-4860EX	24.0	985.98	120.0	-377.41	0.27
P-4870EX	24.0	619.54	120.0	-377.41	0.27
P-5700EX	16.0	1,175.56	120.0	909.62	1.45
P-5710EX	16.0	1,171.19	120.0	909.62	1.45
P-5740	24.0	1,547.92	120.0	-377.41	0.27
P-5780	16.0	683.67	120.0	334.51	0.53
P-6064	16.0	846.07	120.0	-275.18	0.44
P-6065	16.0	3,442.89	120.0	-275.18	0.44
P-6070	16.0	247.15	120.0	-261.58	0.42
P-6166EX	16.0	1,496.42	130.0	60.32	0.10
P-6167EX	16.0	2,351.14	120.0	-308.45	0.49
P-6198	30.0	559.22	120.0	3,809.75	1.73
P-6218	30.0	458.03	120.0	2,486.42	1.13
P-6219	30.0	1,679.89	120.0	-2,486.42	1.13
P-6223	16.0	1,042.80	120.0	-352.71	0.56
P-6226	16.0	139.10	120.0	1,323.34	2.11
P-6236EX	24.0	2,939.36	130.0	-113.98	0.08
P-7000	12.0	741.92	120.0	-164.02	0.47
P-COMWTREX	36.0	1,202.28	120.0	936.97	0.30
P-DU-3-4-080	12.0	797.04	120.0	30.74	0.09
P-DU-3-4-090	12.0	702.19	120.0	51.04	0.14
P-DU-3-4-100	12.0	909.19	120.0	-64.14	0.18
P-DU-3-4-110	16.0	597.34	120.0	92.06	0.15
P-DU-3-4-120	16.0	1,153.09	120.0	67.36	0.11

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-130	12.0	706.88	120.0	-79.78	0.23
P-DU-3-4-70	12.0	1,647.45	120.0	-78.84	0.22
P-DU-3S-130	16.0	2,122.39	120.0	-241.94	0.39
P-DU2-060	12.0	1,914.95	120.0	92.43	0.26
P-DU2-070	12.0	951.56	120.0	92.43	0.26
P-DU2-080	20.0	631.03	120.0	-433.31	0.44
P-DU2-090	20.0	1,106.44	120.0	-433.31	0.44
P-DU3-4-010A	12.0	1,447.93	120.0	-6.48	0.02
P-DU3-4-010B	12.0	847.20	120.0	-90.38	0.26
P-DU3-4-020	24.0	1,289.68	120.0	-202.29	0.14
P-DU3-4-060	12.0	733.41	120.0	-228.24	0.65
P-DU3-4-160	12.0	578.86	120.0	-109.58	0.31
P-DU3-4-170	16.0	1,187.74	120.0	112.74	0.18
P-DU3-4-180	16.0	876.41	120.0	97.84	0.16
P-DU3-4-190	20.0	1,405.86	120.0	-420.38	0.43
P-DU3-4-200	8.0	1,000.70	120.0	17.92	0.11
P-DU3-4-210	8.0	1,083.47	120.0	-45.52	0.29
P-DU3-4-220	8.0	2,361.07	120.0	30.65	0.20
P-DU3-4-30	24.0	1,116.54	120.0	-268.01	0.19
P-DU3-4-40	24.0	496.31	120.0	-321.81	0.23
P-DU3-4-50	24.0	1,092.47	120.0	-375.54	0.27
P-DU3S-010	8.0	260.69	120.0	97.56	0.62
P-DU3S-020	8.0	1,373.83	120.0	42.12	0.27
P-DU3S-030	8.0	1,542.05	120.0	31.12	0.20
P-DU3S-040	8.0	1,241.65	120.0	16.12	0.10
P-DU3S-050	8.0	1,016.55	120.0	-19.46	0.12
P-DU3S-060	8.0	974.34	120.0	-14.34	0.09
P-DU3S-070	8.0	1,383.69	120.0	-26.44	0.17
P-DU3S-080	8.0	1,241.43	120.0	-38.24	0.24
P-DU3S-090	8.0	620.85	120.0	-45.24	0.29
P-DU3S-100	16.0	788.42	120.0	-22.20	0.04
P-DU3S-110	16.0	1,850.66	120.0	-119.32	0.19
P-DU3S-120	16.0	822.09	120.0	-173.12	0.28
P-DU5N-010	16.0	337.08	120.0	47.00	0.07
P-DU5N-020	16.0	1,977.53	120.0	-68.16	0.11
P-DU5N-030	16.0	528.70	120.0	222.61	0.36
P-DU5N-040	16.0	2,706.37	120.0	412.22	0.66
P-DU5N-050	20.0	416.37	120.0	-21.09	0.02
P-DU5N-060	20.0	1,208.29	120.0	-238.47	0.24
P-DU5N-070	20.0	1,779.99	120.0	-238.47	0.24
P-DU5N-080	12.0	450.13	120.0	614.73	1.74
P-DU5N-090	12.0	2,293.31	120.0	-349.67	0.99
P-DU5N-100	12.0	2,325.96	130.0	4.60	0.01
P-DU5N-110	16.0	958.50	130.0	973.60	1.55
P-DU6-010	12.0	1,162.55	120.0	187.34	0.53
P-DU6-020	16.0	123.88	120.0	319.24	0.51
P-DU6-050	12.0	2,221.22	120.0	-187.82	0.53
P-DU6-060	12.0	2,209.31	120.0	187.34	0.53
P-DU6-070	16.0	142.12	120.0	1,069.56	1.71
P-DU6-080	12.0	1,134.59	120.0	187.82	0.53
P-DU6-130	16.0	1,866.29	120.0	-1,005.38	1.60
P-DU6-140	16.0	823.26	120.0	-980.81	1.57
P-DU6-150	8.0	1,139.37	120.0	61.23	0.39

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-180	12.0	1,701.72	120.0	-193.86	0.55
P-DU6-190	12.0	1,447.65	120.0	288.10	0.82
P-DU6-200	12.0	1,510.55	120.0	187.21	0.53
P-DU6-210	20.0	548.31	120.0	-648.68	0.66
P-DU6-220	20.0	1,003.42	120.0	-704.00	0.72
P-DU6-230	8.0	2,333.32	120.0	35.98	0.23
P-DU6-240	12.0	696.34	120.0	332.72	0.94
P-DU6-250	8.0	2,342.14	120.0	-33.66	0.21
P-DU6-260	8.0	656.01	120.0	-143.48	0.92
P-DU6-270	12.0	803.20	120.0	144.76	0.41
P-DU6-290	8.0	936.11	120.0	61.23	0.39
P-DU6-300	20.0	514.67	120.0	-673.98	0.69
P-DU6-310	12.0	1,616.85	120.0	-231.15	0.66
P-DU7-010	12.0	1,114.60	120.0	157.86	0.45
P-DU7-020	12.0	1,146.78	120.0	-103.91	0.29
P-DU7-030	12.0	1,044.06	120.0	21.09	0.06
P-DU7-040	24.0	1,409.98	120.0	-643.67	0.46
P-DU7-050	24.0	1,075.39	120.0	-1,015.60	0.72
P-DU7-060	24.0	1,253.80	120.0	-1,026.70	0.73
P-DU7-070	24.0	1,205.32	120.0	-1,338.25	0.95
P-DU7-080	24.0	2,338.72	120.0	-1,522.24	1.08
P-DU7-090	16.0	941.19	120.0	-490.89	0.78
P-DU7-100	16.0	1,562.41	120.0	-461.99	0.74
P-DU7-110	16.0	1,741.52	120.0	-345.30	0.55
P-DU7-120	16.0	778.48	120.0	238.18	0.38
P-DU7-130	20.0	316.65	120.0	-335.15	0.34
P-DU7-140	20.0	1,206.89	120.0	-333.35	0.34
P-DU7-150	20.0	1,235.71	120.0	-389.16	0.40
P-DU7-160	20.0	891.94	120.0	-351.36	0.36
P-DU7-170	12.0	1,072.99	120.0	21.17	0.06
P-DU7-180	12.0	827.71	120.0	-45.17	0.13
P-DU7-190	12.0	398.61	120.0	-197.38	0.56
P-DU7-200	12.0	2,378.07	120.0	15.67	0.04
P-DU7-210	12.0	1,048.78	120.0	-261.85	0.74
P-DU7-220	12.0	1,053.72	120.0	-231.75	0.66
P-DU7-230	12.0	1,714.23	120.0	-141.51	0.40
P-DU7-240	12.0	1,014.45	120.0	-90.81	0.26
P-DU8-010	16.0	1,107.48	120.0	-228.04	0.36
P-DU8-020	16.0	713.88	120.0	-228.99	0.37
P-DU8-030	16.0	1,312.24	120.0	-224.79	0.36
P-DU8-040	16.0	1,371.08	120.0	-272.13	0.43
P-DU8-050	16.0	520.30	120.0	-328.60	0.52
P-DU8-060	16.0	1,021.04	120.0	-434.97	0.69
P-DU8-070	8.0	541.92	120.0	-39.17	0.25
P-DU8-080	8.0	253.35	120.0	-13.37	0.09
P-DU8-090	8.0	1,138.34	120.0	-28.77	0.18
P-DU8-100	12.0	598.81	120.0	103.56	0.29
P-DU8-110	12.0	709.10	120.0	45.96	0.13
P-DU8-120	8.0	678.33	120.0	-34.80	0.22
P-DU8-130	8.0	1,315.41	120.0	19.63	0.13
P-DU8-140	8.0	965.85	120.0	6.76	0.04
P-DU8-150	6.0	737.49	120.0	5.93	0.07
P-DU8-160	8.0	1,265.36	120.0	14.32	0.09

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-170	8.0	2,613.46	120.0	0.95	0.01
P-DU8-180	8.0	1,777.60	120.0	-16.15	0.10
P-DU8-190	8.0	1,184.98	120.0	12.63	0.08
P-DU8-200	8.0	1,054.34	120.0	49.77	0.32
P-DU9-010	16.0	903.69	120.0	13.60	0.02
P-DU9-020	8.0	226.81	120.0	-0.95	0.01
P-DU9-030	8.0	1,616.12	120.0	-5.15	0.03
P-DU9-040	8.0	745.70	120.0	-34.97	0.22
P-DU9-050	8.0	868.53	120.0	-5.98	0.04
P-DU9-060	8.0	1,549.98	120.0	-41.41	0.26
P-DU9-070	8.0	1,000.62	120.0	-6.37	0.04
P-DU9-080	8.0	643.77	120.0	-14.17	0.09
P-DU9-090	8.0	3,091.64	120.0	9.20	0.06
P-DU9-100	8.0	1,618.99	120.0	-16.98	0.11
P-DU9-110	8.0	3,057.43	120.0	-5.32	0.03
P-DU9-120	8.0	901.10	120.0	20.37	0.13
P-DU9-130	8.0	878.92	120.0	-51.52	0.33
P-DU9-140	8.0	429.87	120.0	-106.37	0.68
P-DU9-150	8.0	4,470.55	120.0	-23.45	0.15
P-SCAP	48.0	1,752.16	120.0	-6,473.83	1.15

Max-Day Demand

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,553.21	1,634.0
SCAP DWPS	1,634.0	10,195.19	1,634.0

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	95.3	1,626.3
J-110EX	1,418.0	Desert Wells	38.20	89.9	1,625.8
J-120EX	1,462.0	Desert Wells	0.00	74.2	1,633.6
J-135EX	1,460.0	Desert Wells	0.00	74.4	1,631.9
J-150EX	1,472.0	Desert Wells	0.00	68.1	1,629.5
J-160EX	1,435.0	Desert Wells	0.00	83.5	1,628.0
J-170EX	1,430.0	Desert Wells	0.00	85.6	1,627.9
J-180EX	1,410.0	Desert Wells	0.00	94.2	1,627.8
J-190EX	1,395.0	Desert Wells	0.00	100.5	1,627.3
J-200EX	1,385.0	Desert Wells	0.00	104.6	1,626.7
J-220EX	1,480.0	Desert Wells	0.00	65.6	1,631.7
J-230EX	1,475.0	Desert Wells	0.00	67.3	1,630.5
J-250EX	1,452.0	Desert Wells	15.60	76.7	1,629.3
J-260EX	1,453.0	Desert Wells	36.40	76.4	1,629.6
J-270EX	1,429.0	Desert Wells	0.00	86.1	1,628.1
J-280EX	1,460.0	Desert Wells	0.00	72.7	1,628.1
J-300EX	1,392.0	Desert Wells	35.40	101.3	1,626.2
J-320EX	1,422.0	Desert Wells	0.00	89.1	1,628.0
J-330EX	1,455.0	Desert Wells	0.00	75.2	1,628.7
J-340EX	1,440.0	Desert Wells	0.00	81.5	1,628.3
J-360EX	1,400.0	Desert Wells	1,375.00	97.4	1,625.0
J-550EX	1,425.0	Desert Wells	0.00	87.9	1,628.2
J-590EX	1,413.0	Desert Wells	0.00	92.2	1,626.1
J-920EX	1,434.0	Desert Wells	0.00	84.1	1,628.5
J-960EX	1,402.0	Desert Wells	0.00	96.7	1,625.6
J-970EX	1,397.0	Desert Wells	0.00	98.8	1,625.3
J-1000EX	1,455.0	Desert Wells	0.00	77.3	1,633.7
J-1010EX	1,485.0	Desert Wells	0.00	64.3	1,633.7
J-1020EX	1,425.0	Desert Wells	0.00	89.1	1,631.0
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	79.6	1,628.9
J-1120EX	1,456.0	Desert Wells	0.00	75.3	1,630.0
J-1130EX	1,445.0	Desert Wells	407.00	79.0	1,627.6
J-1160EX	1,445.0	Desert Wells	0.00	81.6	1,633.6
J-1170EX	1,470.0	Desert Wells	0.00	70.8	1,633.7
J-1180EX	1,440.0	Desert Wells	0.00	83.2	1,632.3
J-1190EX	1,420.0	Desert Wells	0.00	90.3	1,628.8
J-1200EX	1,445.0	Desert Wells	0.00	81.1	1,632.4
J-1210EX	1,455.0	Desert Wells	0.00	77.3	1,633.6
J-1220EX	1,475.0	Desert Wells	0.00	68.6	1,633.6
J-1230EX	1,460.0	Desert Wells	0.00	72.9	1,628.4
J-1235EX	1,440.0	Desert Wells	0.00	81.7	1,628.8
J-1240EX	1,455.0	Desert Wells	0.00	75.2	1,628.9
J-1280	1,410.0	Desert Wells	0.00	94.2	1,627.8
J-1290EX	1,480.0	Desert Wells	0.00	66.5	1,633.6
J-1300EX	1,465.0	Desert Wells	0.00	73.0	1,633.6
J-1310EX	1,480.0	Desert Wells	0.00	66.5	1,633.6
J-1330EX	1,465.0	Desert Wells	0.00	73.0	1,633.6
J-1340EX	1,450.0	Desert Wells	0.00	79.5	1,633.6
J-1350EX	1,465.0	Desert Wells	0.00	73.0	1,633.6
J-1360EX	1,445.0	Desert Wells	0.00	81.6	1,633.6
J-1370EX	1,430.0	Desert Wells	0.00	87.6	1,632.4
J-1380EX	1,450.0	Desert Wells	0.00	79.1	1,632.8

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.6	1,632.4
J-1400EX	1,430.0	Desert Wells	0.00	87.5	1,632.4
J-1410	1,458.0	Desert Wells	0.00	74.9	1,631.0
J-1410EX	1,420.0	Desert Wells	0.00	90.7	1,629.7
J-1420EX	1,460.0	Desert Wells	0.00	73.7	1,630.3
J-1430EX	1,455.0	Desert Wells	0.00	75.9	1,630.5
J-1440EX	1,478.0	Desert Wells	0.00	66.2	1,631.0
J-1680EX	1,401.0	Desert Wells	0.00	97.1	1,625.4
J-1990EX	1,447.0	Desert Wells	52.20	78.8	1,629.0
J-2000EX	1,442.0	Desert Wells	0.00	80.8	1,628.8
J-2010EX	1,419.0	Desert Wells	0.00	90.4	1,627.9
J-2040EX	1,427.0	Desert Wells	0.00	87.0	1,628.1
J-2120EX	1,453.0	Desert Wells	0.00	76.5	1,629.7
J-2140EX	1,450.0	Desert Wells	407.00	77.3	1,628.7
J-2295	1,415.0	Desert Wells	0.00	91.7	1,626.9
J-2340EX	1,434.0	Desert Wells	38.20	83.1	1,626.0
J-2353	1,456.0	Desert Wells	0.00	75.4	1,630.2
J-2361	1,456.9	Desert Wells	0.00	75.1	1,630.5
J-2364	1,457.4	Desert Wells	0.00	74.7	1,630.2
J-DU2-020	1,411.5	Desert Wells	0.00	92.6	1,625.4
J-DU2-030	1,408.0	Desert Wells	0.00	93.9	1,625.1
J-DU3-4-010	1,405.0	Desert Wells	107.60	95.7	1,626.3
J-DU3-4-020	1,402.0	Desert Wells	107.60	97.0	1,626.2
J-DU3-4-030	1,392.0	Desert Wells	144.40	101.3	1,626.2
J-DU3-4-030A	1,394.5	Desert Wells	167.80	100.2	1,626.1
J-DU3-4-040	1,403.0	Desert Wells	71.60	96.6	1,626.2
J-DU3-4-050	1,408.0	Desert Wells	149.40	94.3	1,626.0
J-DU3-4-060	1,408.0	Desert Wells	0.00	94.2	1,625.7
J-DU3-4-070	1,404.0	Desert Wells	40.60	95.9	1,625.7
J-DU3-4-080	1,400.0	Desert Wells	26.20	97.7	1,625.7
J-DU3-4-090	1,393.0	Desert Wells	70.20	100.7	1,625.7
J-DU3-4-100	1,391.0	Desert Wells	90.80	101.7	1,626.1
J-DU3-4-110	1,393.0	Desert Wells	40.60	100.6	1,625.6
J-DU3-4-120	1,393.0	Desert Wells	0.00	100.6	1,625.5
J-DU3-4-130	1,395.0	Desert Wells	49.40	99.7	1,625.5
J-DU3-4-140	1,403.0	Desert Wells	68.80	96.3	1,625.5
J-DU3-4-150	1,407.0	Desert Wells	59.60	94.6	1,625.6
J-DU3-4-160	1,406.0	Desert Wells	29.80	95.0	1,625.5
J-DU3-4-170	1,410.0	Desert Wells	169.80	93.2	1,625.5
J-DU3-4-200	1,412.5	Desert Wells	46.60	92.5	1,626.4
J-DU3-4-210	1,406.0	Desert Wells	188.20	95.2	1,626.1
J-DU3S-010	1,412.0	Desert Wells	20.40	92.9	1,626.7
J-DU3S-020	1,407.0	Desert Wells	22.00	94.9	1,626.4
J-DU3S-030	1,401.0	Desert Wells	30.00	97.5	1,626.3
J-DU3S-040	1,399.0	Desert Wells	22.00	98.3	1,626.2
J-DU3S-050	1,404.0	Desert Wells	24.20	96.2	1,626.3
J-DU3S-060	1,410.0	Desert Wells	23.60	93.6	1,626.4
J-DU3S-070	1,417.0	Desert Wells	14.00	90.7	1,626.6
J-DU3S-080	1,396.0	Desert Wells	141.20	99.6	1,626.2
J-DU5N-010	1,436.0	Desert Wells	59.20	82.0	1,625.5
J-DU5N-020	1,424.5	Desert Wells	153.40	86.9	1,625.3
J-DU5N-030	1,426.0	Desert Wells	40.20	86.2	1,625.2
J-DU5N-040	1,414.0	Desert Wells	0.00	91.4	1,625.3

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	1,375.00	91.4	1,625.2
J-DU5N-060	1,417.0	Desert Wells	0.00	90.2	1,625.4
J-DU5N-070	1,439.5	Desert Wells	969.00	80.2	1,624.9
J-DU5N-080	1,427.3	Desert Wells	969.00	85.5	1,624.9
J-DU6-010	1,459.0	Desert Wells	0.00	73.9	1,629.9
J-DU6-020	1,453.0	Desert Wells	694.40	76.5	1,629.7
J-DU6-050	1,448.0	Desert Wells	0.00	78.8	1,630.1
J-DU6-060	1,458.0	Desert Wells	694.40	74.5	1,630.2
J-DU6-080	1,444.6	Desert Wells	171.60	78.8	1,626.8
J-DU6-090	1,439.0	Desert Wells	0.00	81.3	1,626.9
J-DU6-100	1,439.0	Desert Wells	108.40	80.7	1,625.6
J-DU6-110	1,432.0	Desert Wells	98.20	83.7	1,625.6
J-DU6-120	1,422.0	Desert Wells	100.60	88.1	1,625.7
J-DU6-130	1,416.0	Desert Wells	82.20	90.8	1,625.8
J-DU6-140	1,417.0	Desert Wells	132.00	90.5	1,626.1
J-DU6-150	1,427.0	Desert Wells	84.60	86.4	1,626.6
J-DU6-160	1,436.0	Desert Wells	97.20	82.6	1,627.0
J-DU6-170	1,416.5	Desert Wells	50.60	90.6	1,626.0
J-DU7-010	1,415.0	Desert Wells	4.80	91.6	1,626.7
J-DU7-020	1,425.0	Desert Wells	46.60	87.1	1,626.4
J-DU7-030	1,416.0	Desert Wells	125.00	91.0	1,626.3
J-DU7-040	1,409.0	Desert Wells	37.60	94.0	1,626.3
J-DU7-050	1,416.0	Desert Wells	38.60	91.1	1,626.5
J-DU7-060	1,423.0	Desert Wells	22.20	88.2	1,626.8
J-DU7-070	1,430.0	Desert Wells	0.00	85.3	1,627.2
J-DU7-080	1,434.0	Desert Wells	81.00	83.9	1,627.8
J-DU7-090	1,437.0	Desert Wells	0.00	83.0	1,628.7
J-DU7-100	1,435.0	Desert Wells	57.80	83.6	1,628.2
J-DU7-110	1,435.0	Desert Wells	57.60	83.2	1,627.4
J-DU7-120	1,420.0	Desert Wells	0.00	89.5	1,626.8
J-DU7-130	1,420.0	Desert Wells	3.60	89.5	1,626.8
J-DU7-140	1,425.0	Desert Wells	70.00	87.3	1,626.7
J-DU7-150	1,419.0	Desert Wells	75.60	89.8	1,626.6
J-DU7-160	1,435.0	Desert Wells	48.00	83.2	1,627.2
J-DU7-170	1,432.0	Desert Wells	21.40	84.5	1,627.2
J-DU7-180	1,433.0	Desert Wells	37.40	84.1	1,627.4
J-DU7-190	1,437.0	Desert Wells	60.20	82.6	1,628.0
J-DU7-200	1,432.0	Desert Wells	101.40	84.3	1,626.8
J-DU8-010	1,420.0	Desert Wells	0.00	89.5	1,627.0
J-DU8-020	1,419.5	Desert Wells	0.00	89.8	1,627.1
J-DU8-030	1,421.0	Desert Wells	0.00	89.2	1,627.3
J-DU8-040	1,418.0	Desert Wells	13.40	90.6	1,627.5
J-DU8-050	1,422.0	Desert Wells	0.00	89.0	1,627.7
J-DU8-060	1,420.0	Desert Wells	18.00	89.6	1,627.2
J-DU8-070	1,420.0	Desert Wells	30.80	89.6	1,627.2
J-DU8-080	1,422.0	Desert Wells	8.80	88.8	1,627.2
J-DU8-090	1,424.0	Desert Wells	22.00	87.9	1,627.2
J-DU8-100	1,425.0	Desert Wells	18.40	87.5	1,627.3
J-DU8-110	1,430.0	Desert Wells	66.00	85.3	1,627.2
J-DU8-120	1,431.0	Desert Wells	34.20	84.9	1,627.2
J-DU8-130	1,427.0	Desert Wells	42.00	86.6	1,627.2
J-DU9-010	1,419.0	Desert Wells	39.40	90.0	1,627.0
J-DU9-020	1,415.0	Desert Wells	71.60	91.7	1,627.0

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	65.20	91.3	1,627.0
J-DU9-040	1,416.0	Desert Wells	15.60	91.3	1,627.0
J-DU9-050	1,419.0	Desert Wells	0.00	90.0	1,627.0
J-DU9-060	1,422.0	Desert Wells	62.80	88.8	1,627.2
J-DU9-070	1,414.0	Desert Wells	63.00	92.1	1,626.9
J-DU9-080	1,419.0	Desert Wells	77.00	90.0	1,626.9
J-DU9-090	1,414.0	Desert Wells	0.00	92.1	1,627.0
J-DU9-100	1,414.0	Desert Wells	0.00	92.2	1,627.1

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	151.41	0.24
P-170EX	16.0	5,365.91	120.0	151.41	0.24
P-180EX	16.0	5,395.89	120.0	336.54	0.54
P-190EX	16.0	5,727.93	120.0	336.54	0.54
P-200EX	16.0	888.87	120.0	-1,350.40	2.15
P-210EX	16.0	509.51	120.0	-1,757.40	2.80
P-220EX	16.0	2,908.75	120.0	924.34	1.47
P-240EX	16.0	1,386.71	120.0	-2,056.09	3.28
P-250EX	16.0	2,610.66	120.0	709.31	1.13
P-310	30.0	4,936.64	120.0	2,012.33	0.91
P-340EX	16.0	5,775.00	120.0	151.41	0.24
P-410EX	16.0	5,368.22	120.0	336.54	0.54
P-970	24.0	1,001.45	120.0	1,275.66	0.90
P-980	24.0	1,934.58	120.0	477.21	0.34
P-1060EX	16.0	1,328.19	120.0	384.66	0.61
P-1070EX	16.0	2,607.17	120.0	384.66	0.61
P-1630EX	16.0	1,793.28	120.0	250.05	0.40
P-1640EX	16.0	1,447.45	120.0	589.31	0.94
P-1780	24.0	1,527.79	120.0	1,275.66	0.90
P-1790	24.0	1,115.45	120.0	1,275.66	0.90
P-1940EX	16.0	1,171.38	120.0	465.04	0.74
P-1950EX	16.0	1,440.76	120.0	465.04	0.74
P-1970EX	16.0	816.47	120.0	430.97	0.69
P-1980EX	16.0	1,103.17	120.0	390.37	0.62
P-2040EX	16.0	10,634.81	120.0	-188.12	0.30
P-2055EX	16.0	10,453.02	120.0	608.81	0.97
P-2070EX	24.0	5,328.61	120.0	-756.29	0.54
P-2500EX	24.0	2,750.22	120.0	230.55	0.16
P-2510EX	24.0	2,726.43	120.0	180.49	0.13
P-2540EX	12.0	2,624.38	120.0	393.15	1.12
P-2570EX	16.0	2,640.03	120.0	1,160.77	1.85
P-2655EX	16.0	2,870.17	120.0	360.11	0.57
P-2660EX	24.0	2,796.67	120.0	392.44	0.28
P-2665EX	16.0	2,715.77	120.0	360.11	0.57
P-2690EX	16.0	2,914.43	120.0	-237.91	0.38
P-2700EX	16.0	3,115.09	120.0	471.40	0.75
P-2710EX	16.0	1,822.64	120.0	359.31	0.57
P-2720EX	12.0	3,042.02	120.0	-112.09	0.32
P-2800	24.0	5,785.85	120.0	-185.13	0.13
P-2830	16.0	2,890.37	120.0	-0.80	0.00
P-2860EX	24.0	761.21	120.0	392.44	0.28
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-9.43	0.06
P-2900	24.0	1,422.97	120.0	368.61	0.26
P-2910EX	24.0	496.51	120.0	383.01	0.27
P-2950	12.0	1,088.63	120.0	50.06	0.14
P-2970EX	12.0	1,118.68	120.0	91.45	0.26
P-2990EX	8.0	2,810.72	120.0	8.49	0.05
P-3010EX	12.0	471.37	120.0	9.43	0.03
P-3020EX	12.0	1,167.01	120.0	99.94	0.28
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	17.73	0.11
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	117.67	0.75
P-3080EX	12.0	1,396.97	120.0	434.29	1.23
P-3090EX	12.0	1,108.96	120.0	345.02	0.98
P-3100EX	12.0	694.82	120.0	-48.13	0.14
P-3110EX	12.0	664.35	120.0	41.14	0.12
P-3120EX	8.0	1,851.06	120.0	89.27	0.57
P-3130EX	12.0	1,154.91	120.0	-117.67	0.33
P-3140EX	16.0	1,782.97	120.0	1,001.96	1.60
P-3150EX	16.0	958.12	120.0	1,160.77	1.85
P-3160EX	8.0	3,801.45	120.0	158.81	1.01
P-3170EX	8.0	2,837.60	120.0	-14.40	0.09
P-3180EX	8.0	735.68	120.0	27.17	0.17
P-3190EX	30.0	2,558.57	120.0	6,196.76	2.81
P-3240EX	16.0	810.36	120.0	535.36	0.85
P-3240EX(2)	16.0	452.50	120.0	714.83	1.14
P-3250EX	12.0	844.21	120.0	-215.02	0.61
P-3260EX	16.0	1,108.49	120.0	924.34	1.47
P-3270EX	16.0	1,509.41	120.0	695.24	1.11
P-3280EX	12.0	2,890.26	120.0	-229.10	0.65
P-3290EX	12.0	2,432.48	120.0	-14.08	0.04
P-3930EX	16.0	794.17	120.0	-776.11	1.24
P-3940EX	16.0	509.16	120.0	-776.11	1.24
P-3970EX	16.0	1,445.13	120.0	776.11	1.24
P-4720EX	16.0	1,215.66	120.0	572.40	0.91
P-4730EX	16.0	455.51	120.0	520.20	0.83
P-4750EX	16.0	715.18	120.0	520.20	0.83
P-4760EX	16.0	774.38	120.0	45.49	0.07
P-4780EX	24.0	2,143.12	120.0	685.91	0.49
P-4790EX	16.0	1,816.22	120.0	157.59	0.25
P-4860EX	24.0	985.98	120.0	-685.91	0.49
P-4870EX	24.0	619.54	120.0	-685.91	0.49
P-5700EX	16.0	1,175.56	120.0	1,410.44	2.25
P-5710EX	16.0	1,171.19	120.0	1,410.44	2.25
P-5740	24.0	1,547.92	120.0	-685.91	0.49
P-5780	16.0	683.67	120.0	678.43	1.08
P-6064	16.0	846.07	120.0	-500.78	0.80
P-6065	16.0	3,442.89	120.0	-500.78	0.80
P-6070	16.0	247.15	120.0	-468.85	0.75
P-6166EX	16.0	1,496.42	130.0	-516.50	0.82
P-6167EX	16.0	2,351.14	120.0	-943.40	1.51
P-6198	30.0	559.22	120.0	6,196.76	2.81
P-6218	30.0	458.03	120.0	4,392.72	1.99
P-6219	30.0	1,679.89	120.0	-4,392.72	1.99
P-6223	16.0	1,042.80	120.0	-714.83	1.14
P-6226	16.0	139.10	120.0	1,804.04	2.88
P-6236EX	24.0	2,939.36	130.0	-208.70	0.15
P-7000	12.0	741.92	120.0	-286.08	0.81
P-COMWTREX	36.0	1,202.28	120.0	1,553.21	0.49
P-DU-3-4-080	12.0	797.04	120.0	21.34	0.06
P-DU-3-4-090	12.0	702.19	120.0	61.94	0.18
P-DU-3-4-100	12.0	909.19	120.0	-88.14	0.25
P-DU-3-4-110	16.0	597.34	120.0	-74.67	0.12
P-DU-3-4-120	16.0	1,153.09	120.0	-124.07	0.20

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-130	12.0	706.88	120.0	-175.59	0.50
P-DU-3-4-70	12.0	1,647.45	120.0	-213.85	0.61
P-DU-3S-130	16.0	2,122.39	120.0	-448.02	0.71
P-DU2-060	12.0	1,914.95	120.0	-133.85	0.38
P-DU2-070	12.0	951.56	120.0	-133.85	0.38
P-DU2-080	20.0	631.03	120.0	-724.02	0.74
P-DU2-090	20.0	1,106.44	120.0	-724.02	0.74
P-DU3-4-010A	12.0	1,447.93	120.0	19.12	0.05
P-DU3-4-010B	12.0	847.20	120.0	-148.68	0.42
P-DU3-4-020	24.0	1,289.68	120.0	-430.05	0.30
P-DU3-4-060	12.0	733.41	120.0	-363.25	1.03
P-DU3-4-160	12.0	578.86	120.0	-235.19	0.67
P-DU3-4-170	16.0	1,187.74	120.0	-17.29	0.03
P-DU3-4-180	16.0	876.41	120.0	-47.09	0.08
P-DU3-4-190	20.0	1,405.86	120.0	-940.90	0.96
P-DU3-4-200	8.0	1,000.70	120.0	46.35	0.30
P-DU3-4-210	8.0	1,083.47	120.0	-81.60	0.52
P-DU3-4-220	8.0	2,361.07	120.0	60.25	0.38
P-DU3-4-30	24.0	1,116.54	120.0	-593.58	0.42
P-DU3-4-40	24.0	496.31	120.0	-701.18	0.50
P-DU3-4-50	24.0	1,092.47	120.0	-819.13	0.58
P-DU3S-010	8.0	260.69	120.0	182.77	1.17
P-DU3S-020	8.0	1,373.83	120.0	78.05	0.50
P-DU3S-030	8.0	1,542.05	120.0	56.05	0.36
P-DU3S-040	8.0	1,241.65	120.0	26.05	0.17
P-DU3S-050	8.0	1,016.55	120.0	-26.57	0.17
P-DU3S-060	8.0	974.34	120.0	-22.52	0.14
P-DU3S-070	8.0	1,383.69	120.0	-46.72	0.30
P-DU3S-080	8.0	1,241.43	120.0	-70.32	0.45
P-DU3S-090	8.0	620.85	120.0	-84.32	0.54
P-DU3S-100	16.0	788.42	120.0	-51.09	0.08
P-DU3S-110	16.0	1,850.66	120.0	-212.21	0.34
P-DU3S-120	16.0	822.09	120.0	-319.81	0.51
P-DU5N-010	16.0	337.08	120.0	-346.68	0.55
P-DU5N-020	16.0	1,977.53	120.0	-353.95	0.56
P-DU5N-030	16.0	528.70	120.0	464.01	0.74
P-DU5N-040	16.0	2,706.37	120.0	78.13	0.12
P-DU5N-050	20.0	416.37	120.0	-645.89	0.66
P-DU5N-060	20.0	1,208.29	120.0	-862.96	0.88
P-DU5N-070	20.0	1,779.99	120.0	-862.96	0.88
P-DU5N-080	12.0	450.13	120.0	501.94	1.42
P-DU5N-090	12.0	2,293.31	120.0	-388.70	1.10
P-DU5N-100	12.0	2,325.96	130.0	78.36	0.22
P-DU5N-110	16.0	958.50	130.0	1,047.36	1.67
P-DU6-010	12.0	1,162.55	120.0	197.60	0.56
P-DU6-020	16.0	123.88	120.0	298.69	0.48
P-DU6-050	12.0	2,221.22	120.0	-198.11	0.56
P-DU6-060	12.0	2,209.31	120.0	197.60	0.56
P-DU6-070	16.0	142.12	120.0	1,090.11	1.74
P-DU6-080	12.0	1,134.59	120.0	198.11	0.56
P-DU6-130	16.0	1,866.29	120.0	-1,624.57	2.59
P-DU6-140	16.0	823.26	120.0	-1,502.45	2.40
P-DU6-150	8.0	1,139.37	120.0	49.48	0.32

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-180	12.0	1,701.72	120.0	-164.66	0.47
P-DU6-190	12.0	1,447.65	120.0	428.29	1.21
P-DU6-200	12.0	1,510.55	120.0	100.44	0.28
P-DU6-210	20.0	548.31	120.0	-1,123.54	1.15
P-DU6-220	20.0	1,003.42	120.0	-1,223.61	1.25
P-DU6-230	8.0	2,333.32	120.0	82.53	0.53
P-DU6-240	12.0	696.34	120.0	522.31	1.48
P-DU6-250	8.0	2,342.14	120.0	-73.11	0.47
P-DU6-260	8.0	656.01	120.0	-219.79	1.40
P-DU6-270	12.0	803.20	120.0	66.46	0.19
P-DU6-290	8.0	936.11	120.0	49.48	0.32
P-DU6-300	20.0	514.67	120.0	-1,174.14	1.20
P-DU6-310	12.0	1,616.85	120.0	-263.46	0.75
P-DU7-010	12.0	1,114.60	120.0	271.74	0.77
P-DU7-020	12.0	1,146.78	120.0	-164.89	0.47
P-DU7-030	12.0	1,044.06	120.0	-39.89	0.11
P-DU7-040	24.0	1,409.98	120.0	-1,180.08	0.84
P-DU7-050	24.0	1,075.39	120.0	-1,857.76	1.32
P-DU7-060	24.0	1,253.80	120.0	-1,879.96	1.33
P-DU7-070	24.0	1,205.32	120.0	-2,407.95	1.71
P-DU7-080	24.0	2,338.72	120.0	-2,708.74	1.92
P-DU7-090	16.0	941.19	120.0	-893.45	1.43
P-DU7-100	16.0	1,562.41	120.0	-835.65	1.33
P-DU7-110	16.0	1,741.52	120.0	-622.30	0.99
P-DU7-120	16.0	778.48	120.0	438.47	0.70
P-DU7-130	20.0	316.65	120.0	-570.85	0.58
P-DU7-140	20.0	1,206.89	120.0	-567.25	0.58
P-DU7-150	20.0	1,235.71	120.0	-660.13	0.67
P-DU7-160	20.0	891.94	120.0	-584.53	0.60
P-DU7-170	12.0	1,072.99	120.0	-5.68	0.02
P-DU7-180	12.0	827.71	120.0	-42.32	0.12
P-DU7-190	12.0	398.61	120.0	-328.00	0.93
P-DU7-200	12.0	2,378.07	120.0	49.10	0.14
P-DU7-210	12.0	1,048.78	120.0	-474.70	1.35
P-DU7-220	12.0	1,053.72	120.0	-414.50	1.18
P-DU7-230	12.0	1,714.23	120.0	-264.28	0.75
P-DU7-240	12.0	1,014.45	120.0	-162.88	0.46
P-DU8-010	16.0	1,107.48	120.0	-387.03	0.62
P-DU8-020	16.0	713.88	120.0	-405.30	0.65
P-DU8-030	16.0	1,312.24	120.0	-403.56	0.64
P-DU8-040	16.0	1,371.08	120.0	-493.35	0.79
P-DU8-050	16.0	520.30	120.0	-598.85	0.96
P-DU8-060	16.0	1,021.04	120.0	-798.45	1.27
P-DU8-070	8.0	541.92	120.0	-69.30	0.44
P-DU8-080	8.0	253.35	120.0	-23.22	0.15
P-DU8-090	8.0	1,138.34	120.0	-54.02	0.34
P-DU8-100	12.0	598.81	120.0	204.85	0.58
P-DU8-110	12.0	709.10	120.0	91.38	0.26
P-DU8-120	8.0	678.33	120.0	-64.09	0.41
P-DU8-130	8.0	1,315.41	120.0	41.06	0.26
P-DU8-140	8.0	965.85	120.0	18.49	0.12
P-DU8-150	6.0	737.49	120.0	12.55	0.14
P-DU8-160	8.0	1,265.36	120.0	28.94	0.18

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-170	8.0	2,613.46	120.0	4.00	0.03
P-DU8-180	8.0	1,777.60	120.0	-30.20	0.19
P-DU8-190	8.0	1,184.98	120.0	19.90	0.13
P-DU8-200	8.0	1,054.34	120.0	92.10	0.59
P-DU9-010	16.0	903.69	120.0	31.93	0.05
P-DU9-020	8.0	226.81	120.0	-18.28	0.12
P-DU9-030	8.0	1,616.12	120.0	10.80	0.07
P-DU9-040	8.0	745.70	120.0	-67.56	0.43
P-DU9-050	8.0	868.53	120.0	6.77	0.04
P-DU9-060	8.0	1,549.98	120.0	-77.23	0.49
P-DU9-070	8.0	1,000.62	120.0	-2.76	0.02
P-DU9-080	8.0	643.77	120.0	-18.36	0.12
P-DU9-090	8.0	3,091.64	120.0	21.56	0.14
P-DU9-100	8.0	1,618.99	120.0	-33.16	0.21
P-DU9-110	8.0	3,057.43	120.0	-8.27	0.05
P-DU9-120	8.0	901.10	120.0	41.85	0.27
P-DU9-130	8.0	878.92	120.0	-93.38	0.60
P-DU9-140	8.0	429.87	120.0	-199.60	1.27
P-DU9-150	8.0	4,470.55	120.0	-43.42	0.28
P-SCAP	48.0	1,752.16	120.0	-10,195.19	1.81

Peak-Hour Demand

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	2,119.19	1,634.0
SCAP DWPS	1,634.0	13,626.81	1,634.0

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	92.5	1,619.8
J-110EX	1,418.0	Desert Wells	57.30	87.1	1,619.2
J-120EX	1,462.0	Desert Wells	0.00	74.1	1,633.2
J-135EX	1,460.0	Desert Wells	0.00	73.8	1,630.6
J-150EX	1,472.0	Desert Wells	0.00	66.6	1,626.0
J-160EX	1,435.0	Desert Wells	0.00	81.4	1,623.1
J-170EX	1,430.0	Desert Wells	0.00	83.5	1,623.0
J-180EX	1,410.0	Desert Wells	0.00	92.0	1,622.7
J-190EX	1,395.0	Desert Wells	0.00	98.1	1,621.8
J-200EX	1,385.0	Desert Wells	0.00	102.0	1,620.7
J-220EX	1,480.0	Desert Wells	0.00	64.9	1,630.1
J-230EX	1,475.0	Desert Wells	0.00	66.2	1,627.9
J-250EX	1,452.0	Desert Wells	23.40	75.1	1,625.7
J-260EX	1,453.0	Desert Wells	54.60	74.9	1,626.1
J-270EX	1,429.0	Desert Wells	0.00	84.1	1,623.3
J-280EX	1,460.0	Desert Wells	0.00	70.7	1,623.3
J-300EX	1,392.0	Desert Wells	53.10	98.5	1,619.7
J-320EX	1,422.0	Desert Wells	0.00	87.0	1,623.1
J-330EX	1,455.0	Desert Wells	0.00	73.3	1,624.5
J-340EX	1,440.0	Desert Wells	0.00	79.5	1,623.7
J-360EX	1,400.0	Desert Wells	2,228.00	94.0	1,617.2
J-550EX	1,425.0	Desert Wells	0.00	85.8	1,623.4
J-590EX	1,413.0	Desert Wells	0.00	89.4	1,619.6
J-920EX	1,434.0	Desert Wells	0.00	82.2	1,624.0
J-960EX	1,402.0	Desert Wells	0.00	93.6	1,618.4
J-970EX	1,397.0	Desert Wells	0.00	95.5	1,617.8
J-1000EX	1,455.0	Desert Wells	0.00	77.2	1,633.4
J-1010EX	1,485.0	Desert Wells	0.00	64.2	1,633.4
J-1020EX	1,425.0	Desert Wells	0.00	88.0	1,628.5
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	77.8	1,624.9
J-1120EX	1,456.0	Desert Wells	0.00	74.0	1,627.0
J-1130EX	1,445.0	Desert Wells	407.00	77.2	1,623.5
J-1160EX	1,445.0	Desert Wells	0.00	81.5	1,633.3
J-1170EX	1,470.0	Desert Wells	0.00	70.7	1,633.4
J-1180EX	1,440.0	Desert Wells	0.00	82.6	1,631.0
J-1190EX	1,420.0	Desert Wells	0.00	88.5	1,624.4
J-1200EX	1,445.0	Desert Wells	0.00	80.5	1,631.1
J-1210EX	1,455.0	Desert Wells	0.00	77.2	1,633.4
J-1220EX	1,475.0	Desert Wells	0.00	68.5	1,633.3
J-1230EX	1,460.0	Desert Wells	0.00	70.9	1,623.9
J-1235EX	1,440.0	Desert Wells	0.00	79.9	1,624.6
J-1240EX	1,455.0	Desert Wells	0.00	73.5	1,624.9
J-1280	1,410.0	Desert Wells	0.00	92.1	1,622.8
J-1290EX	1,480.0	Desert Wells	0.00	66.3	1,633.3
J-1300EX	1,465.0	Desert Wells	0.00	72.8	1,633.4
J-1310EX	1,480.0	Desert Wells	0.00	66.4	1,633.4
J-1330EX	1,465.0	Desert Wells	0.00	72.9	1,633.4
J-1340EX	1,450.0	Desert Wells	0.00	79.3	1,633.4
J-1350EX	1,465.0	Desert Wells	0.00	72.8	1,633.4
J-1360EX	1,445.0	Desert Wells	0.00	81.5	1,633.3
J-1370EX	1,430.0	Desert Wells	0.00	87.0	1,631.1
J-1380EX	1,450.0	Desert Wells	0.00	78.7	1,631.8

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.0	1,631.0
J-1400EX	1,430.0	Desert Wells	0.00	87.0	1,631.0
J-1410	1,458.0	Desert Wells	0.00	73.9	1,628.7
J-1410EX	1,420.0	Desert Wells	0.00	89.2	1,626.1
J-1420EX	1,460.0	Desert Wells	0.00	72.6	1,627.9
J-1430EX	1,455.0	Desert Wells	0.00	74.9	1,628.0
J-1440EX	1,478.0	Desert Wells	0.00	65.3	1,628.9
J-1680EX	1,401.0	Desert Wells	0.00	93.9	1,617.9
J-1990EX	1,447.0	Desert Wells	78.30	77.0	1,625.1
J-2000EX	1,442.0	Desert Wells	0.00	79.0	1,624.6
J-2010EX	1,419.0	Desert Wells	0.00	88.2	1,622.9
J-2040EX	1,427.0	Desert Wells	0.00	84.9	1,623.2
J-2120EX	1,453.0	Desert Wells	0.00	75.4	1,627.3
J-2140EX	1,450.0	Desert Wells	407.00	76.0	1,625.6
J-2295	1,415.0	Desert Wells	0.00	89.2	1,621.1
J-2340EX	1,434.0	Desert Wells	57.30	80.5	1,620.0
J-2353	1,456.0	Desert Wells	0.00	74.1	1,627.3
J-2361	1,456.9	Desert Wells	0.00	73.9	1,627.8
J-2364	1,457.4	Desert Wells	0.00	73.5	1,627.3
J-DU2-020	1,411.5	Desert Wells	0.00	89.5	1,618.4
J-DU2-030	1,408.0	Desert Wells	0.00	90.6	1,617.4
J-DU3-4-010	1,405.0	Desert Wells	161.40	93.0	1,619.9
J-DU3-4-020	1,402.0	Desert Wells	161.40	94.2	1,619.7
J-DU3-4-030	1,392.0	Desert Wells	216.60	98.5	1,619.6
J-DU3-4-030A	1,394.5	Desert Wells	251.70	97.4	1,619.6
J-DU3-4-040	1,403.0	Desert Wells	107.40	93.8	1,619.8
J-DU3-4-050	1,408.0	Desert Wells	149.40	91.5	1,619.4
J-DU3-4-060	1,408.0	Desert Wells	0.00	91.2	1,618.8
J-DU3-4-070	1,404.0	Desert Wells	60.90	92.9	1,618.8
J-DU3-4-080	1,400.0	Desert Wells	39.30	94.7	1,618.8
J-DU3-4-090	1,393.0	Desert Wells	105.30	97.7	1,618.8
J-DU3-4-100	1,391.0	Desert Wells	136.20	98.9	1,619.6
J-DU3-4-110	1,393.0	Desert Wells	60.90	97.6	1,618.6
J-DU3-4-120	1,393.0	Desert Wells	0.00	97.5	1,618.3
J-DU3-4-130	1,395.0	Desert Wells	74.10	96.6	1,618.4
J-DU3-4-140	1,403.0	Desert Wells	103.20	93.2	1,618.4
J-DU3-4-150	1,407.0	Desert Wells	89.40	91.5	1,618.6
J-DU3-4-160	1,406.0	Desert Wells	44.70	91.9	1,618.5
J-DU3-4-170	1,410.0	Desert Wells	254.70	90.2	1,618.5
J-DU3-4-200	1,412.5	Desert Wells	69.90	89.8	1,620.0
J-DU3-4-210	1,406.0	Desert Wells	282.30	92.4	1,619.6
J-DU3S-010	1,412.0	Desert Wells	30.60	90.3	1,620.6
J-DU3S-020	1,407.0	Desert Wells	33.00	92.2	1,620.1
J-DU3S-030	1,401.0	Desert Wells	45.00	94.7	1,619.8
J-DU3S-040	1,399.0	Desert Wells	33.00	95.5	1,619.8
J-DU3S-050	1,404.0	Desert Wells	36.30	93.4	1,619.8
J-DU3S-060	1,410.0	Desert Wells	35.40	90.8	1,620.0
J-DU3S-070	1,417.0	Desert Wells	21.00	88.0	1,620.3
J-DU3S-080	1,396.0	Desert Wells	211.80	96.8	1,619.7
J-DU5N-010	1,436.0	Desert Wells	88.80	79.2	1,619.0
J-DU5N-020	1,424.5	Desert Wells	230.10	83.9	1,618.5
J-DU5N-030	1,426.0	Desert Wells	60.30	83.2	1,618.4
J-DU5N-040	1,414.0	Desert Wells	0.00	88.3	1,618.1

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	2,228.00	88.3	1,618.0
J-DU5N-060	1,417.0	Desert Wells	0.00	87.2	1,618.5
J-DU5N-070	1,439.5	Desert Wells	969.00	77.4	1,618.4
J-DU5N-080	1,427.3	Desert Wells	969.00	82.6	1,618.2
J-DU6-010	1,459.0	Desert Wells	0.00	72.9	1,627.5
J-DU6-020	1,453.0	Desert Wells	694.40	75.4	1,627.3
J-DU6-050	1,448.0	Desert Wells	0.00	77.7	1,627.6
J-DU6-060	1,458.0	Desert Wells	694.40	73.5	1,627.8
J-DU6-080	1,444.6	Desert Wells	257.40	76.5	1,621.3
J-DU6-090	1,439.0	Desert Wells	0.00	78.9	1,621.4
J-DU6-100	1,439.0	Desert Wells	162.60	78.0	1,619.2
J-DU6-110	1,432.0	Desert Wells	147.30	80.9	1,619.0
J-DU6-120	1,422.0	Desert Wells	150.90	85.3	1,619.1
J-DU6-130	1,416.0	Desert Wells	123.30	87.9	1,619.1
J-DU6-140	1,417.0	Desert Wells	198.00	87.7	1,619.7
J-DU6-150	1,427.0	Desert Wells	126.90	83.8	1,620.6
J-DU6-160	1,436.0	Desert Wells	145.80	80.2	1,621.4
J-DU6-170	1,416.5	Desert Wells	75.90	87.8	1,619.4
J-DU7-010	1,415.0	Desert Wells	7.20	89.0	1,620.7
J-DU7-020	1,425.0	Desert Wells	69.90	84.4	1,620.2
J-DU7-030	1,416.0	Desert Wells	125.00	88.2	1,620.0
J-DU7-040	1,409.0	Desert Wells	56.40	91.3	1,619.9
J-DU7-050	1,416.0	Desert Wells	57.90	88.4	1,620.3
J-DU7-060	1,423.0	Desert Wells	33.30	85.6	1,620.9
J-DU7-070	1,430.0	Desert Wells	0.00	82.9	1,621.7
J-DU7-080	1,434.0	Desert Wells	121.50	81.7	1,622.9
J-DU7-090	1,437.0	Desert Wells	0.00	81.1	1,624.5
J-DU7-100	1,435.0	Desert Wells	86.70	81.5	1,623.4
J-DU7-110	1,435.0	Desert Wells	86.40	80.9	1,621.9
J-DU7-120	1,420.0	Desert Wells	0.00	86.9	1,620.9
J-DU7-130	1,420.0	Desert Wells	5.40	86.9	1,620.9
J-DU7-140	1,425.0	Desert Wells	105.00	84.7	1,620.7
J-DU7-150	1,419.0	Desert Wells	113.40	87.2	1,620.4
J-DU7-160	1,435.0	Desert Wells	72.00	80.8	1,621.7
J-DU7-170	1,432.0	Desert Wells	32.10	82.1	1,621.7
J-DU7-180	1,433.0	Desert Wells	56.10	81.8	1,622.0
J-DU7-190	1,437.0	Desert Wells	90.30	80.5	1,623.1
J-DU7-200	1,432.0	Desert Wells	152.10	81.7	1,620.9
J-DU8-010	1,420.0	Desert Wells	0.00	87.0	1,621.2
J-DU8-020	1,419.5	Desert Wells	0.00	87.3	1,621.3
J-DU8-030	1,421.0	Desert Wells	0.00	86.8	1,621.7
J-DU8-040	1,418.0	Desert Wells	20.10	88.3	1,622.2
J-DU8-050	1,422.0	Desert Wells	0.00	86.7	1,622.4
J-DU8-060	1,420.0	Desert Wells	27.00	87.2	1,621.5
J-DU8-070	1,420.0	Desert Wells	46.20	87.2	1,621.5
J-DU8-080	1,422.0	Desert Wells	13.20	86.4	1,621.6
J-DU8-090	1,424.0	Desert Wells	33.00	85.5	1,621.6
J-DU8-100	1,425.0	Desert Wells	27.60	85.1	1,621.7
J-DU8-110	1,430.0	Desert Wells	99.00	82.9	1,621.5
J-DU8-120	1,431.0	Desert Wells	51.30	82.4	1,621.5
J-DU8-130	1,427.0	Desert Wells	63.00	84.2	1,621.6
J-DU9-010	1,419.0	Desert Wells	59.10	87.5	1,621.1
J-DU9-020	1,415.0	Desert Wells	107.40	89.2	1,621.1

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	97.80	88.7	1,621.1
J-DU9-040	1,416.0	Desert Wells	23.40	88.7	1,621.1
J-DU9-050	1,419.0	Desert Wells	0.00	87.4	1,621.1
J-DU9-060	1,422.0	Desert Wells	94.20	86.3	1,621.5
J-DU9-070	1,414.0	Desert Wells	94.50	89.5	1,621.0
J-DU9-080	1,419.0	Desert Wells	115.50	87.4	1,621.0
J-DU9-090	1,414.0	Desert Wells	0.00	89.6	1,621.1
J-DU9-100	1,414.0	Desert Wells	0.00	89.8	1,621.5

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	214.29	0.34
P-170EX	16.0	5,365.91	120.0	214.29	0.34
P-180EX	16.0	5,395.89	120.0	475.17	0.76
P-190EX	16.0	5,727.93	120.0	475.17	0.76
P-200EX	16.0	888.87	120.0	-1,884.66	3.01
P-210EX	16.0	509.51	120.0	-2,291.66	3.66
P-220EX	16.0	2,908.75	120.0	1,237.92	1.98
P-240EX	16.0	1,386.71	120.0	-2,606.36	4.16
P-250EX	16.0	2,610.66	120.0	1,026.40	1.64
P-310	30.0	4,936.64	120.0	2,855.42	1.30
P-340EX	16.0	5,775.00	120.0	214.29	0.34
P-410EX	16.0	5,368.22	120.0	475.17	0.76
P-970	24.0	1,001.45	120.0	1,813.35	1.29
P-980	24.0	1,934.58	120.0	673.48	0.48
P-1060EX	16.0	1,328.19	120.0	439.16	0.70
P-1070EX	16.0	2,607.17	120.0	439.16	0.70
P-1630EX	16.0	1,793.28	120.0	332.13	0.53
P-1640EX	16.0	1,447.45	120.0	820.88	1.31
P-1780	24.0	1,527.79	120.0	1,813.35	1.29
P-1790	24.0	1,115.45	120.0	1,813.35	1.29
P-1940EX	16.0	1,171.38	120.0	770.32	1.23
P-1950EX	16.0	1,440.76	120.0	770.32	1.23
P-1970EX	16.0	816.47	120.0	615.94	0.98
P-1980EX	16.0	1,103.17	120.0	555.04	0.89
P-2040EX	16.0	10,634.81	120.0	-253.20	0.40
P-2055EX	16.0	10,453.02	120.0	842.97	1.35
P-2070EX	24.0	5,328.61	120.0	-1,023.01	0.73
P-2500EX	24.0	2,750.22	120.0	295.39	0.21
P-2510EX	24.0	2,726.43	120.0	227.61	0.16
P-2540EX	12.0	2,624.38	120.0	545.95	1.55
P-2570EX	16.0	2,640.03	120.0	1,609.27	2.57
P-2655EX	16.0	2,870.17	120.0	511.59	0.82
P-2660EX	24.0	2,796.67	120.0	509.92	0.36
P-2665EX	16.0	2,715.77	120.0	511.59	0.82
P-2690EX	16.0	2,914.43	120.0	-351.85	0.56
P-2700EX	16.0	3,115.09	120.0	674.55	1.08
P-2710EX	16.0	1,822.64	120.0	513.94	0.82
P-2720EX	12.0	3,042.02	120.0	-160.61	0.46
P-2800	24.0	5,785.85	120.0	-260.89	0.19
P-2830	16.0	2,890.37	120.0	2.35	0.00
P-2860EX	24.0	761.21	120.0	509.92	0.36
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-10.53	0.07
P-2900	24.0	1,422.97	120.0	480.81	0.34
P-2910EX	24.0	496.51	120.0	499.39	0.35
P-2950	12.0	1,088.63	120.0	67.78	0.19
P-2970EX	12.0	1,118.68	120.0	124.79	0.35
P-2990EX	8.0	2,810.72	120.0	13.06	0.08
P-3010EX	12.0	471.37	120.0	10.53	0.03
P-3020EX	12.0	1,167.01	120.0	137.85	0.39
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	25.61	0.16
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	163.46	1.04
P-3080EX	12.0	1,396.97	120.0	602.83	1.71
P-3090EX	12.0	1,108.96	120.0	478.92	1.36
P-3100EX	12.0	694.82	120.0	-67.03	0.19
P-3110EX	12.0	664.35	120.0	56.88	0.16
P-3120EX	8.0	1,851.06	120.0	123.91	0.79
P-3130EX	12.0	1,154.91	120.0	-163.46	0.46
P-3140EX	16.0	1,782.97	120.0	1,388.92	2.22
P-3150EX	16.0	958.12	120.0	1,609.27	2.57
P-3160EX	8.0	3,801.45	120.0	220.35	1.41
P-3170EX	8.0	2,837.60	120.0	-18.58	0.12
P-3180EX	8.0	735.68	120.0	36.14	0.23
P-3190EX	30.0	2,558.57	120.0	8,433.49	3.83
P-3240EX	16.0	810.36	120.0	996.38	1.59
P-3240EX(2)	16.0	452.50	120.0	1,038.82	1.66
P-3250EX	12.0	844.21	120.0	-211.52	0.60
P-3260EX	16.0	1,108.49	120.0	1,237.92	1.98
P-3270EX	16.0	1,509.41	120.0	940.49	1.50
P-3280EX	12.0	2,890.26	120.0	-297.42	0.84
P-3290EX	12.0	2,432.48	120.0	-85.90	0.24
P-3930EX	16.0	794.17	120.0	-1,170.11	1.87
P-3940EX	16.0	509.16	120.0	-1,170.11	1.87
P-3970EX	16.0	1,445.13	120.0	1,170.11	1.87
P-4720EX	16.0	1,215.66	120.0	814.13	1.30
P-4730EX	16.0	455.51	120.0	735.83	1.17
P-4750EX	16.0	715.18	120.0	735.83	1.17
P-4760EX	16.0	774.38	120.0	63.43	0.10
P-4780EX	24.0	2,143.12	120.0	970.78	0.69
P-4790EX	16.0	1,816.22	120.0	224.04	0.36
P-4860EX	24.0	985.98	120.0	-970.78	0.69
P-4870EX	24.0	619.54	120.0	-970.78	0.69
P-5700EX	16.0	1,175.56	120.0	1,858.96	2.97
P-5710EX	16.0	1,171.19	120.0	1,858.96	2.97
P-5740	24.0	1,547.92	120.0	-970.78	0.69
P-5780	16.0	683.67	120.0	984.22	1.57
P-6064	16.0	846.07	120.0	-709.90	1.13
P-6065	16.0	3,442.89	120.0	-709.90	1.13
P-6070	16.0	247.15	120.0	-656.92	1.05
P-6166EX	16.0	1,496.42	130.0	-927.91	1.48
P-6167EX	16.0	2,351.14	120.0	-1,477.66	2.36
P-6198	30.0	559.22	120.0	8,433.49	3.83
P-6218	30.0	458.03	120.0	6,162.72	2.80
P-6219	30.0	1,679.89	120.0	-6,162.72	2.80
P-6223	16.0	1,042.80	120.0	-1,038.82	1.66
P-6226	16.0	139.10	120.0	2,270.77	3.62
P-6236EX	24.0	2,939.36	130.0	-297.30	0.21
P-7000	12.0	741.92	120.0	-394.11	1.12
P-COMWTREX	36.0	1,202.28	120.0	2,119.19	0.67
P-DU-3-4-080	12.0	797.04	120.0	-0.55	0.00
P-DU-3-4-090	12.0	702.19	120.0	60.35	0.17
P-DU-3-4-100	12.0	909.19	120.0	-99.65	0.28
P-DU-3-4-110	16.0	597.34	120.0	-215.28	0.34
P-DU-3-4-120	16.0	1,153.09	120.0	-289.38	0.46

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-130	12.0	706.88	120.0	-233.94	0.66
P-DU-3-4-70	12.0	1,647.45	120.0	-323.90	0.92
P-DU-3S-130	16.0	2,122.39	120.0	-639.70	1.02
P-DU2-060	12.0	1,914.95	120.0	-287.57	0.82
P-DU2-070	12.0	951.56	120.0	-287.57	0.82
P-DU2-080	20.0	631.03	120.0	-908.76	0.93
P-DU2-090	20.0	1,106.44	120.0	-908.76	0.93
P-DU3-4-010A	12.0	1,447.93	120.0	52.28	0.15
P-DU3-4-010B	12.0	847.20	120.0	-199.42	0.57
P-DU3-4-020	24.0	1,289.68	120.0	-624.96	0.44
P-DU3-4-060	12.0	733.41	120.0	-473.30	1.34
P-DU3-4-160	12.0	578.86	120.0	-323.34	0.92
P-DU3-4-170	16.0	1,187.74	120.0	-158.64	0.25
P-DU3-4-180	16.0	876.41	120.0	-203.34	0.32
P-DU3-4-190	20.0	1,405.86	120.0	-1,366.80	1.40
P-DU3-4-200	8.0	1,000.70	120.0	77.27	0.49
P-DU3-4-210	8.0	1,083.47	120.0	-115.63	0.74
P-DU3-4-220	8.0	2,361.07	120.0	89.40	0.57
P-DU3-4-30	24.0	1,116.54	120.0	-893.83	0.63
P-DU3-4-40	24.0	496.31	120.0	-1,055.23	0.75
P-DU3-4-50	24.0	1,092.47	120.0	-1,239.90	0.88
P-DU3S-010	8.0	260.69	120.0	262.81	1.68
P-DU3S-020	8.0	1,373.83	120.0	111.40	0.71
P-DU3S-030	8.0	1,542.05	120.0	78.40	0.50
P-DU3S-040	8.0	1,241.65	120.0	33.40	0.21
P-DU3S-050	8.0	1,016.55	120.0	-28.51	0.18
P-DU3S-060	8.0	974.34	120.0	-28.11	0.18
P-DU3S-070	8.0	1,383.69	120.0	-64.41	0.41
P-DU3S-080	8.0	1,241.43	120.0	-99.81	0.64
P-DU3S-090	8.0	620.85	120.0	-120.81	0.77
P-DU3S-100	16.0	788.42	120.0	-89.95	0.14
P-DU3S-110	16.0	1,850.66	120.0	-292.77	0.47
P-DU3S-120	16.0	822.09	120.0	-454.17	0.72
P-DU5N-010	16.0	337.08	120.0	-709.16	1.13
P-DU5N-020	16.0	1,977.53	120.0	-575.29	0.92
P-DU5N-030	16.0	528.70	120.0	666.35	1.06
P-DU5N-040	16.0	2,706.37	120.0	-297.04	0.47
P-DU5N-050	20.0	416.37	120.0	-1,205.80	1.23
P-DU5N-060	20.0	1,208.29	120.0	-1,309.77	1.34
P-DU5N-070	20.0	1,779.99	120.0	-1,309.77	1.34
P-DU5N-080	12.0	450.13	120.0	309.01	0.88
P-DU5N-090	12.0	2,293.31	120.0	-492.45	1.40
P-DU5N-100	12.0	2,325.96	130.0	167.54	0.48
P-DU5N-110	16.0	958.50	130.0	1,136.54	1.81
P-DU6-010	12.0	1,162.55	120.0	189.61	0.54
P-DU6-020	16.0	123.88	120.0	314.70	0.50
P-DU6-050	12.0	2,221.22	120.0	-190.09	0.54
P-DU6-060	12.0	2,209.31	120.0	189.61	0.54
P-DU6-070	16.0	142.12	120.0	1,074.10	1.71
P-DU6-080	12.0	1,134.59	120.0	190.09	0.54
P-DU6-130	16.0	1,866.29	120.0	-2,228.33	3.56
P-DU6-140	16.0	823.26	120.0	-2,008.30	3.20
P-DU6-150	8.0	1,139.37	120.0	37.37	0.24

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-180	12.0	1,701.72	120.0	-102.23	0.29
P-DU6-190	12.0	1,447.65	120.0	571.98	1.62
P-DU6-200	12.0	1,510.55	120.0	2.31	0.01
P-DU6-210	20.0	548.31	120.0	-1,492.40	1.52
P-DU6-220	20.0	1,003.42	120.0	-1,648.43	1.68
P-DU6-230	8.0	2,333.32	120.0	117.88	0.75
P-DU6-240	12.0	696.34	120.0	707.78	2.01
P-DU6-250	8.0	2,342.14	120.0	-108.98	0.70
P-DU6-260	8.0	656.01	120.0	-292.16	1.86
P-DU6-270	12.0	803.20	120.0	-45.07	0.13
P-DU6-290	8.0	936.11	120.0	37.37	0.24
P-DU6-300	20.0	514.67	120.0	-1,568.30	1.60
P-DU6-310	12.0	1,616.85	120.0	-321.16	0.91
P-DU7-010	12.0	1,114.60	120.0	370.95	1.05
P-DU7-020	12.0	1,146.78	120.0	-211.65	0.60
P-DU7-030	12.0	1,044.06	120.0	-86.65	0.25
P-DU7-040	24.0	1,409.98	120.0	-1,682.94	1.19
P-DU7-050	24.0	1,075.39	120.0	-2,612.66	1.85
P-DU7-060	24.0	1,253.80	120.0	-2,645.96	1.88
P-DU7-070	24.0	1,205.32	120.0	-3,392.18	2.41
P-DU7-080	24.0	2,338.72	120.0	-3,805.84	2.70
P-DU7-090	16.0	941.19	120.0	-1,268.46	2.02
P-DU7-100	16.0	1,562.41	120.0	-1,181.76	1.89
P-DU7-110	16.0	1,741.52	120.0	-873.94	1.39
P-DU7-120	16.0	778.48	120.0	623.74	1.00
P-DU7-130	20.0	316.65	120.0	-774.59	0.79
P-DU7-140	20.0	1,206.89	120.0	-769.19	0.79
P-DU7-150	20.0	1,235.71	120.0	-890.01	0.91
P-DU7-160	20.0	891.94	120.0	-776.61	0.79
P-DU7-170	12.0	1,072.99	120.0	-38.45	0.11
P-DU7-180	12.0	827.71	120.0	-33.55	0.10
P-DU7-190	12.0	398.61	120.0	-443.58	1.26
P-DU7-200	12.0	2,378.07	120.0	82.43	0.23
P-DU7-210	12.0	1,048.78	120.0	-672.40	1.91
P-DU7-220	12.0	1,053.72	120.0	-582.10	1.65
P-DU7-230	12.0	1,714.23	120.0	-377.92	1.07
P-DU7-240	12.0	1,014.45	120.0	-225.82	0.64
P-DU8-010	16.0	1,107.48	120.0	-524.39	0.84
P-DU8-020	16.0	713.88	120.0	-558.70	0.89
P-DU8-030	16.0	1,312.24	120.0	-565.20	0.90
P-DU8-040	16.0	1,371.08	120.0	-698.03	1.11
P-DU8-050	16.0	520.30	120.0	-850.39	1.36
P-DU8-060	16.0	1,021.04	120.0	-1,139.87	1.82
P-DU8-070	8.0	541.92	120.0	-95.69	0.61
P-DU8-080	8.0	253.35	120.0	-31.55	0.20
P-DU8-090	8.0	1,138.34	120.0	-77.75	0.50
P-DU8-100	12.0	598.81	120.0	303.85	0.86
P-DU8-110	12.0	709.10	120.0	135.62	0.38
P-DU8-120	8.0	678.33	120.0	-91.14	0.58
P-DU8-130	8.0	1,315.41	120.0	62.87	0.40
P-DU8-140	8.0	965.85	120.0	31.29	0.20
P-DU8-150	6.0	737.49	120.0	19.88	0.23
P-DU8-160	8.0	1,265.36	120.0	43.57	0.28

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by SCAP (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-170	8.0	2,613.46	120.0	7.44	0.05
P-DU8-180	8.0	1,777.60	120.0	-43.86	0.28
P-DU8-190	8.0	1,184.98	120.0	25.40	0.16
P-DU8-200	8.0	1,054.34	120.0	132.26	0.84
P-DU9-010	16.0	903.69	120.0	52.97	0.08
P-DU9-020	8.0	226.81	120.0	-34.31	0.22
P-DU9-030	8.0	1,616.12	120.0	28.19	0.18
P-DU9-040	8.0	745.70	120.0	-102.19	0.65
P-DU9-050	8.0	868.53	120.0	22.98	0.15
P-DU9-060	8.0	1,549.98	120.0	-112.95	0.72
P-DU9-070	8.0	1,000.62	120.0	4.26	0.03
P-DU9-080	8.0	643.77	120.0	-19.14	0.12
P-DU9-090	8.0	3,091.64	120.0	33.86	0.22
P-DU9-100	8.0	1,618.99	120.0	-49.70	0.32
P-DU9-110	8.0	3,057.43	120.0	-10.94	0.07
P-DU9-120	8.0	901.10	120.0	63.86	0.41
P-DU9-130	8.0	878.92	120.0	-132.70	0.85
P-DU9-140	8.0	429.87	120.0	-289.48	1.85
P-DU9-150	8.0	4,470.55	120.0	-62.58	0.40
P-SCAP	48.0	1,752.16	120.0	-13,626.81	2.42

Max-Day Demand Plus Fire Flow

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	4,000.00	20.0	89.5	J-1010EX	4.20	P-240EX
J-110EX	1,418.0	True	4,038.20	5,038.20	20.0	83.5	J-1010EX	4.60	P-240EX
J-120EX	1,462.0	True	2,000.00	4,000.00	20.0	74.1	J-1010EX	3.28	P-240EX
J-135EX	1,460.0	True	2,000.00	4,000.00	20.0	72.1	J-1010EX	4.86	P-5700EX
J-150EX	1,472.0	True	2,000.00	4,000.00	20.0	64.6	J-1010EX	4.04	P-240EX
J-160EX	1,435.0	True	2,000.00	4,000.00	20.0	72.0	J-1010EX	4.06	P-240EX
J-170EX	1,430.0	True	2,000.00	4,000.00	20.0	74.1	J-1010EX	4.06	P-240EX
J-180EX	1,410.0	True	2,000.00	4,000.00	20.0	88.7	J-1010EX	4.07	P-240EX
J-190EX	1,395.0	True	2,000.00	4,000.00	20.0	88.1	J-1010EX	4.09	P-240EX
J-200EX	1,385.0	True	2,000.00	4,000.00	20.0	92.3	J-1010EX	4.10	P-240EX
J-220EX	1,480.0	True	2,000.00	4,000.00	20.0	61.5	J-1440EX	3.92	P-220EX
J-230EX	1,475.0	True	2,000.00	4,000.00	20.0	63.3	J-1440EX	4.05	P-240EX
J-250EX	1,452.0	True	4,015.60	5,015.60	20.0	74.2	J-1010EX	4.25	P-6198
J-260EX	1,453.0	True	4,036.40	5,036.40	20.0	72.6	J-1010EX	4.34	P-5780
J-270EX	1,429.0	True	2,000.00	4,000.00	20.0	82.5	J-1010EX	4.06	P-240EX
J-280EX	1,460.0	True	2,000.00	4,000.00	20.0	68.5	J-1010EX	4.06	P-240EX
J-300EX	1,392.0	True	4,035.40	5,035.40	20.0	94.2	J-1010EX	4.33	P-240EX
J-320EX	1,422.0	True	2,000.00	4,000.00	20.0	85.1	J-1010EX	4.06	P-240EX
J-330EX	1,455.0	True	2,000.00	4,000.00	20.0	70.7	J-1010EX	4.03	P-240EX
J-340EX	1,440.0	True	2,000.00	4,000.00	20.0	78.2	J-1010EX	4.05	P-240EX
J-360EX	1,400.0	True	5,375.00	8,375.00	20.0	81.3	J-1010EX	5.40	P-1950EX
J-550EX	1,425.0	True	2,000.00	4,000.00	20.0	84.5	J-1010EX	4.05	P-240EX
J-590EX	1,413.0	True	4,000.00	5,000.00	20.0	83.0	J-1010EX	4.48	P-240EX
J-920EX	1,434.0	True	2,000.00	4,000.00	20.0	81.0	J-1010EX	4.04	P-240EX
J-960EX	1,402.0	True	2,000.00	4,000.00	20.0	89.6	J-1010EX	4.22	P-3970EX
J-970EX	1,397.0	True	2,000.00	4,000.00	20.0	91.9	J-1010EX	4.21	P-240EX
J-1000EX	1,455.0	True	2,000.00	4,000.00	20.0	76.2	J-1010EX	3.31	P-240EX
J-1010EX	1,485.0	True	2,000.00	4,000.00	20.0	63.3	J-220EX	3.29	P-240EX
J-1020EX	1,425.0	True	2,000.00	4,000.00	20.0	82.1	J-1010EX	3.89	P-240EX
J-1030EX	1,480.0	True	2,000.00	4,000.00	20.0	66.6	J-1010EX	3.28	P-240EX
J-1050EX	1,445.0	True	2,000.00	4,000.00	20.0	75.5	J-1010EX	4.02	P-240EX
J-1120EX	1,456.0	True	2,000.00	4,000.00	20.0	72.8	J-1010EX	4.94	P-6226
J-1130EX	1,445.0	True	4,407.00	6,407.00	20.0	69.3	J-1010EX	7.36	P-210EX
J-1160EX	1,445.0	True	2,000.00	4,000.00	20.0	59.2	J-1010EX	11.35	P-3030EX
J-1170EX	1,470.0	True	2,000.00	4,000.00	20.0	69.6	J-1010EX	3.30	P-240EX
J-1180EX	1,440.0	True	2,000.00	4,000.00	20.0	73.5	J-1010EX	5.64	P-3080EX
J-1190EX	1,420.0	True	2,000.00	4,000.00	20.0	83.1	J-1010EX	4.06	P-3150EX
J-1200EX	1,445.0	True	2,000.00	4,000.00	20.0	45.1	J-1370EX	11.35	P-3060EX
J-1210EX	1,455.0	True	2,000.00	3,749.54	20.0	42.8	J-1300EX	12.00	P-3180EX
J-1220EX	1,475.0	True	2,000.00	4,000.00	20.0	67.8	J-1010EX	3.29	P-240EX
J-1230EX	1,460.0	True	2,000.00	4,000.00	20.0	66.4	J-1010EX	4.04	P-240EX
J-1235EX	1,440.0	True	2,000.00	4,000.00	20.0	77.8	J-1010EX	4.02	P-240EX
J-1240EX	1,455.0	True	2,000.00	4,000.00	20.0	70.6	J-1010EX	4.03	P-240EX
J-1280	1,410.0	True	2,000.00	4,000.00	20.0	89.9	J-1010EX	4.07	P-240EX
J-1290EX	1,480.0	True	2,000.00	4,000.00	20.0	65.6	J-1010EX	3.29	P-240EX
J-1300EX	1,465.0	True	2,000.00	3,749.54	20.0	44.1	J-1350EX	12.00	P-3180EX
J-1310EX	1,480.0	True	2,000.00	4,000.00	20.0	65.5	J-1010EX	3.29	P-240EX
J-1330EX	1,465.0	True	2,000.00	4,000.00	20.0	65.2	J-1010EX	6.76	P-2950
J-1340EX	1,450.0	True	2,000.00	4,000.00	20.0	70.2	J-1010EX	7.38	P-2970EX
J-1350EX	1,465.0	True	2,000.00	3,662.78	20.0	48.1	J-1300EX	12.00	P-3180EX
J-1360EX	1,445.0	True	2,000.00	4,000.00	20.0	65.4	J-1010EX	7.55	P-3020EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1370EX	1,430.0	True	2,000.00	4,000.00	20.0	61.5	J-1200EX	8.63	P-3130EX
J-1380EX	1,450.0	True	2,000.00	4,000.00	20.0	69.8	J-1010EX	6.87	P-3080EX
J-1390EX	1,430.0	True	2,000.00	4,000.00	20.0	75.0	J-1010EX	6.71	P-3100EX
J-1400EX	1,430.0	True	2,000.00	4,000.00	20.0	71.2	J-1010EX	7.71	P-3110EX
J-1410	1,458.0	True	2,000.00	4,000.00	20.0	73.6	J-1010EX	4.14	P-3190EX
J-1410EX	1,420.0	True	2,000.00	4,000.00	20.0	83.5	J-1010EX	3.99	P-240EX
J-1420EX	1,460.0	True	2,000.00	4,000.00	20.0	71.8	J-1010EX	5.44	P-6226
J-1430EX	1,455.0	True	2,000.00	4,000.00	20.0	70.6	J-220EX	5.70	P-3250EX
J-1440EX	1,478.0	True	2,000.00	4,000.00	20.0	62.3	J-220EX	3.98	P-240EX
J-1680EX	1,401.0	True	4,000.00	5,000.00	20.0	87.0	J-1010EX	4.66	P-3970EX
J-1990EX	1,447.0	True	2,052.20	4,052.20	20.0	74.8	J-1010EX	4.09	P-4720EX
J-2000EX	1,442.0	True	2,000.00	4,000.00	20.0	76.9	J-1010EX	4.02	P-240EX
J-2010EX	1,419.0	True	2,000.00	4,000.00	20.0	86.1	J-1010EX	4.07	P-240EX
J-2040EX	1,427.0	True	2,000.00	4,000.00	20.0	83.2	J-1010EX	4.06	P-240EX
J-2120EX	1,453.0	True	2,000.00	4,000.00	20.0	72.9	J-1010EX	6.02	P-240EX
J-2140EX	1,450.0	True	2,407.00	4,407.00	20.0	72.9	J-1010EX	6.43	P-210EX
J-2295	1,415.0	True	2,000.00	4,000.00	20.0	86.4	J-1010EX	5.34	P-DU9-020
J-2340EX	1,434.0	True	4,038.20	6,038.20	20.0	74.2	J-1010EX	5.47	P-210EX
J-2353	1,456.0	True	2,000.00	4,000.00	20.0	73.8	J-1010EX	4.03	P-6198
J-2361	1,456.9	True	2,000.00	4,000.00	20.0	73.7	J-1010EX	4.05	P-6198
J-2364	1,457.4	True	2,000.00	4,000.00	20.0	73.0	J-1010EX	6.30	P-6226
J-DU2-020	1,411.5	True	2,000.00	4,000.00	20.0	88.3	J-1010EX	4.23	P-240EX
J-DU2-030	1,408.0	True	4,000.00	6,347.19	20.0	70.6	J-1010EX	10.00	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	5,107.60	20.0	86.7	J-1010EX	4.32	P-240EX
J-DU3-4-020	1,402.0	True	4,107.60	5,107.60	20.0	91.8	J-1010EX	4.34	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	5,144.40	20.0	95.9	J-1010EX	4.34	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	4,167.80	20.0	90.6	J-1010EX	6.57	P-DU3-4-010B
J-DU3-4-040	1,403.0	True	4,071.60	5,071.60	20.0	91.5	J-1010EX	4.34	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	4,149.40	20.0	85.2	J-1010EX	7.66	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	4,000.00	20.0	86.0	J-1010EX	4.61	P-DU-3-4-130
J-DU3-4-070	1,404.0	True	2,040.60	4,040.60	20.0	85.1	J-1010EX	6.22	P-DU-3-4-080
J-DU3-4-080	1,400.0	True	4,026.20	5,026.20	20.0	82.8	J-1010EX	8.43	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	5,070.20	20.0	93.4	J-1010EX	4.38	P-240EX
J-DU3-4-100	1,391.0	True	4,090.80	5,090.80	20.0	96.1	J-1010EX	4.34	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	5,040.60	20.0	92.6	J-1010EX	4.46	P-1970EX
J-DU3-4-120	1,393.0	True	4,000.00	5,000.00	20.0	93.0	J-1010EX	4.41	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	5,049.40	20.0	91.7	J-1010EX	4.41	P-240EX
J-DU3-4-140	1,403.0	True	4,068.80	5,068.80	20.0	88.8	J-1010EX	4.41	P-240EX
J-DU3-4-150	1,407.0	True	2,059.60	4,059.60	20.0	86.0	J-1010EX	6.27	P-DU-3-4-130
J-DU3-4-160	1,406.0	True	2,029.80	4,029.80	20.0	89.7	J-1010EX	4.20	P-240EX
J-DU3-4-170	1,410.0	True	2,169.80	4,169.80	20.0	89.2	J-1010EX	4.21	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	4,046.60	20.0	86.4	J-1010EX	4.11	P-240EX
J-DU3-4-210	1,406.0	True	2,188.20	4,188.20	20.0	69.2	J-1010EX	10.39	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,388.94	20.0	83.0	J-1010EX	12.00	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,740.53	20.0	52.9	J-1010EX	12.00	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	3,164.29	20.0	41.7	J-DU3S-020	12.00	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	3,392.90	20.0	65.0	J-1010EX	12.00	P-DU3S-050
J-DU3S-050	1,404.0	True	2,024.20	3,036.58	20.0	47.0	J-DU3S-060	12.00	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,843.50	20.0	44.8	J-1010EX	12.00	P-DU3S-010

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU3S-070	1,417.0	True	2,014.00	2,591.58	20.0	62.5	J-1010EX	12.00	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	5,141.20	20.0	92.2	J-1010EX	4.33	P-240EX
J-DU5N-010	1,436.0	True	4,059.20	5,059.20	20.0	74.6	J-1010EX	5.15	P-DU6-140
J-DU5N-020	1,424.5	True	4,153.40	5,153.40	20.0	79.4	J-1010EX	4.65	P-DU6-140
J-DU5N-030	1,426.0	True	4,040.20	5,040.20	20.0	78.8	J-1010EX	4.53	P-DU6-140
J-DU5N-040	1,414.0	True	4,000.00	5,000.00	20.0	85.6	J-1010EX	4.50	P-240EX
J-DU5N-050	1,414.0	True	5,375.00	6,375.00	20.0	85.3	J-1010EX	4.52	P-240EX
J-DU5N-060	1,417.0	True	4,000.00	5,000.00	20.0	83.7	J-1010EX	4.56	P-240EX
J-DU5N-070	1,439.5	True	2,969.00	4,969.00	20.0	72.3	J-1010EX	6.21	P-DU5N-110
J-DU5N-080	1,427.3	True	2,969.00	4,969.00	20.0	77.7	J-1010EX	7.27	P-DU5N-080
J-DU6-010	1,459.0	True	2,000.00	4,000.00	20.0	64.4	J-1010EX	6.31	P-DU6-010
J-DU6-020	1,453.0	True	4,694.40	7,694.40	20.0	68.7	J-1010EX	8.50	P-DU6-020
J-DU6-050	1,448.0	True	4,000.00	5,000.00	20.0	65.3	J-1010EX	8.50	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,694.40	20.0	71.3	J-1010EX	7.73	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	5,171.60	20.0	72.0	J-1010EX	5.84	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	3,682.23	20.0	44.4	J-1010EX	12.00	P-DU6-150
J-DU6-100	1,439.0	True	4,108.40	5,108.40	20.0	73.5	J-1010EX	5.35	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	4,098.20	20.0	73.7	J-1010EX	6.88	P-DU6-270
J-DU6-120	1,422.0	True	2,100.60	4,100.60	20.0	82.3	J-1010EX	4.18	P-240EX
J-DU6-130	1,416.0	True	2,082.20	4,082.20	20.0	86.9	J-1010EX	4.18	P-240EX
J-DU6-140	1,417.0	True	4,132.00	5,132.00	20.0	85.6	J-1010EX	4.38	P-240EX
J-DU6-150	1,427.0	True	2,084.60	4,084.60	20.0	80.1	J-1010EX	6.24	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	3,787.30	20.0	61.3	J-1010EX	12.00	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	4,050.60	20.0	86.8	J-1010EX	4.17	P-240EX
J-DU7-010	1,415.0	True	2,004.80	4,004.80	20.0	87.5	J-1010EX	4.10	P-240EX
J-DU7-020	1,425.0	True	2,046.60	4,046.60	20.0	77.8	J-1010EX	6.11	P-DU7-010
J-DU7-030	1,416.0	True	2,125.00	4,125.00	20.0	80.9	J-1010EX	6.82	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	5,037.60	20.0	89.3	J-1010EX	4.34	P-240EX
J-DU7-050	1,416.0	True	4,038.60	5,038.60	20.0	86.9	J-1010EX	4.34	P-240EX
J-DU7-060	1,423.0	True	2,022.20	4,022.20	20.0	84.9	J-1010EX	4.11	P-240EX
J-DU7-070	1,430.0	True	2,000.00	4,000.00	20.0	82.2	J-1010EX	4.09	P-240EX
J-DU7-080	1,434.0	True	2,081.00	4,081.00	20.0	80.8	J-1010EX	4.06	P-240EX
J-DU7-090	1,437.0	True	2,000.00	4,000.00	20.0	80.3	J-1010EX	4.02	P-240EX
J-DU7-100	1,435.0	True	2,057.80	4,057.80	20.0	79.4	J-1010EX	4.55	P-DU7-090
J-DU7-110	1,435.0	True	2,057.60	4,057.60	20.0	79.2	J-1010EX	4.07	P-240EX
J-DU7-120	1,420.0	True	2,000.00	4,000.00	20.0	86.0	J-1010EX	4.10	P-240EX
J-DU7-130	1,420.0	True	4,003.60	5,003.60	20.0	84.7	J-1010EX	4.31	P-240EX
J-DU7-140	1,425.0	True	4,070.00	5,070.00	20.0	82.4	J-1010EX	4.32	P-240EX
J-DU7-150	1,419.0	True	2,075.60	4,075.60	20.0	86.2	J-1010EX	4.11	P-240EX
J-DU7-160	1,435.0	True	2,048.00	4,048.00	20.0	75.0	J-1010EX	5.93	P-DU7-170
J-DU7-170	1,432.0	True	2,021.40	4,021.40	20.0	78.1	J-1010EX	5.25	P-DU7-190
J-DU7-180	1,433.0	True	2,037.40	4,037.40	20.0	77.8	J-1010EX	4.68	P-DU7-190
J-DU7-190	1,437.0	True	2,060.20	4,060.20	20.0	74.1	J-1010EX	6.44	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	4,101.40	20.0	74.6	J-1010EX	6.73	P-DU7-240
J-DU8-010	1,420.0	True	2,000.00	4,000.00	20.0	85.2	J-1010EX	4.09	P-240EX
J-DU8-020	1,419.5	True	2,000.00	4,000.00	20.0	85.1	J-1010EX	4.08	P-240EX
J-DU8-030	1,421.0	True	2,000.00	4,000.00	20.0	83.9	J-1010EX	4.07	P-240EX
J-DU8-040	1,418.0	True	2,013.40	4,013.40	20.0	85.4	J-1010EX	4.07	P-240EX
J-DU8-050	1,422.0	True	2,000.00	4,000.00	20.0	84.1	J-1010EX	4.35	P-DU8-060
J-DU8-060	1,420.0	True	2,018.00	4,018.00	20.0	72.2	J-1010EX	11.08	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,951.59	20.0	73.8	J-1010EX	12.00	P-DU8-080

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-080	1,422.0	True	2,008.80	4,008.80	20.0	76.7	J-1010EX	6.95	P-DU8-100
J-DU8-090	1,424.0	True	2,022.00	4,022.00	20.0	64.7	J-1010EX	9.48	P-DU8-150
J-DU8-100	1,425.0	True	2,018.40	4,018.40	20.0	79.4	J-1010EX	7.55	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	4,066.00	20.0	45.9	J-DU8-120	11.04	P-DU8-130
J-DU8-120	1,431.0	True	2,034.20	3,302.62	20.0	20.0	J-1010EX	11.58	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	4,042.00	20.0	51.8	J-DU8-120	11.97	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	4,039.40	20.0	83.8	J-1010EX	7.63	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,471.20	20.0	65.4	J-1010EX	12.00	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	5,001.24	20.0	51.7	J-DU9-040	12.00	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	3,619.66	20.0	47.7	J-1010EX	12.00	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	3,371.07	20.0	60.7	J-DU9-080	12.00	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,720.00	20.0	73.7	J-1010EX	12.00	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	3,810.35	20.0	31.6	J-DU9-080	12.00	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	3,299.33	20.0	45.7	J-1010EX	12.00	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	4,000.00	20.0	87.0	J-1010EX	5.71	P-DU9-020
J-DU9-100	1,414.0	True	2,000.00	4,000.00	20.0	86.3	J-1010EX	5.08	P-DU9-020

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	2,188.20	20.0	92.6	J-1010EX	3.80	P-240EX
J-110EX	1,418.0	True	4,038.20	4,039.20	20.0	85.1	J-1010EX	4.34	P-240EX
J-120EX	1,462.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	3.28	P-240EX
J-135EX	1,460.0	True	2,000.00	2,188.20	20.0	73.1	J-1010EX	3.94	P-6226
J-150EX	1,472.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	3.67	P-240EX
J-160EX	1,435.0	True	2,000.00	2,188.20	20.0	79.0	J-1010EX	3.70	P-240EX
J-170EX	1,430.0	True	2,000.00	2,188.20	20.0	81.2	J-1010EX	3.70	P-240EX
J-180EX	1,410.0	True	2,000.00	2,188.20	20.0	91.7	J-1010EX	3.70	P-240EX
J-190EX	1,395.0	True	2,000.00	2,188.20	20.0	95.8	J-1010EX	3.71	P-240EX
J-200EX	1,385.0	True	2,000.00	2,188.20	20.0	100.0	J-1010EX	3.72	P-240EX
J-220EX	1,480.0	True	2,000.00	2,188.20	20.0	63.9	J-1010EX	3.60	P-240EX
J-230EX	1,475.0	True	2,000.00	2,188.20	20.0	65.6	J-1010EX	3.68	P-240EX
J-250EX	1,452.0	True	4,015.60	4,031.21	20.0	74.7	J-1010EX	4.00	P-240EX
J-260EX	1,453.0	True	4,036.40	4,072.80	20.0	73.6	J-1010EX	4.01	P-240EX
J-270EX	1,429.0	True	2,000.00	2,188.20	20.0	84.2	J-1010EX	3.69	P-240EX
J-280EX	1,460.0	True	2,000.00	2,188.20	20.0	70.7	J-1010EX	3.69	P-240EX
J-300EX	1,392.0	True	4,035.40	4,069.81	20.0	96.0	J-1010EX	4.12	P-240EX
J-320EX	1,422.0	True	2,000.00	2,188.20	20.0	87.1	J-1010EX	3.69	P-240EX
J-330EX	1,455.0	True	2,000.00	2,188.20	20.0	73.2	J-1010EX	3.68	P-240EX
J-340EX	1,440.0	True	2,000.00	2,188.20	20.0	79.7	J-1010EX	3.68	P-240EX
J-360EX	1,400.0	True	5,375.00	6,750.00	20.0	86.4	J-1010EX	4.54	P-240EX
J-550EX	1,425.0	True	2,000.00	2,188.20	20.0	86.1	J-1010EX	3.69	P-240EX
J-590EX	1,413.0	True	4,000.00	4,001.00	20.0	85.5	J-1010EX	4.25	P-240EX
J-920EX	1,434.0	True	2,000.00	2,188.20	20.0	82.5	J-1010EX	3.68	P-240EX
J-960EX	1,402.0	True	2,000.00	2,188.20	20.0	93.5	J-1010EX	3.80	P-240EX
J-970EX	1,397.0	True	2,000.00	2,188.20	20.0	95.7	J-1010EX	3.79	P-240EX
J-1000EX	1,455.0	True	2,000.00	2,188.20	20.0	76.9	J-1010EX	3.29	P-240EX
J-1010EX	1,485.0	True	2,000.00	2,188.20	20.0	64.0	J-220EX	3.28	P-240EX
J-1020EX	1,425.0	True	2,000.00	2,188.20	20.0	85.6	J-1010EX	3.59	P-240EX
J-1030EX	1,480.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	3.28	P-240EX
J-1050EX	1,445.0	True	2,000.00	2,188.20	20.0	77.7	J-1010EX	3.67	P-240EX
J-1120EX	1,456.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	3.97	P-6226
J-1130EX	1,445.0	True	4,407.00	4,814.00	20.0	72.9	J-1010EX	6.02	P-210EX
J-1160EX	1,445.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	6.21	P-3030EX
J-1170EX	1,470.0	True	2,000.00	2,188.20	20.0	70.4	J-1010EX	3.29	P-240EX
J-1180EX	1,440.0	True	2,000.00	2,188.20	20.0	79.2	J-1010EX	3.66	P-3080EX
J-1190EX	1,420.0	True	2,000.00	2,188.20	20.0	87.0	J-1010EX	3.72	P-240EX
J-1200EX	1,445.0	True	2,000.00	2,188.20	20.0	68.6	J-1010EX	6.21	P-3060EX
J-1210EX	1,455.0	True	2,000.00	2,188.20	20.0	64.5	J-1300EX	7.02	P-3180EX
J-1220EX	1,475.0	True	2,000.00	2,188.20	20.0	68.3	J-1010EX	3.28	P-240EX
J-1230EX	1,460.0	True	2,000.00	2,188.20	20.0	70.2	J-1010EX	3.68	P-240EX
J-1235EX	1,440.0	True	2,000.00	2,188.20	20.0	79.9	J-1010EX	3.67	P-240EX
J-1240EX	1,455.0	True	2,000.00	2,188.20	20.0	73.3	J-1010EX	3.67	P-240EX
J-1280	1,410.0	True	2,000.00	2,188.20	20.0	92.1	J-1010EX	3.70	P-240EX
J-1290EX	1,480.0	True	2,000.00	2,188.20	20.0	66.2	J-1010EX	3.28	P-240EX
J-1300EX	1,465.0	True	2,000.00	2,188.20	20.0	62.3	J-1350EX	7.02	P-3180EX
J-1310EX	1,480.0	True	2,000.00	2,188.20	20.0	66.1	J-1010EX	3.28	P-240EX
J-1330EX	1,465.0	True	2,000.00	2,188.20	20.0	70.3	J-1010EX	3.72	P-2950
J-1340EX	1,450.0	True	2,000.00	2,188.20	20.0	76.3	J-1010EX	4.11	P-2970EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1350EX	1,465.0	True	2,000.00	2,188.20	20.0	63.3	J-1300EX	7.18	P-3180EX
J-1360EX	1,445.0	True	2,000.00	2,188.20	20.0	76.1	J-1010EX	4.20	P-3020EX
J-1370EX	1,430.0	True	2,000.00	2,188.20	20.0	78.4	J-1010EX	4.63	P-3130EX
J-1380EX	1,450.0	True	2,000.00	2,188.20	20.0	75.4	J-1010EX	4.32	P-3080EX
J-1390EX	1,430.0	True	2,000.00	2,188.20	20.0	82.7	J-1010EX	3.61	P-3100EX
J-1400EX	1,430.0	True	2,000.00	2,188.20	20.0	81.4	J-1010EX	4.22	P-3110EX
J-1410	1,458.0	True	2,000.00	2,188.20	20.0	74.2	J-1010EX	3.55	P-240EX
J-1410EX	1,420.0	True	2,000.00	2,188.20	20.0	87.3	J-1010EX	3.67	P-240EX
J-1420EX	1,460.0	True	2,000.00	2,188.20	20.0	72.8	J-1010EX	4.42	P-6226
J-1430EX	1,455.0	True	2,000.00	2,188.20	20.0	73.8	J-1010EX	3.95	P-6226
J-1440EX	1,478.0	True	2,000.00	2,188.20	20.0	64.6	J-1010EX	3.66	P-240EX
J-1680EX	1,401.0	True	4,000.00	4,001.00	20.0	89.8	J-1010EX	4.22	P-240EX
J-1990EX	1,447.0	True	2,052.20	2,240.40	20.0	77.0	J-1010EX	3.67	P-240EX
J-2000EX	1,442.0	True	2,000.00	2,188.20	20.0	79.0	J-1010EX	3.67	P-240EX
J-2010EX	1,419.0	True	2,000.00	2,188.20	20.0	88.3	J-1010EX	3.70	P-240EX
J-2040EX	1,427.0	True	2,000.00	2,188.20	20.0	85.0	J-1010EX	3.69	P-240EX
J-2120EX	1,453.0	True	2,000.00	2,188.20	20.0	74.6	J-1010EX	4.87	P-240EX
J-2140EX	1,450.0	True	2,407.00	2,814.00	0.0	74.7	J-1010EX	5.17	P-210EX
J-2295	1,415.0	True	2,000.00	2,188.20	20.0	89.3	J-1010EX	3.71	P-240EX
J-2340EX	1,434.0	True	4,038.20	4,076.41	20.0	78.0	J-1010EX	4.52	P-240EX
J-2353	1,456.0	True	2,000.00	2,188.20	20.0	74.6	J-1010EX	3.62	P-240EX
J-2361	1,456.9	True	2,000.00	2,188.20	20.0	74.4	J-1010EX	3.61	P-240EX
J-2364	1,457.4	True	2,000.00	2,188.20	20.0	73.8	J-1010EX	4.88	P-6226
J-DU2-020	1,411.5	True	2,000.00	2,188.20	20.0	90.5	J-1010EX	3.80	P-240EX
J-DU2-030	1,408.0	True	4,000.00	4,001.00	20.0	82.8	J-1010EX	6.20	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	4,215.20	20.0	89.0	J-1010EX	4.13	P-240EX
J-DU3-4-020	1,402.0	True	4,107.60	4,215.20	20.0	92.9	J-1010EX	4.15	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	4,288.80	20.0	97.1	J-1010EX	4.16	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	2,356.00	20.0	96.3	J-1010EX	3.74	P-240EX
J-DU3-4-040	1,403.0	True	4,071.60	4,143.20	20.0	92.7	J-1010EX	4.14	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	2,337.60	20.0	90.6	J-1010EX	4.44	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	2,188.20	20.0	90.8	J-1010EX	3.76	P-240EX
J-DU3-4-070	1,404.0	True	2,040.60	2,228.80	20.0	91.6	J-1010EX	3.76	P-240EX
J-DU3-4-080	1,400.0	True	4,026.20	4,052.40	20.0	87.2	J-1010EX	6.81	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	4,140.40	20.0	95.2	J-1010EX	4.17	P-240EX
J-DU3-4-100	1,391.0	True	4,090.80	4,181.60	20.0	97.4	J-1010EX	4.15	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	4,081.20	20.0	94.7	J-1010EX	4.18	P-240EX
J-DU3-4-120	1,393.0	True	4,000.00	4,001.00	20.0	95.0	J-1010EX	4.18	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	4,098.80	20.0	93.7	J-1010EX	4.20	P-240EX
J-DU3-4-140	1,403.0	True	4,068.80	4,137.60	20.0	90.7	J-1010EX	4.20	P-240EX
J-DU3-4-150	1,407.0	True	2,059.60	2,247.80	20.0	91.1	J-1010EX	3.77	P-240EX
J-DU3-4-160	1,406.0	True	2,029.80	2,218.00	20.0	92.6	J-1010EX	3.78	P-240EX
J-DU3-4-170	1,410.0	True	2,169.80	2,358.00	20.0	91.2	J-1010EX	3.79	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	2,234.80	20.0	89.8	J-1010EX	3.73	P-240EX
J-DU3-4-210	1,406.0	True	2,188.20	2,376.40	20.0	85.6	J-1010EX	5.88	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,208.60	20.0	84.2	J-1010EX	11.14	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,210.20	20.0	66.3	J-1010EX	9.80	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	2,218.20	20.0	68.0	J-1010EX	8.59	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	2,210.20	20.0	82.5	J-1010EX	7.88	P-DU3S-050

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU3S-050	1,404.0	True	2,024.20	2,212.40	20.0	68.2	J-1010EX	8.75	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,211.80	20.0	62.5	J-1010EX	9.47	P-DU3S-010
J-DU3S-070	1,417.0	True	2,014.00	2,202.20	20.0	69.5	J-1010EX	10.22	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	4,282.40	20.0	93.9	J-1010EX	4.15	P-240EX
J-DU5N-010	1,436.0	True	4,059.20	4,118.40	20.0	76.4	J-1010EX	4.59	P-DU6-140
J-DU5N-020	1,424.5	True	4,153.40	4,306.80	20.0	81.1	J-1010EX	4.26	P-240EX
J-DU5N-030	1,426.0	True	4,040.20	4,080.40	20.0	80.7	J-1010EX	4.25	P-240EX
J-DU5N-040	1,414.0	True	4,000.00	4,001.00	20.0	87.0	J-1010EX	4.26	P-240EX
J-DU5N-050	1,414.0	True	5,375.00	6,750.00	20.0	84.7	J-1010EX	4.61	P-240EX
J-DU5N-060	1,417.0	True	4,000.00	4,001.00	20.0	85.3	J-1010EX	4.30	P-240EX
J-DU5N-070	1,439.5	True	2,969.00	3,938.00	0.0	75.0	J-1010EX	4.98	P-DU5N-110
J-DU5N-080	1,427.3	True	2,969.00	3,938.00	0.0	80.3	J-1010EX	5.77	P-DU5N-080
J-DU6-010	1,459.0	True	2,000.00	2,188.20	20.0	70.4	J-1010EX	4.56	P-240EX
J-DU6-020	1,453.0	True	4,694.40	5,388.80	20.0	71.9	J-1010EX	6.38	P-240EX
J-DU6-050	1,448.0	True	4,000.00	4,001.00	20.0	69.6	J-1010EX	6.85	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,388.80	20.0	71.6	J-1010EX	7.36	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	4,343.20	20.0	73.5	J-1010EX	5.27	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	7.11	P-DU6-150
J-DU6-100	1,439.0	True	4,108.40	4,216.80	20.0	75.2	J-1010EX	4.77	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	2,286.40	20.0	79.7	J-1010EX	3.80	P-DU6-270
J-DU6-120	1,422.0	True	2,100.60	2,288.80	20.0	85.6	J-1010EX	3.78	P-240EX
J-DU6-130	1,416.0	True	2,082.20	2,270.40	20.0	88.8	J-1010EX	3.77	P-240EX
J-DU6-140	1,417.0	True	4,132.00	4,264.00	20.0	86.6	J-1010EX	4.19	P-240EX
J-DU6-150	1,427.0	True	2,084.60	2,272.80	20.0	83.7	J-1010EX	3.85	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	2,285.40	20.0	73.9	J-1010EX	7.34	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	2,238.80	20.0	88.7	J-1010EX	3.76	P-240EX
J-DU7-010	1,415.0	True	2,004.80	2,193.00	20.0	89.6	J-1010EX	3.72	P-240EX
J-DU7-020	1,425.0	True	2,046.60	2,234.80	20.0	83.4	J-1010EX	3.73	P-240EX
J-DU7-030	1,416.0	True	2,125.00	2,313.20	20.0	87.0	J-1010EX	3.80	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	4,075.20	20.0	90.4	J-1010EX	4.13	P-240EX
J-DU7-050	1,416.0	True	4,038.60	4,077.20	20.0	87.8	J-1010EX	4.13	P-240EX
J-DU7-060	1,423.0	True	2,022.20	2,210.40	20.0	86.5	J-1010EX	3.72	P-240EX
J-DU7-070	1,430.0	True	2,000.00	2,188.20	20.0	83.7	J-1010EX	3.71	P-240EX
J-DU7-080	1,434.0	True	2,081.00	2,269.20	20.0	82.3	J-1010EX	3.70	P-240EX
J-DU7-090	1,437.0	True	2,000.00	2,188.20	20.0	81.6	J-1010EX	3.67	P-240EX
J-DU7-100	1,435.0	True	2,057.80	2,246.00	20.0	81.6	J-1010EX	3.69	P-240EX
J-DU7-110	1,435.0	True	2,057.60	2,245.80	20.0	81.3	J-1010EX	3.71	P-240EX
J-DU7-120	1,420.0	True	2,000.00	2,188.20	20.0	87.7	J-1010EX	3.72	P-240EX
J-DU7-130	1,420.0	True	4,003.60	4,007.20	20.0	85.9	J-1010EX	4.10	P-240EX
J-DU7-140	1,425.0	True	4,070.00	4,140.00	20.0	83.5	J-1010EX	4.12	P-240EX
J-DU7-150	1,419.0	True	2,075.60	2,263.80	20.0	88.0	J-1010EX	3.73	P-240EX
J-DU7-160	1,435.0	True	2,048.00	2,236.20	20.0	79.9	J-1010EX	3.71	P-240EX
J-DU7-170	1,432.0	True	2,021.40	2,209.60	20.0	81.8	J-1010EX	3.71	P-240EX
J-DU7-180	1,433.0	True	2,037.40	2,225.60	20.0	81.5	J-1010EX	3.70	P-240EX
J-DU7-190	1,437.0	True	2,060.20	2,248.40	20.0	79.3	J-1010EX	3.85	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	2,289.60	20.0	80.5	J-1010EX	3.72	P-240EX
J-DU8-010	1,420.0	True	2,000.00	2,188.20	20.0	87.5	J-1010EX	3.71	P-240EX
J-DU8-020	1,419.5	True	2,000.00	2,188.20	20.0	87.7	J-1010EX	3.71	P-240EX
J-DU8-030	1,421.0	True	2,000.00	2,188.20	20.0	86.9	J-1010EX	3.71	P-240EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-040	1,418.0	True	2,013.40	2,201.60	20.0	88.3	J-1010EX	3.70	P-240EX
J-DU8-050	1,422.0	True	2,000.00	2,188.20	20.0	86.8	J-1010EX	3.70	P-240EX
J-DU8-060	1,420.0	True	2,018.00	2,206.20	20.0	83.2	J-1010EX	6.13	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,219.00	20.0	79.9	J-1010EX	9.02	P-DU8-080
J-DU8-080	1,422.0	True	2,008.80	2,197.00	20.0	84.1	J-1010EX	3.95	P-DU8-100
J-DU8-090	1,424.0	True	2,022.00	2,210.20	20.0	79.5	J-1010EX	5.29	P-DU8-150
J-DU8-100	1,425.0	True	2,018.40	2,206.60	20.0	84.1	J-1010EX	4.27	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	2,254.20	20.0	71.4	J-1010EX	6.15	P-DU8-130
J-DU8-120	1,431.0	True	2,034.20	2,222.40	20.0	53.1	J-1010EX	7.80	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	2,230.20	20.0	74.3	J-1010EX	6.68	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	2,227.60	20.0	87.3	J-1010EX	4.22	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,143.20	20.0	68.7	J-1010EX	11.13	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	4,130.40	20.0	62.9	J-1010EX	9.94	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	2,203.80	20.0	72.9	J-1010EX	7.27	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	2,188.20	20.0	75.8	J-1010EX	8.12	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,251.00	20.0	77.8	J-1010EX	10.03	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	2,251.20	20.0	68.3	J-1010EX	7.41	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	2,265.20	20.0	67.2	J-1010EX	8.45	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	2,188.20	20.0	89.8	J-1010EX	3.71	P-240EX
J-DU9-100	1,414.0	True	2,000.00	2,188.20	20.0	89.7	J-1010EX	3.71	P-240EX

APPENDIX C

HYDRAULIC MODELING RESULTS
SERVED BY DESERT WELLS GROUNDWATER FACILITY
(FULL BUILDOUT DROUGHT CONDITION)

Average-Day Demand

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	762.91	1,634.0
SCAP DWPS	1,634.0	5,003.60	1,634.0
DWGWF - DWPS	1,634.0	1,644.29	1,634.0

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	97.7	1,631.9
J-110EX	1,418.0	Desert Wells	19.10	92.4	1,631.6
J-120EX	1,462.0	Desert Wells	0.00	74.4	1,633.9
J-135EX	1,460.0	Desert Wells	0.00	75.0	1,633.4
J-150EX	1,472.0	Desert Wells	0.00	69.7	1,633.1
J-160EX	1,435.0	Desert Wells	0.00	85.9	1,633.5
J-170EX	1,430.0	Desert Wells	0.00	88.1	1,633.6
J-180EX	1,410.0	Desert Wells	0.00	96.9	1,633.9
J-190EX	1,395.0	Desert Wells	0.00	103.1	1,633.4
J-200EX	1,385.0	Desert Wells	0.00	107.2	1,632.8
J-220EX	1,480.0	Desert Wells	0.00	66.4	1,633.5
J-230EX	1,475.0	Desert Wells	0.00	68.4	1,633.2
J-250EX	1,452.0	Desert Wells	7.80	78.3	1,633.0
J-260EX	1,453.0	Desert Wells	18.20	77.9	1,633.0
J-270EX	1,429.0	Desert Wells	0.00	88.3	1,633.1
J-280EX	1,460.0	Desert Wells	0.00	74.9	1,633.1
J-300EX	1,392.0	Desert Wells	17.70	103.9	1,632.2
J-320EX	1,422.0	Desert Wells	0.00	91.4	1,633.2
J-330EX	1,455.0	Desert Wells	0.00	77.0	1,633.0
J-340EX	1,440.0	Desert Wells	0.00	83.5	1,633.0
J-360EX	1,400.0	Desert Wells	352.00	100.3	1,631.7
J-550EX	1,425.0	Desert Wells	0.00	90.0	1,633.0
J-590EX	1,413.0	Desert Wells	0.00	94.7	1,631.8
J-920EX	1,434.0	Desert Wells	0.00	86.1	1,633.0
J-960EX	1,402.0	Desert Wells	0.00	99.4	1,631.8
J-970EX	1,397.0	Desert Wells	0.00	101.6	1,631.8
J-1000EX	1,455.0	Desert Wells	0.00	77.4	1,633.9
J-1010EX	1,485.0	Desert Wells	0.00	64.4	1,633.9
J-1020EX	1,425.0	Desert Wells	0.00	90.1	1,633.2
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	81.3	1,633.0
J-1120EX	1,456.0	Desert Wells	0.00	76.6	1,633.0
J-1130EX	1,445.0	Desert Wells	407.00	80.8	1,631.7
J-1160EX	1,445.0	Desert Wells	0.00	81.7	1,633.9
J-1170EX	1,470.0	Desert Wells	0.00	70.9	1,633.9
J-1180EX	1,440.0	Desert Wells	0.00	83.7	1,633.6
J-1190EX	1,420.0	Desert Wells	0.00	92.0	1,632.6
J-1200EX	1,445.0	Desert Wells	0.00	81.6	1,633.6
J-1210EX	1,455.0	Desert Wells	0.00	77.4	1,633.9
J-1220EX	1,475.0	Desert Wells	0.00	68.7	1,633.9
J-1230EX	1,460.0	Desert Wells	0.00	74.9	1,633.1
J-1235EX	1,440.0	Desert Wells	0.00	83.5	1,633.0
J-1240EX	1,455.0	Desert Wells	0.00	77.0	1,633.0
J-1280	1,410.0	Desert Wells	0.00	96.6	1,633.3
J-1290EX	1,480.0	Desert Wells	0.00	66.6	1,633.9
J-1300EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1310EX	1,480.0	Desert Wells	0.00	66.6	1,633.9
J-1330EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1340EX	1,450.0	Desert Wells	0.00	79.6	1,633.9
J-1350EX	1,465.0	Desert Wells	0.00	73.1	1,633.9
J-1360EX	1,445.0	Desert Wells	0.00	81.7	1,633.9
J-1370EX	1,430.0	Desert Wells	0.00	88.1	1,633.6
J-1380EX	1,450.0	Desert Wells	0.00	79.5	1,633.7

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	88.1	1,633.6
J-1400EX	1,430.0	Desert Wells	0.00	88.1	1,633.6
J-1410	1,458.0	Desert Wells	0.00	75.8	1,633.3
J-1410EX	1,420.0	Desert Wells	0.00	92.1	1,632.8
J-1420EX	1,460.0	Desert Wells	0.00	74.8	1,633.0
J-1430EX	1,455.0	Desert Wells	0.00	77.1	1,633.1
J-1440EX	1,478.0	Desert Wells	0.00	67.2	1,633.3
J-1680EX	1,401.0	Desert Wells	0.00	99.9	1,631.8
J-1990EX	1,447.0	Desert Wells	26.10	80.5	1,633.0
J-2000EX	1,442.0	Desert Wells	0.00	82.6	1,633.0
J-2010EX	1,419.0	Desert Wells	0.00	92.7	1,633.3
J-2040EX	1,427.0	Desert Wells	0.00	89.2	1,633.1
J-2120EX	1,453.0	Desert Wells	0.00	77.6	1,632.3
J-2140EX	1,450.0	Desert Wells	407.00	78.7	1,631.9
J-2295	1,415.0	Desert Wells	0.00	94.1	1,632.5
J-2340EX	1,434.0	Desert Wells	19.10	85.5	1,631.6
J-2353	1,456.0	Desert Wells	0.00	76.6	1,633.1
J-2361	1,456.9	Desert Wells	0.00	76.3	1,633.2
J-2364	1,457.4	Desert Wells	0.00	76.0	1,633.0
J-DU2-020	1,411.5	Desert Wells	0.00	95.3	1,631.7
J-DU2-030	1,408.0	Desert Wells	0.00	96.8	1,631.7
J-DU3-4-010	1,405.0	Desert Wells	53.80	98.3	1,632.2
J-DU3-4-020	1,402.0	Desert Wells	53.80	99.6	1,632.1
J-DU3-4-030	1,392.0	Desert Wells	72.20	103.9	1,632.1
J-DU3-4-030A	1,394.5	Desert Wells	83.90	102.8	1,632.2
J-DU3-4-040	1,403.0	Desert Wells	35.80	99.1	1,632.1
J-DU3-4-050	1,408.0	Desert Wells	149.40	96.9	1,632.0
J-DU3-4-060	1,408.0	Desert Wells	0.00	96.9	1,631.9
J-DU3-4-070	1,404.0	Desert Wells	20.30	98.6	1,631.9
J-DU3-4-080	1,400.0	Desert Wells	13.10	100.3	1,631.9
J-DU3-4-090	1,393.0	Desert Wells	35.10	103.4	1,631.9
J-DU3-4-100	1,391.0	Desert Wells	45.40	104.3	1,632.1
J-DU3-4-110	1,393.0	Desert Wells	20.30	103.4	1,631.9
J-DU3-4-120	1,393.0	Desert Wells	0.00	103.3	1,631.8
J-DU3-4-130	1,395.0	Desert Wells	24.70	102.5	1,631.8
J-DU3-4-140	1,403.0	Desert Wells	34.40	99.0	1,631.8
J-DU3-4-150	1,407.0	Desert Wells	29.80	97.3	1,631.8
J-DU3-4-160	1,406.0	Desert Wells	14.90	97.7	1,631.8
J-DU3-4-170	1,410.0	Desert Wells	84.90	95.9	1,631.8
J-DU3-4-200	1,412.5	Desert Wells	23.30	95.1	1,632.3
J-DU3-4-210	1,406.0	Desert Wells	94.10	97.8	1,632.1
J-DU3S-010	1,412.0	Desert Wells	10.20	95.4	1,632.5
J-DU3S-020	1,407.0	Desert Wells	11.00	97.5	1,632.4
J-DU3S-030	1,401.0	Desert Wells	15.00	100.1	1,632.3
J-DU3S-040	1,399.0	Desert Wells	11.00	100.9	1,632.3
J-DU3S-050	1,404.0	Desert Wells	12.10	98.8	1,632.3
J-DU3S-060	1,410.0	Desert Wells	11.80	96.2	1,632.3
J-DU3S-070	1,417.0	Desert Wells	7.00	93.2	1,632.4
J-DU3S-080	1,396.0	Desert Wells	70.60	102.2	1,632.2
J-DU5N-010	1,436.0	Desert Wells	29.60	84.5	1,631.3
J-DU5N-020	1,424.5	Desert Wells	76.70	89.5	1,631.2
J-DU5N-030	1,426.0	Desert Wells	20.10	88.8	1,631.2
J-DU5N-040	1,414.0	Desert Wells	0.00	94.2	1,631.6

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	352.00	94.2	1,631.6
J-DU5N-060	1,417.0	Desert Wells	0.00	92.9	1,631.6
J-DU5N-070	1,439.5	Desert Wells	969.00	82.7	1,630.7
J-DU5N-080	1,427.3	Desert Wells	969.00	88.0	1,630.7
J-DU6-010	1,459.0	Desert Wells	0.00	75.1	1,632.5
J-DU6-020	1,453.0	Desert Wells	694.40	77.6	1,632.3
J-DU6-050	1,448.0	Desert Wells	0.00	79.9	1,632.7
J-DU6-060	1,458.0	Desert Wells	694.40	75.7	1,632.9
J-DU6-080	1,444.6	Desert Wells	85.80	81.0	1,631.8
J-DU6-090	1,439.0	Desert Wells	0.00	83.5	1,632.0
J-DU6-100	1,439.0	Desert Wells	54.20	83.2	1,631.3
J-DU6-110	1,432.0	Desert Wells	49.10	86.2	1,631.3
J-DU6-120	1,422.0	Desert Wells	50.30	90.7	1,631.6
J-DU6-130	1,416.0	Desert Wells	41.10	93.4	1,631.9
J-DU6-140	1,417.0	Desert Wells	66.00	93.0	1,632.0
J-DU6-150	1,427.0	Desert Wells	42.30	88.7	1,632.1
J-DU6-160	1,436.0	Desert Wells	48.60	84.9	1,632.2
J-DU6-170	1,416.5	Desert Wells	25.30	93.2	1,631.9
J-DU7-010	1,415.0	Desert Wells	2.40	94.1	1,632.4
J-DU7-020	1,425.0	Desert Wells	23.30	89.7	1,632.2
J-DU7-030	1,416.0	Desert Wells	125.00	93.5	1,632.1
J-DU7-040	1,409.0	Desert Wells	18.80	96.5	1,632.1
J-DU7-050	1,416.0	Desert Wells	19.30	93.5	1,632.2
J-DU7-060	1,423.0	Desert Wells	11.10	90.5	1,632.3
J-DU7-070	1,430.0	Desert Wells	0.00	87.6	1,632.4
J-DU7-080	1,434.0	Desert Wells	40.50	85.9	1,632.6
J-DU7-090	1,437.0	Desert Wells	0.00	84.8	1,633.0
J-DU7-100	1,435.0	Desert Wells	28.90	85.6	1,632.8
J-DU7-110	1,435.0	Desert Wells	28.80	85.5	1,632.6
J-DU7-120	1,420.0	Desert Wells	0.00	91.9	1,632.4
J-DU7-130	1,420.0	Desert Wells	1.80	91.9	1,632.4
J-DU7-140	1,425.0	Desert Wells	35.00	89.7	1,632.3
J-DU7-150	1,419.0	Desert Wells	37.80	92.3	1,632.2
J-DU7-160	1,435.0	Desert Wells	24.00	85.4	1,632.4
J-DU7-170	1,432.0	Desert Wells	10.70	86.7	1,632.5
J-DU7-180	1,433.0	Desert Wells	18.70	86.3	1,632.6
J-DU7-190	1,437.0	Desert Wells	30.10	84.7	1,632.7
J-DU7-200	1,432.0	Desert Wells	50.70	86.7	1,632.4
J-DU8-010	1,420.0	Desert Wells	0.00	91.9	1,632.5
J-DU8-020	1,419.5	Desert Wells	0.00	92.2	1,632.6
J-DU8-030	1,421.0	Desert Wells	0.00	91.6	1,632.6
J-DU8-040	1,418.0	Desert Wells	6.70	92.9	1,632.8
J-DU8-050	1,422.0	Desert Wells	0.00	91.2	1,632.8
J-DU8-060	1,420.0	Desert Wells	9.00	92.0	1,632.6
J-DU8-070	1,420.0	Desert Wells	15.40	92.0	1,632.6
J-DU8-080	1,422.0	Desert Wells	4.40	91.1	1,632.6
J-DU8-090	1,424.0	Desert Wells	11.00	90.2	1,632.6
J-DU8-100	1,425.0	Desert Wells	9.20	89.8	1,632.6
J-DU8-110	1,430.0	Desert Wells	33.00	87.6	1,632.6
J-DU8-120	1,431.0	Desert Wells	17.10	87.2	1,632.6
J-DU8-130	1,427.0	Desert Wells	21.00	89.0	1,632.6
J-DU9-010	1,419.0	Desert Wells	19.70	92.4	1,632.6
J-DU9-020	1,415.0	Desert Wells	35.80	94.1	1,632.6

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	32.60	93.7	1,632.6
J-DU9-040	1,416.0	Desert Wells	7.80	93.7	1,632.6
J-DU9-050	1,419.0	Desert Wells	0.00	92.4	1,632.6
J-DU9-060	1,422.0	Desert Wells	31.40	91.1	1,632.7
J-DU9-070	1,414.0	Desert Wells	31.50	94.6	1,632.5
J-DU9-080	1,419.0	Desert Wells	38.50	92.4	1,632.6
J-DU9-090	1,414.0	Desert Wells	0.00	94.6	1,632.6
J-DU9-100	1,414.0	Desert Wells	0.00	94.6	1,632.7

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	-256.48	0.41
P-170EX	16.0	5,365.91	120.0	-256.48	0.41
P-180EX	16.0	5,395.89	120.0	350.12	0.56
P-190EX	16.0	5,727.93	120.0	350.12	0.56
P-200EX	16.0	888.87	120.0	-601.90	0.96
P-210EX	16.0	509.51	120.0	-1,008.90	1.61
P-220EX	16.0	2,908.75	120.0	420.68	0.67
P-240EX	16.0	1,386.71	120.0	-1,276.32	2.04
P-250EX	16.0	2,610.66	120.0	218.47	0.35
P-310	30.0	4,936.64	120.0	209.35	0.10
P-340EX	16.0	5,775.00	120.0	-256.48	0.41
P-410EX	16.0	5,368.22	120.0	350.12	0.56
P-970	24.0	1,001.45	120.0	-209.62	0.15
P-980	24.0	1,934.58	120.0	-710.37	0.50
P-1060EX	16.0	1,328.19	120.0	293.35	0.47
P-1070EX	16.0	2,607.17	120.0	293.35	0.47
P-1630EX	16.0	1,793.28	120.0	258.04	0.41
P-1640EX	16.0	1,447.45	120.0	393.86	0.63
P-1780	24.0	1,527.79	120.0	-209.62	0.15
P-1790	24.0	1,115.45	120.0	-209.62	0.15
P-1940EX	16.0	1,171.38	120.0	176.20	0.28
P-1950EX	16.0	1,440.76	120.0	176.20	0.28
P-1970EX	16.0	816.47	120.0	282.96	0.45
P-1980EX	16.0	1,103.17	120.0	262.66	0.42
P-2040EX	16.0	10,634.81	120.0	-92.37	0.15
P-2055EX	16.0	10,453.02	120.0	299.18	0.48
P-2070EX	24.0	5,328.61	120.0	-371.37	0.26
P-2500EX	24.0	2,750.22	120.0	113.05	0.08
P-2510EX	24.0	2,726.43	120.0	88.82	0.06
P-2540EX	12.0	2,624.38	120.0	193.22	0.55
P-2570EX	16.0	2,640.03	120.0	570.45	0.91
P-2655EX	16.0	2,870.17	120.0	-121.57	0.19
P-2660EX	24.0	2,796.67	120.0	192.46	0.14
P-2665EX	16.0	2,715.77	120.0	-121.57	0.19
P-2690EX	16.0	2,914.43	120.0	-143.25	0.23
P-2700EX	16.0	3,115.09	120.0	75.22	0.12
P-2710EX	16.0	1,822.64	120.0	8.74	0.01
P-2720EX	12.0	3,042.02	120.0	-66.48	0.19
P-2800	24.0	5,785.85	120.0	1,037.70	0.74
P-2830	16.0	2,890.37	120.0	130.32	0.21
P-2860EX	24.0	761.21	120.0	192.46	0.14
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-4.43	0.03
P-2900	24.0	1,422.97	120.0	181.19	0.13
P-2910EX	24.0	496.51	120.0	188.03	0.13
P-2950	12.0	1,088.63	120.0	24.23	0.07
P-2970EX	12.0	1,118.68	120.0	44.88	0.13
P-2990EX	8.0	2,810.72	120.0	4.19	0.03
P-3010EX	12.0	471.37	120.0	4.43	0.01
P-3020EX	12.0	1,167.01	120.0	49.07	0.14
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	8.76	0.06
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	57.84	0.37
P-3080EX	12.0	1,396.97	120.0	213.44	0.61
P-3090EX	12.0	1,108.96	120.0	169.56	0.48
P-3100EX	12.0	694.82	120.0	-23.66	0.07
P-3110EX	12.0	664.35	120.0	20.21	0.06
P-3120EX	8.0	1,851.06	120.0	43.87	0.28
P-3130EX	12.0	1,154.91	120.0	-57.84	0.16
P-3140EX	16.0	1,782.97	120.0	492.40	0.79
P-3150EX	16.0	958.12	120.0	570.45	0.91
P-3160EX	8.0	3,801.45	120.0	78.05	0.50
P-3170EX	8.0	2,837.60	120.0	-6.84	0.04
P-3180EX	8.0	735.68	120.0	13.20	0.08
P-3190EX	30.0	2,558.57	120.0	2,792.93	1.27
P-3240EX	16.0	810.36	120.0	-213.04	0.34
P-3240EX(2)	16.0	452.50	120.0	77.62	0.12
P-3250EX	12.0	844.21	120.0	-202.21	0.57
P-3260EX	16.0	1,108.49	120.0	420.68	0.67
P-3270EX	16.0	1,509.41	120.0	296.49	0.47
P-3280EX	12.0	2,890.26	120.0	-124.20	0.35
P-3290EX	12.0	2,432.48	120.0	78.02	0.22
P-3930EX	16.0	794.17	120.0	-277.11	0.44
P-3940EX	16.0	509.16	120.0	-277.11	0.44
P-3970EX	16.0	1,445.13	120.0	277.11	0.44
P-4720EX	16.0	1,215.66	120.0	133.90	0.21
P-4730EX	16.0	455.51	120.0	107.80	0.17
P-4750EX	16.0	715.18	120.0	107.80	0.17
P-4760EX	16.0	774.38	120.0	-141.22	0.23
P-4780EX	24.0	2,143.12	120.0	-575.47	0.41
P-4790EX	16.0	1,816.22	120.0	-74.75	0.12
P-4860EX	24.0	985.98	120.0	575.47	0.41
P-4870EX	24.0	619.54	120.0	575.47	0.41
P-5700EX	16.0	1,175.56	120.0	706.13	1.13
P-5710EX	16.0	1,171.19	120.0	706.13	1.13
P-5740	24.0	1,547.92	120.0	575.47	0.41
P-5780	16.0	683.67	120.0	59.42	0.09
P-6064	16.0	846.07	120.0	-462.23	0.74
P-6065	16.0	3,442.89	120.0	-462.23	0.74
P-6070	16.0	247.15	120.0	-352.34	0.56
P-6160	48.0	931.87	120.0	5,003.60	0.89
P-6161	48.0	820.29	120.0	5,003.60	0.89
P-6162	36.0	861.98	120.0	1,644.29	0.52
P-6163	36.0	895.14	120.0	1,644.29	0.52
P-6166EX	16.0	1,496.42	130.0	164.57	0.26
P-6167EX	16.0	2,351.14	120.0	-194.90	0.31
P-6198	30.0	559.22	120.0	2,792.93	1.27
P-6218	30.0	458.03	120.0	1,549.10	0.70
P-6219	30.0	1,679.89	120.0	-1,549.10	0.70
P-6223	16.0	1,042.80	120.0	-77.62	0.12
P-6226	16.0	139.10	120.0	1,243.83	1.98
P-6236EX	24.0	2,939.36	130.0	-134.90	0.10
P-7000	12.0	741.92	120.0	-243.63	0.69
P-COMWTREX	36.0	1,202.28	120.0	762.91	0.24
P-DU-3-4-080	12.0	797.04	120.0	42.40	0.12

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-090	12.0	702.19	120.0	62.70	0.18
P-DU-3-4-100	12.0	909.19	120.0	-75.80	0.22
P-DU-3-4-110	16.0	597.34	120.0	86.46	0.14
P-DU-3-4-120	16.0	1,153.09	120.0	61.76	0.10
P-DU-3-4-130	12.0	706.88	120.0	-120.49	0.34
P-DU-3-4-70	12.0	1,647.45	120.0	-107.89	0.31
P-DU-3S-130	16.0	2,122.39	120.0	-250.26	0.40
P-DU2-060	12.0	1,914.95	120.0	101.31	0.29
P-DU2-070	12.0	951.56	120.0	101.31	0.29
P-DU2-080	20.0	631.03	120.0	-560.36	0.57
P-DU2-090	20.0	1,106.44	120.0	-560.36	0.57
P-DU3-4-010A	12.0	1,447.93	120.0	-62.21	0.18
P-DU3-4-010B	12.0	847.20	120.0	-146.11	0.41
P-DU3-4-020	24.0	1,289.68	120.0	-181.22	0.13
P-DU3-4-060	12.0	733.41	120.0	-257.29	0.73
P-DU3-4-160	12.0	578.86	120.0	-150.29	0.43
P-DU3-4-170	16.0	1,187.74	120.0	147.85	0.24
P-DU3-4-180	16.0	876.41	120.0	132.95	0.21
P-DU3-4-190	20.0	1,405.86	120.0	-512.31	0.52
P-DU3-4-200	8.0	1,000.70	120.0	-1.10	0.01
P-DU3-4-210	8.0	1,083.47	120.0	-61.45	0.39
P-DU3-4-220	8.0	2,361.07	120.0	33.75	0.22
P-DU3-4-30	24.0	1,116.54	120.0	-191.22	0.14
P-DU3-4-40	24.0	496.31	120.0	-245.02	0.17
P-DU3-4-50	24.0	1,092.47	120.0	-279.72	0.20
P-DU3S-010	8.0	260.69	120.0	108.71	0.69
P-DU3S-020	8.0	1,373.83	120.0	47.70	0.30
P-DU3S-030	8.0	1,542.05	120.0	36.70	0.23
P-DU3S-040	8.0	1,241.65	120.0	21.70	0.14
P-DU3S-050	8.0	1,016.55	120.0	-30.61	0.20
P-DU3S-060	8.0	974.34	120.0	-19.91	0.13
P-DU3S-070	8.0	1,383.69	120.0	-32.01	0.20
P-DU3S-080	8.0	1,241.43	120.0	-43.81	0.28
P-DU3S-090	8.0	620.85	120.0	-50.81	0.32
P-DU3S-100	16.0	788.42	120.0	-74.38	0.12
P-DU3S-110	16.0	1,850.66	120.0	-111.72	0.18
P-DU3S-120	16.0	822.09	120.0	-165.52	0.26
P-DU5N-010	16.0	337.08	120.0	87.46	0.14
P-DU5N-020	16.0	1,977.53	120.0	-46.28	0.07
P-DU5N-030	16.0	528.70	120.0	221.94	0.35
P-DU5N-040	16.0	2,706.37	120.0	419.35	0.67
P-DU5N-050	20.0	416.37	120.0	-141.02	0.14
P-DU5N-060	20.0	1,208.29	120.0	-109.68	0.11
P-DU5N-070	20.0	1,779.99	120.0	-109.68	0.11
P-DU5N-080	12.0	450.13	120.0	621.19	1.76
P-DU5N-090	12.0	2,293.31	120.0	-340.37	0.97
P-DU5N-100	12.0	2,325.96	130.0	7.44	0.02
P-DU5N-110	16.0	958.50	130.0	976.44	1.56
P-DU6-010	12.0	1,162.55	120.0	213.21	0.60
P-DU6-020	16.0	123.88	120.0	267.42	0.43
P-DU6-050	12.0	2,221.22	120.0	-213.76	0.61
P-DU6-060	12.0	2,209.31	120.0	213.21	0.60
P-DU6-070	16.0	142.12	120.0	1,121.38	1.79

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-080	12.0	1,134.59	120.0	213.76	0.61
P-DU6-130	16.0	1,866.29	120.0	-953.16	1.52
P-DU6-140	16.0	823.26	120.0	-943.19	1.51
P-DU6-150	8.0	1,139.37	120.0	75.82	0.48
P-DU6-180	12.0	1,701.72	120.0	-212.44	0.60
P-DU6-190	12.0	1,447.65	120.0	307.48	0.87
P-DU6-200	12.0	1,510.55	120.0	207.62	0.59
P-DU6-210	20.0	548.31	120.0	-761.03	0.78
P-DU6-220	20.0	1,003.42	120.0	-821.99	0.84
P-DU6-230	8.0	2,333.32	120.0	30.34	0.19
P-DU6-240	12.0	696.34	120.0	354.33	1.01
P-DU6-250	8.0	2,342.14	120.0	-25.79	0.16
P-DU6-260	8.0	656.01	120.0	-150.21	0.96
P-DU6-270	12.0	803.20	120.0	163.34	0.46
P-DU6-290	8.0	936.11	120.0	75.82	0.48
P-DU6-300	20.0	514.67	120.0	-786.33	0.80
P-DU6-310	12.0	1,616.85	120.0	-252.36	0.72
P-DU7-010	12.0	1,114.60	120.0	192.47	0.55
P-DU7-020	12.0	1,146.78	120.0	-135.42	0.38
P-DU7-030	12.0	1,044.06	120.0	-10.42	0.03
P-DU7-040	24.0	1,409.98	120.0	-545.40	0.39
P-DU7-050	24.0	1,075.39	120.0	-926.30	0.66
P-DU7-060	24.0	1,253.80	120.0	-937.40	0.66
P-DU7-070	24.0	1,205.32	120.0	-1,210.01	0.86
P-DU7-080	24.0	2,338.72	120.0	-1,400.72	0.99
P-DU7-090	16.0	941.19	120.0	-474.54	0.76
P-DU7-100	16.0	1,562.41	120.0	-445.64	0.71
P-DU7-110	16.0	1,741.52	120.0	-329.16	0.53
P-DU7-120	16.0	778.48	120.0	201.50	0.32
P-DU7-130	20.0	316.65	120.0	-457.17	0.47
P-DU7-140	20.0	1,206.89	120.0	-455.37	0.47
P-DU7-150	20.0	1,235.71	120.0	-498.19	0.51
P-DU7-160	20.0	891.94	120.0	-460.39	0.47
P-DU7-170	12.0	1,072.99	120.0	81.71	0.23
P-DU7-180	12.0	827.71	120.0	-105.71	0.30
P-DU7-190	12.0	398.61	120.0	-244.93	0.69
P-DU7-200	12.0	2,378.07	120.0	-44.71	0.13
P-DU7-210	12.0	1,048.78	120.0	-249.02	0.71
P-DU7-220	12.0	1,053.72	120.0	-218.92	0.62
P-DU7-230	12.0	1,714.23	120.0	-128.52	0.36
P-DU7-240	12.0	1,014.45	120.0	-77.82	0.22
P-DU8-010	16.0	1,107.48	120.0	-329.51	0.53
P-DU8-020	16.0	713.88	120.0	-251.22	0.40
P-DU8-030	16.0	1,312.24	120.0	-254.93	0.41
P-DU8-040	16.0	1,371.08	120.0	-315.20	0.50
P-DU8-050	16.0	520.30	120.0	-388.31	0.62
P-DU8-060	16.0	1,021.04	120.0	-500.75	0.80
P-DU8-070	8.0	541.92	120.0	-11.03	0.07
P-DU8-080	8.0	253.35	120.0	0.01	0.00
P-DU8-090	8.0	1,138.34	120.0	-15.39	0.10
P-DU8-100	12.0	598.81	120.0	42.97	0.12
P-DU8-110	12.0	709.10	120.0	8.41	0.02
P-DU8-120	8.0	678.33	120.0	-20.04	0.13

Eastmark Master Water Report

Active Scenario: Ave Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-130	8.0	1,315.41	120.0	9.97	0.06
P-DU8-140	8.0	965.85	120.0	-16.03	0.10
P-DU8-150	6.0	737.49	120.0	21.75	0.25
P-DU8-160	8.0	1,265.36	120.0	17.46	0.11
P-DU8-170	8.0	2,613.46	120.0	-5.57	0.04
P-DU8-180	8.0	1,777.60	120.0	-22.67	0.14
P-DU8-190	8.0	1,184.98	120.0	22.74	0.15
P-DU8-200	8.0	1,054.34	120.0	66.41	0.42
P-DU9-010	16.0	903.69	120.0	109.89	0.18
P-DU9-020	8.0	226.81	120.0	78.28	0.50
P-DU9-030	8.0	1,616.12	120.0	11.90	0.08
P-DU9-040	8.0	745.70	120.0	-14.73	0.09
P-DU9-050	8.0	868.53	120.0	-9.16	0.06
P-DU9-060	8.0	1,549.98	120.0	-38.51	0.25
P-DU9-070	8.0	1,000.62	120.0	-10.39	0.07
P-DU9-080	8.0	643.77	120.0	-18.19	0.12
P-DU9-090	8.0	3,091.64	120.0	7.14	0.05
P-DU9-100	8.0	1,618.99	120.0	-17.74	0.11
P-DU9-110	8.0	3,057.43	120.0	-6.62	0.04
P-DU9-120	8.0	901.10	120.0	20.02	0.13
P-DU9-130	8.0	878.92	120.0	-55.95	0.36
P-DU9-140	8.0	429.87	120.0	-112.45	0.72
P-DU9-150	8.0	4,470.55	120.0	-25.10	0.16

Max-Day Demand

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,265.99	1,634.0
SCAP DWPS	1,634.0	7,731.31	1,634.0
DWGWF - DWPS	1,634.0	2,751.10	1,634.0

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	96.1	1,628.2
J-110EX	1,418.0	Desert Wells	38.20	90.8	1,627.8
J-120EX	1,462.0	Desert Wells	0.00	74.3	1,633.7
J-135EX	1,460.0	Desert Wells	0.00	74.7	1,632.8
J-150EX	1,472.0	Desert Wells	0.00	69.1	1,631.7
J-160EX	1,435.0	Desert Wells	0.00	85.5	1,632.7
J-170EX	1,430.0	Desert Wells	0.00	87.9	1,633.1
J-180EX	1,410.0	Desert Wells	0.00	96.8	1,633.8
J-190EX	1,395.0	Desert Wells	0.00	102.7	1,632.3
J-200EX	1,385.0	Desert Wells	0.00	106.3	1,630.7
J-220EX	1,480.0	Desert Wells	0.00	66.1	1,632.7
J-230EX	1,475.0	Desert Wells	0.00	68.0	1,632.1
J-250EX	1,452.0	Desert Wells	15.60	77.7	1,631.6
J-260EX	1,453.0	Desert Wells	36.40	77.3	1,631.6
J-270EX	1,429.0	Desert Wells	0.00	87.7	1,631.8
J-280EX	1,460.0	Desert Wells	0.00	74.3	1,631.8
J-300EX	1,392.0	Desert Wells	35.40	102.6	1,629.2
J-320EX	1,422.0	Desert Wells	0.00	90.8	1,631.9
J-330EX	1,455.0	Desert Wells	0.00	76.4	1,631.6
J-340EX	1,440.0	Desert Wells	0.00	82.9	1,631.5
J-360EX	1,400.0	Desert Wells	1,375.00	98.3	1,627.2
J-550EX	1,425.0	Desert Wells	0.00	89.4	1,631.5
J-590EX	1,413.0	Desert Wells	0.00	93.0	1,628.0
J-920EX	1,434.0	Desert Wells	0.00	85.5	1,631.5
J-960EX	1,402.0	Desert Wells	0.00	97.6	1,627.7
J-970EX	1,397.0	Desert Wells	0.00	99.8	1,627.6
J-1000EX	1,455.0	Desert Wells	0.00	77.4	1,633.8
J-1010EX	1,485.0	Desert Wells	0.00	64.4	1,633.8
J-1020EX	1,425.0	Desert Wells	0.00	89.4	1,631.7
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	80.7	1,631.5
J-1120EX	1,456.0	Desert Wells	0.00	76.0	1,631.7
J-1130EX	1,445.0	Desert Wells	407.00	79.6	1,629.1
J-1160EX	1,445.0	Desert Wells	0.00	81.7	1,633.7
J-1170EX	1,470.0	Desert Wells	0.00	70.9	1,633.8
J-1180EX	1,440.0	Desert Wells	0.00	83.4	1,632.8
J-1190EX	1,420.0	Desert Wells	0.00	90.9	1,630.1
J-1200EX	1,445.0	Desert Wells	0.00	81.3	1,632.8
J-1210EX	1,455.0	Desert Wells	0.00	77.3	1,633.8
J-1220EX	1,475.0	Desert Wells	0.00	68.7	1,633.8
J-1230EX	1,460.0	Desert Wells	0.00	74.3	1,631.7
J-1235EX	1,440.0	Desert Wells	0.00	82.8	1,631.5
J-1240EX	1,455.0	Desert Wells	0.00	76.4	1,631.6
J-1280	1,410.0	Desert Wells	0.00	96.2	1,632.2
J-1290EX	1,480.0	Desert Wells	0.00	66.5	1,633.8
J-1300EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1310EX	1,480.0	Desert Wells	0.00	66.5	1,633.8
J-1330EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1340EX	1,450.0	Desert Wells	0.00	79.5	1,633.8
J-1350EX	1,465.0	Desert Wells	0.00	73.0	1,633.8
J-1360EX	1,445.0	Desert Wells	0.00	81.7	1,633.7
J-1370EX	1,430.0	Desert Wells	0.00	87.8	1,632.8
J-1380EX	1,450.0	Desert Wells	0.00	79.2	1,633.1

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.7	1,632.8
J-1400EX	1,430.0	Desert Wells	0.00	87.7	1,632.8
J-1410	1,458.0	Desert Wells	0.00	75.4	1,632.3
J-1410EX	1,420.0	Desert Wells	0.00	91.2	1,630.8
J-1420EX	1,460.0	Desert Wells	0.00	74.3	1,631.8
J-1430EX	1,455.0	Desert Wells	0.00	76.6	1,632.0
J-1440EX	1,478.0	Desert Wells	0.00	66.8	1,632.4
J-1680EX	1,401.0	Desert Wells	0.00	98.0	1,627.5
J-1990EX	1,447.0	Desert Wells	52.20	79.8	1,631.5
J-2000EX	1,442.0	Desert Wells	0.00	82.0	1,631.4
J-2010EX	1,419.0	Desert Wells	0.00	92.2	1,632.1
J-2040EX	1,427.0	Desert Wells	0.00	88.6	1,631.8
J-2120EX	1,453.0	Desert Wells	0.00	76.9	1,630.8
J-2140EX	1,450.0	Desert Wells	407.00	77.9	1,629.9
J-2295	1,415.0	Desert Wells	0.00	93.1	1,630.1
J-2340EX	1,434.0	Desert Wells	38.20	83.9	1,628.0
J-2353	1,456.0	Desert Wells	0.00	76.1	1,631.9
J-2361	1,456.9	Desert Wells	0.00	75.8	1,632.0
J-2364	1,457.4	Desert Wells	0.00	75.4	1,631.8
J-DU2-020	1,411.5	Desert Wells	0.00	93.6	1,627.7
J-DU2-030	1,408.0	Desert Wells	0.00	94.9	1,627.3
J-DU3-4-010	1,405.0	Desert Wells	107.60	97.0	1,629.2
J-DU3-4-020	1,402.0	Desert Wells	107.60	98.2	1,628.9
J-DU3-4-030	1,392.0	Desert Wells	144.40	102.5	1,628.9
J-DU3-4-030A	1,394.5	Desert Wells	167.80	101.4	1,628.9
J-DU3-4-040	1,403.0	Desert Wells	71.60	97.8	1,628.9
J-DU3-4-050	1,408.0	Desert Wells	149.40	95.4	1,628.6
J-DU3-4-060	1,408.0	Desert Wells	0.00	95.3	1,628.2
J-DU3-4-070	1,404.0	Desert Wells	40.60	97.0	1,628.2
J-DU3-4-080	1,400.0	Desert Wells	26.20	98.7	1,628.2
J-DU3-4-090	1,393.0	Desert Wells	70.20	101.8	1,628.3
J-DU3-4-100	1,391.0	Desert Wells	90.80	102.9	1,628.9
J-DU3-4-110	1,393.0	Desert Wells	40.60	101.7	1,628.1
J-DU3-4-120	1,393.0	Desert Wells	0.00	101.6	1,627.9
J-DU3-4-130	1,395.0	Desert Wells	49.40	100.7	1,627.9
J-DU3-4-140	1,403.0	Desert Wells	68.80	97.3	1,627.9
J-DU3-4-150	1,407.0	Desert Wells	59.60	95.6	1,628.0
J-DU3-4-160	1,406.0	Desert Wells	29.80	96.0	1,627.9
J-DU3-4-170	1,410.0	Desert Wells	169.80	94.3	1,627.9
J-DU3-4-200	1,412.5	Desert Wells	46.60	93.8	1,629.3
J-DU3-4-210	1,406.0	Desert Wells	188.20	96.5	1,628.9
J-DU3S-010	1,412.0	Desert Wells	20.40	94.2	1,629.8
J-DU3S-020	1,407.0	Desert Wells	22.00	96.3	1,629.5
J-DU3S-030	1,401.0	Desert Wells	30.00	98.8	1,629.3
J-DU3S-040	1,399.0	Desert Wells	22.00	99.6	1,629.2
J-DU3S-050	1,404.0	Desert Wells	24.20	97.5	1,629.2
J-DU3S-060	1,410.0	Desert Wells	23.60	94.9	1,629.4
J-DU3S-070	1,417.0	Desert Wells	14.00	92.0	1,629.6
J-DU3S-080	1,396.0	Desert Wells	141.20	100.9	1,629.1
J-DU5N-010	1,436.0	Desert Wells	59.20	83.0	1,627.7
J-DU5N-020	1,424.5	Desert Wells	153.40	87.9	1,627.6
J-DU5N-030	1,426.0	Desert Wells	40.20	87.2	1,627.5
J-DU5N-040	1,414.0	Desert Wells	0.00	92.4	1,627.5

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	1,375.00	92.3	1,627.4
J-DU5N-060	1,417.0	Desert Wells	0.00	91.1	1,627.6
J-DU5N-070	1,439.5	Desert Wells	969.00	81.2	1,627.1
J-DU5N-080	1,427.3	Desert Wells	969.00	86.4	1,627.0
J-DU6-010	1,459.0	Desert Wells	0.00	74.5	1,631.1
J-DU6-020	1,453.0	Desert Wells	694.40	76.9	1,630.8
J-DU6-050	1,448.0	Desert Wells	0.00	79.3	1,631.4
J-DU6-060	1,458.0	Desert Wells	694.40	75.1	1,631.6
J-DU6-080	1,444.6	Desert Wells	171.60	79.7	1,628.9
J-DU6-090	1,439.0	Desert Wells	0.00	82.3	1,629.1
J-DU6-100	1,439.0	Desert Wells	108.40	81.7	1,627.7
J-DU6-110	1,432.0	Desert Wells	98.20	84.7	1,627.8
J-DU6-120	1,422.0	Desert Wells	100.60	89.2	1,628.1
J-DU6-130	1,416.0	Desert Wells	82.20	91.8	1,628.2
J-DU6-140	1,417.0	Desert Wells	132.00	91.6	1,628.7
J-DU6-150	1,427.0	Desert Wells	84.60	87.4	1,629.1
J-DU6-160	1,436.0	Desert Wells	97.20	83.6	1,629.3
J-DU6-170	1,416.5	Desert Wells	50.60	91.7	1,628.5
J-DU7-010	1,415.0	Desert Wells	4.80	92.9	1,629.6
J-DU7-020	1,425.0	Desert Wells	46.60	88.4	1,629.2
J-DU7-030	1,416.0	Desert Wells	125.00	92.2	1,629.0
J-DU7-040	1,409.0	Desert Wells	37.60	95.2	1,629.0
J-DU7-050	1,416.0	Desert Wells	38.60	92.2	1,629.1
J-DU7-060	1,423.0	Desert Wells	22.20	89.3	1,629.4
J-DU7-070	1,430.0	Desert Wells	0.00	86.4	1,629.8
J-DU7-080	1,434.0	Desert Wells	81.00	84.9	1,630.3
J-DU7-090	1,437.0	Desert Wells	0.00	84.2	1,631.5
J-DU7-100	1,435.0	Desert Wells	57.80	84.8	1,631.0
J-DU7-110	1,435.0	Desert Wells	57.60	84.5	1,630.2
J-DU7-120	1,420.0	Desert Wells	0.00	90.7	1,629.7
J-DU7-130	1,420.0	Desert Wells	3.60	90.7	1,629.7
J-DU7-140	1,425.0	Desert Wells	70.00	88.5	1,629.5
J-DU7-150	1,419.0	Desert Wells	75.60	91.0	1,629.3
J-DU7-160	1,435.0	Desert Wells	48.00	84.3	1,629.8
J-DU7-170	1,432.0	Desert Wells	21.40	85.6	1,629.9
J-DU7-180	1,433.0	Desert Wells	37.40	85.3	1,630.2
J-DU7-190	1,437.0	Desert Wells	60.20	83.8	1,630.7
J-DU7-200	1,432.0	Desert Wells	101.40	85.5	1,629.6
J-DU8-010	1,420.0	Desert Wells	0.00	90.9	1,630.0
J-DU8-020	1,419.5	Desert Wells	0.00	91.1	1,630.1
J-DU8-030	1,421.0	Desert Wells	0.00	90.6	1,630.4
J-DU8-040	1,418.0	Desert Wells	13.40	92.0	1,630.7
J-DU8-050	1,422.0	Desert Wells	0.00	90.4	1,630.9
J-DU8-060	1,420.0	Desert Wells	18.00	90.9	1,630.1
J-DU8-070	1,420.0	Desert Wells	30.80	90.9	1,630.1
J-DU8-080	1,422.0	Desert Wells	8.80	90.1	1,630.2
J-DU8-090	1,424.0	Desert Wells	22.00	89.2	1,630.2
J-DU8-100	1,425.0	Desert Wells	18.40	88.8	1,630.2
J-DU8-110	1,430.0	Desert Wells	66.00	86.6	1,630.1
J-DU8-120	1,431.0	Desert Wells	34.20	86.2	1,630.2
J-DU8-130	1,427.0	Desert Wells	42.00	87.9	1,630.3
J-DU9-010	1,419.0	Desert Wells	39.40	91.3	1,630.1
J-DU9-020	1,415.0	Desert Wells	71.60	93.1	1,630.1

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	65.20	92.6	1,630.1
J-DU9-040	1,416.0	Desert Wells	15.60	92.6	1,630.1
J-DU9-050	1,419.0	Desert Wells	0.00	91.3	1,630.1
J-DU9-060	1,422.0	Desert Wells	62.80	90.2	1,630.4
J-DU9-070	1,414.0	Desert Wells	63.00	93.5	1,630.0
J-DU9-080	1,419.0	Desert Wells	77.00	91.3	1,630.1
J-DU9-090	1,414.0	Desert Wells	0.00	93.5	1,630.1
J-DU9-100	1,414.0	Desert Wells	0.00	93.7	1,630.6

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	-421.97	0.67
P-170EX	16.0	5,365.91	120.0	-421.97	0.67
P-180EX	16.0	5,395.89	120.0	603.76	0.96
P-190EX	16.0	5,727.93	120.0	603.76	0.96
P-200EX	16.0	888.87	120.0	-1,192.80	1.90
P-210EX	16.0	509.51	120.0	-1,599.80	2.55
P-220EX	16.0	2,908.75	120.0	668.29	1.07
P-240EX	16.0	1,386.71	120.0	-1,775.88	2.83
P-250EX	16.0	2,610.66	120.0	401.85	0.64
P-310	30.0	4,936.64	120.0	539.51	0.24
P-340EX	16.0	5,775.00	120.0	-421.97	0.67
P-410EX	16.0	5,368.22	120.0	603.76	0.96
P-970	24.0	1,001.45	120.0	-238.20	0.17
P-980	24.0	1,934.58	120.0	-1,158.28	0.82
P-1060EX	16.0	1,328.19	120.0	327.93	0.52
P-1070EX	16.0	2,607.17	120.0	327.93	0.52
P-1630EX	16.0	1,793.28	120.0	427.83	0.68
P-1640EX	16.0	1,447.45	120.0	737.50	1.18
P-1780	24.0	1,527.79	120.0	-238.20	0.17
P-1790	24.0	1,115.45	120.0	-238.20	0.17
P-1940EX	16.0	1,171.38	120.0	564.59	0.90
P-1950EX	16.0	1,440.76	120.0	564.59	0.90
P-1970EX	16.0	816.47	120.0	553.80	0.88
P-1980EX	16.0	1,103.17	120.0	513.20	0.82
P-2040EX	16.0	10,634.81	120.0	-146.30	0.23
P-2055EX	16.0	10,453.02	120.0	521.84	0.83
P-2070EX	24.0	5,328.61	120.0	-597.84	0.42
P-2500EX	24.0	2,750.22	120.0	147.68	0.10
P-2510EX	24.0	2,726.43	120.0	109.21	0.08
P-2540EX	12.0	2,624.38	120.0	340.19	0.97
P-2570EX	16.0	2,640.03	120.0	999.07	1.59
P-2655EX	16.0	2,870.17	120.0	-180.18	0.29
P-2660EX	24.0	2,796.67	120.0	266.92	0.19
P-2665EX	16.0	2,715.77	120.0	-180.18	0.29
P-2690EX	16.0	2,914.43	120.0	-243.83	0.39
P-2700EX	16.0	3,115.09	120.0	158.02	0.25
P-2710EX	16.0	1,822.64	120.0	42.92	0.07
P-2720EX	12.0	3,042.02	120.0	-115.10	0.33
P-2800	24.0	5,785.85	120.0	1,725.37	1.22
P-2830	16.0	2,890.37	120.0	223.10	0.36
P-2860EX	24.0	761.21	120.0	266.92	0.19
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-3.18	0.02
P-2900	24.0	1,422.97	120.0	255.51	0.18
P-2910EX	24.0	496.51	120.0	263.74	0.19
P-2950	12.0	1,088.63	120.0	38.47	0.11
P-2970EX	12.0	1,118.68	120.0	74.86	0.21
P-2990EX	8.0	2,810.72	120.0	9.83	0.06
P-3010EX	12.0	471.37	120.0	3.18	0.01
P-3020EX	12.0	1,167.01	120.0	84.69	0.24
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	17.24	0.11
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	101.92	0.65
P-3080EX	12.0	1,396.97	120.0	375.31	1.06
P-3090EX	12.0	1,108.96	120.0	298.17	0.85
P-3100EX	12.0	694.82	120.0	-42.02	0.12
P-3110EX	12.0	664.35	120.0	35.12	0.10
P-3120EX	8.0	1,851.06	120.0	77.14	0.49
P-3130EX	12.0	1,154.91	120.0	-101.92	0.29
P-3140EX	16.0	1,782.97	120.0	862.03	1.38
P-3150EX	16.0	958.12	120.0	999.07	1.59
P-3160EX	8.0	3,801.45	120.0	137.04	0.87
P-3170EX	8.0	2,837.60	120.0	-8.23	0.05
P-3180EX	8.0	735.68	120.0	20.42	0.13
P-3190EX	30.0	2,558.57	120.0	4,475.59	2.03
P-3240EX	16.0	810.36	120.0	132.20	0.21
P-3240EX(2)	16.0	452.50	120.0	340.72	0.54
P-3250EX	12.0	844.21	120.0	-266.45	0.76
P-3260EX	16.0	1,108.49	120.0	668.29	1.07
P-3270EX	16.0	1,509.41	120.0	486.48	0.78
P-3280EX	12.0	2,890.26	120.0	-181.82	0.52
P-3290EX	12.0	2,432.48	120.0	84.63	0.24
P-3930EX	16.0	794.17	120.0	-671.14	1.07
P-3940EX	16.0	509.16	120.0	-671.14	1.07
P-3970EX	16.0	1,445.13	120.0	671.14	1.07
P-4720EX	16.0	1,215.66	120.0	264.92	0.42
P-4730EX	16.0	455.51	120.0	212.72	0.34
P-4750EX	16.0	715.18	120.0	212.72	0.34
P-4760EX	16.0	774.38	120.0	-243.20	0.39
P-4780EX	24.0	2,143.12	120.0	-916.48	0.65
P-4790EX	16.0	1,816.22	120.0	-128.10	0.20
P-4860EX	24.0	985.98	120.0	916.48	0.65
P-4870EX	24.0	619.54	120.0	916.48	0.65
P-5700EX	16.0	1,175.56	120.0	1,078.47	1.72
P-5710EX	16.0	1,171.19	120.0	1,078.47	1.72
P-5740	24.0	1,547.92	120.0	916.48	0.65
P-5780	16.0	683.67	120.0	304.32	0.49
P-6064	16.0	846.07	120.0	-808.89	1.29
P-6065	16.0	3,442.89	120.0	-808.89	1.29
P-6070	16.0	247.15	120.0	-618.64	0.99
P-6160	48.0	931.87	120.0	7,731.31	1.37
P-6161	48.0	820.29	120.0	7,731.31	1.37
P-6162	36.0	861.98	120.0	2,751.10	0.87
P-6163	36.0	895.14	120.0	2,751.10	0.87
P-6166EX	16.0	1,496.42	130.0	-403.78	0.64
P-6167EX	16.0	2,351.14	120.0	-785.80	1.25
P-6198	30.0	559.22	120.0	4,475.59	2.03
P-6218	30.0	458.03	120.0	2,761.14	1.25
P-6219	30.0	1,679.89	120.0	-2,761.14	1.25
P-6223	16.0	1,042.80	120.0	-340.72	0.54
P-6226	16.0	139.10	120.0	1,714.45	2.74
P-6236EX	24.0	2,939.36	130.0	-241.79	0.17
P-7000	12.0	741.92	120.0	-417.02	1.18
P-COMWTREX	36.0	1,202.28	120.0	1,265.99	0.40
P-DU-3-4-080	12.0	797.04	120.0	46.70	0.13

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-090	12.0	702.19	120.0	87.30	0.25
P-DU-3-4-100	12.0	909.19	120.0	-113.50	0.32
P-DU-3-4-110	16.0	597.34	120.0	-51.39	0.08
P-DU-3-4-120	16.0	1,153.09	120.0	-100.79	0.16
P-DU-3-4-130	12.0	706.88	120.0	-243.34	0.69
P-DU-3-4-70	12.0	1,647.45	120.0	-256.24	0.73
P-DU-3S-130	16.0	2,122.39	120.0	-461.89	0.74
P-DU2-060	12.0	1,914.95	120.0	-139.27	0.40
P-DU2-070	12.0	951.56	120.0	-139.27	0.40
P-DU2-080	20.0	631.03	120.0	-931.08	0.95
P-DU2-090	20.0	1,106.44	120.0	-931.08	0.95
P-DU3-4-010A	12.0	1,447.93	120.0	-81.29	0.23
P-DU3-4-010B	12.0	847.20	120.0	-249.09	0.71
P-DU3-4-020	24.0	1,289.68	120.0	-400.47	0.28
P-DU3-4-060	12.0	733.41	120.0	-405.64	1.15
P-DU3-4-160	12.0	578.86	120.0	-302.94	0.86
P-DU3-4-170	16.0	1,187.74	120.0	73.75	0.12
P-DU3-4-180	16.0	876.41	120.0	43.95	0.07
P-DU3-4-190	20.0	1,405.86	120.0	-1,056.93	1.08
P-DU3-4-200	8.0	1,000.70	120.0	21.61	0.14
P-DU3-4-210	8.0	1,083.47	120.0	-103.35	0.66
P-DU3-4-220	8.0	2,361.07	120.0	63.24	0.40
P-DU3-4-30	24.0	1,116.54	120.0	-463.58	0.33
P-DU3-4-40	24.0	496.31	120.0	-571.18	0.41
P-DU3-4-50	24.0	1,092.47	120.0	-664.39	0.47
P-DU3S-010	8.0	260.69	120.0	201.62	1.29
P-DU3S-020	8.0	1,373.83	120.0	87.49	0.56
P-DU3S-030	8.0	1,542.05	120.0	65.49	0.42
P-DU3S-040	8.0	1,241.65	120.0	35.49	0.23
P-DU3S-050	8.0	1,016.55	120.0	-45.42	0.29
P-DU3S-060	8.0	974.34	120.0	-31.93	0.20
P-DU3S-070	8.0	1,383.69	120.0	-56.13	0.36
P-DU3S-080	8.0	1,241.43	120.0	-79.73	0.51
P-DU3S-090	8.0	620.85	120.0	-93.73	0.60
P-DU3S-100	16.0	788.42	120.0	-140.53	0.22
P-DU3S-110	16.0	1,850.66	120.0	-204.34	0.33
P-DU3S-120	16.0	822.09	120.0	-311.94	0.50
P-DU5N-010	16.0	337.08	120.0	-257.61	0.41
P-DU5N-020	16.0	1,977.53	120.0	-320.76	0.51
P-DU5N-030	16.0	528.70	120.0	472.30	0.75
P-DU5N-040	16.0	2,706.37	120.0	110.32	0.18
P-DU5N-050	20.0	416.37	120.0	-820.76	0.84
P-DU5N-060	20.0	1,208.29	120.0	-693.51	0.71
P-DU5N-070	20.0	1,779.99	120.0	-693.51	0.71
P-DU5N-080	12.0	450.13	120.0	542.42	1.54
P-DU5N-090	12.0	2,293.31	120.0	-343.82	0.98
P-DU5N-100	12.0	2,325.96	130.0	82.76	0.23
P-DU5N-110	16.0	958.50	130.0	1,051.76	1.68
P-DU6-010	12.0	1,162.55	120.0	258.83	0.73
P-DU6-020	16.0	123.88	120.0	176.08	0.28
P-DU6-050	12.0	2,221.22	120.0	-259.49	0.74
P-DU6-060	12.0	2,209.31	120.0	258.83	0.73
P-DU6-070	16.0	142.12	120.0	1,212.72	1.94

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-080	12.0	1,134.59	120.0	259.49	0.74
P-DU6-130	16.0	1,866.29	120.0	-1,505.93	2.40
P-DU6-140	16.0	823.26	120.0	-1,417.78	2.26
P-DU6-150	8.0	1,139.37	120.0	83.45	0.53
P-DU6-180	12.0	1,701.72	120.0	-220.55	0.63
P-DU6-190	12.0	1,447.65	120.0	458.47	1.30
P-DU6-200	12.0	1,510.55	120.0	167.62	0.48
P-DU6-210	20.0	548.31	120.0	-1,306.75	1.33
P-DU6-220	20.0	1,003.42	120.0	-1,415.08	1.45
P-DU6-230	8.0	2,333.32	120.0	74.27	0.47
P-DU6-240	12.0	696.34	120.0	560.82	1.59
P-DU6-250	8.0	2,342.14	120.0	-56.52	0.36
P-DU6-260	8.0	656.01	120.0	-237.17	1.51
P-DU6-270	12.0	803.20	120.0	122.35	0.35
P-DU6-290	8.0	936.11	120.0	83.45	0.53
P-DU6-300	20.0	514.67	120.0	-1,357.35	1.39
P-DU6-310	12.0	1,616.85	120.0	-304.94	0.87
P-DU7-010	12.0	1,114.60	120.0	325.21	0.92
P-DU7-020	12.0	1,146.78	120.0	-215.37	0.61
P-DU7-030	12.0	1,044.06	120.0	-90.37	0.26
P-DU7-040	24.0	1,409.98	120.0	-1,017.26	0.72
P-DU7-050	24.0	1,075.39	120.0	-1,703.64	1.21
P-DU7-060	24.0	1,253.80	120.0	-1,725.84	1.22
P-DU7-070	24.0	1,205.32	120.0	-2,171.09	1.54
P-DU7-080	24.0	2,338.72	120.0	-2,489.26	1.77
P-DU7-090	16.0	941.19	120.0	-872.71	1.39
P-DU7-100	16.0	1,562.41	120.0	-814.91	1.30
P-DU7-110	16.0	1,741.52	120.0	-588.91	0.94
P-DU7-120	16.0	778.48	120.0	374.88	0.60
P-DU7-130	20.0	316.65	120.0	-780.43	0.80
P-DU7-140	20.0	1,206.89	120.0	-776.83	0.79
P-DU7-150	20.0	1,235.71	120.0	-842.90	0.86
P-DU7-160	20.0	891.94	120.0	-767.30	0.78
P-DU7-170	12.0	1,072.99	120.0	115.57	0.33
P-DU7-180	12.0	827.71	120.0	-163.57	0.46
P-DU7-190	12.0	398.61	120.0	-422.43	1.20
P-DU7-200	12.0	2,378.07	120.0	-64.11	0.18
P-DU7-210	12.0	1,048.78	120.0	-455.92	1.29
P-DU7-220	12.0	1,053.72	120.0	-395.72	1.12
P-DU7-230	12.0	1,714.23	120.0	-237.46	0.67
P-DU7-240	12.0	1,014.45	120.0	-136.06	0.39
P-DU8-010	16.0	1,107.48	120.0	-566.41	0.90
P-DU8-020	16.0	713.88	120.0	-440.42	0.70
P-DU8-030	16.0	1,312.24	120.0	-458.72	0.73
P-DU8-040	16.0	1,371.08	120.0	-572.49	0.91
P-DU8-050	16.0	520.30	120.0	-707.25	1.13
P-DU8-060	16.0	1,021.04	120.0	-920.08	1.47
P-DU8-070	8.0	541.92	120.0	-24.43	0.16
P-DU8-080	8.0	253.35	120.0	-1.37	0.01
P-DU8-090	8.0	1,138.34	120.0	-32.17	0.21
P-DU8-100	12.0	598.81	120.0	104.29	0.30
P-DU8-110	12.0	709.10	120.0	27.51	0.08
P-DU8-120	8.0	678.33	120.0	-41.06	0.26

Eastmark Master Water Report

Active Scenario: Max Day Demand - Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-130	8.0	1,315.41	120.0	26.20	0.17
P-DU8-140	8.0	965.85	120.0	-22.35	0.14
P-DU8-150	6.0	737.49	120.0	38.97	0.44
P-DU8-160	8.0	1,265.36	120.0	32.89	0.21
P-DU8-170	8.0	2,613.46	120.0	-6.91	0.04
P-DU8-180	8.0	1,777.60	120.0	-41.11	0.26
P-DU8-190	8.0	1,184.98	120.0	38.26	0.24
P-DU8-200	8.0	1,054.34	120.0	121.37	0.77
P-DU9-010	16.0	903.69	120.0	190.25	0.30
P-DU9-020	8.0	226.81	120.0	125.99	0.80
P-DU9-030	8.0	1,616.12	120.0	24.85	0.16
P-DU9-040	8.0	745.70	120.0	-42.73	0.27
P-DU9-050	8.0	868.53	120.0	-4.02	0.03
P-DU9-060	8.0	1,549.98	120.0	-74.80	0.48
P-DU9-070	8.0	1,000.62	120.0	-12.81	0.08
P-DU9-080	8.0	643.77	120.0	-28.41	0.18
P-DU9-090	8.0	3,091.64	120.0	18.38	0.12
P-DU9-100	8.0	1,618.99	120.0	-33.96	0.22
P-DU9-110	8.0	3,057.43	120.0	-10.66	0.07
P-DU9-120	8.0	901.10	120.0	40.74	0.26
P-DU9-130	8.0	878.92	120.0	-103.10	0.66
P-DU9-140	8.0	429.87	120.0	-212.82	1.36
P-DU9-150	8.0	4,470.55	120.0	-46.92	0.30

Peak-Hour Demand

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Reservoir Table

Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,722.22	1,634.0
SCAP DWPS	1,634.0	10,232.73	1,634.0
DWGWF - DWPS	1,634.0	3,791.06	1,634.0

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.00	94.0	1,623.3
J-110EX	1,418.0	Desert Wells	57.30	88.6	1,622.9
J-120EX	1,462.0	Desert Wells	0.00	74.2	1,633.6
J-135EX	1,460.0	Desert Wells	0.00	74.4	1,631.9
J-150EX	1,472.0	Desert Wells	0.00	68.3	1,630.0
J-160EX	1,435.0	Desert Wells	0.00	85.1	1,631.6
J-170EX	1,430.0	Desert Wells	0.00	87.5	1,632.3
J-180EX	1,410.0	Desert Wells	0.00	96.8	1,633.7
J-190EX	1,395.0	Desert Wells	0.00	102.1	1,630.9
J-200EX	1,385.0	Desert Wells	0.00	105.1	1,627.9
J-220EX	1,480.0	Desert Wells	0.00	65.7	1,631.8
J-230EX	1,475.0	Desert Wells	0.00	67.4	1,630.7
J-250EX	1,452.0	Desert Wells	23.40	76.9	1,629.7
J-260EX	1,453.0	Desert Wells	54.60	76.5	1,629.8
J-270EX	1,429.0	Desert Wells	0.00	87.0	1,630.0
J-280EX	1,460.0	Desert Wells	0.00	73.6	1,630.1
J-300EX	1,392.0	Desert Wells	53.10	100.8	1,625.0
J-320EX	1,422.0	Desert Wells	0.00	90.1	1,630.3
J-330EX	1,455.0	Desert Wells	0.00	75.6	1,629.8
J-340EX	1,440.0	Desert Wells	0.00	82.0	1,629.6
J-360EX	1,400.0	Desert Wells	2,228.00	95.7	1,621.2
J-550EX	1,425.0	Desert Wells	0.00	88.5	1,629.6
J-590EX	1,413.0	Desert Wells	0.00	90.9	1,623.1
J-920EX	1,434.0	Desert Wells	0.00	84.6	1,629.6
J-960EX	1,402.0	Desert Wells	0.00	95.3	1,622.2
J-970EX	1,397.0	Desert Wells	0.00	97.3	1,622.0
J-1000EX	1,455.0	Desert Wells	0.00	77.3	1,633.6
J-1010EX	1,485.0	Desert Wells	0.00	64.3	1,633.6
J-1020EX	1,425.0	Desert Wells	0.00	88.6	1,629.8
J-1030EX	1,480.0	Desert Wells	0.00	66.6	1,634.0
J-1050EX	1,445.0	Desert Wells	0.00	79.8	1,629.5
J-1120EX	1,456.0	Desert Wells	0.00	75.3	1,630.1
J-1130EX	1,445.0	Desert Wells	407.00	78.4	1,626.1
J-1160EX	1,445.0	Desert Wells	0.00	81.6	1,633.5
J-1170EX	1,470.0	Desert Wells	0.00	70.8	1,633.6
J-1180EX	1,440.0	Desert Wells	0.00	83.0	1,631.8
J-1190EX	1,420.0	Desert Wells	0.00	89.5	1,626.8
J-1200EX	1,445.0	Desert Wells	0.00	80.8	1,631.9
J-1210EX	1,455.0	Desert Wells	0.00	77.3	1,633.6
J-1220EX	1,475.0	Desert Wells	0.00	68.6	1,633.6
J-1230EX	1,460.0	Desert Wells	0.00	73.5	1,629.9
J-1235EX	1,440.0	Desert Wells	0.00	82.0	1,629.5
J-1240EX	1,455.0	Desert Wells	0.00	75.6	1,629.8
J-1280	1,410.0	Desert Wells	0.00	95.5	1,630.8
J-1290EX	1,480.0	Desert Wells	0.00	66.5	1,633.6
J-1300EX	1,465.0	Desert Wells	0.00	72.9	1,633.6
J-1310EX	1,480.0	Desert Wells	0.00	66.5	1,633.6
J-1330EX	1,465.0	Desert Wells	0.00	73.0	1,633.6
J-1340EX	1,450.0	Desert Wells	0.00	79.4	1,633.6
J-1350EX	1,465.0	Desert Wells	0.00	72.9	1,633.6
J-1360EX	1,445.0	Desert Wells	0.00	81.6	1,633.5
J-1370EX	1,430.0	Desert Wells	0.00	87.3	1,631.9
J-1380EX	1,450.0	Desert Wells	0.00	78.9	1,632.4

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1390EX	1,430.0	Desert Wells	0.00	87.3	1,631.8
J-1400EX	1,430.0	Desert Wells	0.00	87.3	1,631.8
J-1410	1,458.0	Desert Wells	0.00	74.9	1,631.1
J-1410EX	1,420.0	Desert Wells	0.00	90.0	1,628.1
J-1420EX	1,460.0	Desert Wells	0.00	73.7	1,630.3
J-1430EX	1,455.0	Desert Wells	0.00	76.0	1,630.6
J-1440EX	1,478.0	Desert Wells	0.00	66.3	1,631.2
J-1680EX	1,401.0	Desert Wells	0.00	95.5	1,621.8
J-1990EX	1,447.0	Desert Wells	78.30	79.0	1,629.5
J-2000EX	1,442.0	Desert Wells	0.00	81.1	1,629.4
J-2010EX	1,419.0	Desert Wells	0.00	91.6	1,630.6
J-2040EX	1,427.0	Desert Wells	0.00	87.9	1,630.1
J-2120EX	1,453.0	Desert Wells	0.00	76.2	1,629.2
J-2140EX	1,450.0	Desert Wells	407.00	76.9	1,627.8
J-2295	1,415.0	Desert Wells	0.00	91.6	1,626.8
J-2340EX	1,434.0	Desert Wells	57.30	82.0	1,623.5
J-2353	1,456.0	Desert Wells	0.00	75.5	1,630.4
J-2361	1,456.9	Desert Wells	0.00	75.1	1,630.6
J-2364	1,457.4	Desert Wells	0.00	74.7	1,630.2
J-DU2-020	1,411.5	Desert Wells	0.00	91.3	1,622.6
J-DU2-030	1,408.0	Desert Wells	0.00	92.3	1,621.4
J-DU3-4-010	1,405.0	Desert Wells	161.40	95.2	1,625.1
J-DU3-4-020	1,402.0	Desert Wells	161.40	96.3	1,624.7
J-DU3-4-030	1,392.0	Desert Wells	216.60	100.6	1,624.6
J-DU3-4-030A	1,394.5	Desert Wells	251.70	99.6	1,624.7
J-DU3-4-040	1,403.0	Desert Wells	107.40	95.9	1,624.7
J-DU3-4-050	1,408.0	Desert Wells	149.40	93.5	1,624.2
J-DU3-4-060	1,408.0	Desert Wells	0.00	93.2	1,623.4
J-DU3-4-070	1,404.0	Desert Wells	60.90	94.9	1,623.4
J-DU3-4-080	1,400.0	Desert Wells	39.30	96.7	1,623.4
J-DU3-4-090	1,393.0	Desert Wells	105.30	99.7	1,623.5
J-DU3-4-100	1,391.0	Desert Wells	136.20	101.1	1,624.6
J-DU3-4-110	1,393.0	Desert Wells	60.90	99.6	1,623.1
J-DU3-4-120	1,393.0	Desert Wells	0.00	99.4	1,622.7
J-DU3-4-130	1,395.0	Desert Wells	74.10	98.5	1,622.7
J-DU3-4-140	1,403.0	Desert Wells	103.20	95.1	1,622.8
J-DU3-4-150	1,407.0	Desert Wells	89.40	93.5	1,623.0
J-DU3-4-160	1,406.0	Desert Wells	44.70	93.8	1,622.8
J-DU3-4-170	1,410.0	Desert Wells	254.70	92.1	1,622.8
J-DU3-4-200	1,412.5	Desert Wells	69.90	92.1	1,625.3
J-DU3-4-210	1,406.0	Desert Wells	282.30	94.6	1,624.7
J-DU3S-010	1,412.0	Desert Wells	30.60	92.7	1,626.2
J-DU3S-020	1,407.0	Desert Wells	33.00	94.6	1,625.6
J-DU3S-030	1,401.0	Desert Wells	45.00	97.0	1,625.2
J-DU3S-040	1,399.0	Desert Wells	33.00	97.8	1,625.1
J-DU3S-050	1,404.0	Desert Wells	36.30	95.7	1,625.2
J-DU3S-060	1,410.0	Desert Wells	35.40	93.2	1,625.4
J-DU3S-070	1,417.0	Desert Wells	21.00	90.4	1,625.9
J-DU3S-080	1,396.0	Desert Wells	211.80	99.1	1,625.0
J-DU5N-010	1,436.0	Desert Wells	88.80	80.9	1,623.1
J-DU5N-020	1,424.5	Desert Wells	230.10	85.7	1,622.6
J-DU5N-030	1,426.0	Desert Wells	60.30	85.0	1,622.4
J-DU5N-040	1,414.0	Desert Wells	0.00	90.1	1,622.2

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU5N-050	1,414.0	Desert Wells	2,228.00	90.0	1,622.0
J-DU5N-060	1,417.0	Desert Wells	0.00	88.9	1,622.4
J-DU5N-070	1,439.5	Desert Wells	969.00	79.1	1,622.4
J-DU5N-080	1,427.3	Desert Wells	969.00	84.3	1,622.2
J-DU6-010	1,459.0	Desert Wells	0.00	73.8	1,629.5
J-DU6-020	1,453.0	Desert Wells	694.40	76.2	1,629.2
J-DU6-050	1,448.0	Desert Wells	0.00	78.7	1,629.8
J-DU6-060	1,458.0	Desert Wells	694.40	74.5	1,630.2
J-DU6-080	1,444.6	Desert Wells	257.40	78.1	1,625.1
J-DU6-090	1,439.0	Desert Wells	0.00	80.6	1,625.4
J-DU6-100	1,439.0	Desert Wells	162.60	79.7	1,623.2
J-DU6-110	1,432.0	Desert Wells	147.30	82.7	1,623.1
J-DU6-120	1,422.0	Desert Wells	150.90	87.1	1,623.4
J-DU6-130	1,416.0	Desert Wells	123.30	89.8	1,623.5
J-DU6-140	1,417.0	Desert Wells	198.00	89.7	1,624.3
J-DU6-150	1,427.0	Desert Wells	126.90	85.7	1,625.1
J-DU6-160	1,436.0	Desert Wells	145.80	82.0	1,625.6
J-DU6-170	1,416.5	Desert Wells	75.90	89.7	1,623.9
J-DU7-010	1,415.0	Desert Wells	7.20	91.3	1,626.0
J-DU7-020	1,425.0	Desert Wells	69.90	86.6	1,625.3
J-DU7-030	1,416.0	Desert Wells	125.00	90.4	1,624.9
J-DU7-040	1,409.0	Desert Wells	56.40	93.4	1,624.8
J-DU7-050	1,416.0	Desert Wells	57.90	90.5	1,625.1
J-DU7-060	1,423.0	Desert Wells	33.30	87.7	1,625.7
J-DU7-070	1,430.0	Desert Wells	0.00	84.9	1,626.3
J-DU7-080	1,434.0	Desert Wells	121.50	83.6	1,627.3
J-DU7-090	1,437.0	Desert Wells	0.00	83.3	1,629.6
J-DU7-100	1,435.0	Desert Wells	86.70	83.7	1,628.5
J-DU7-110	1,435.0	Desert Wells	86.40	83.1	1,627.0
J-DU7-120	1,420.0	Desert Wells	0.00	89.2	1,626.2
J-DU7-130	1,420.0	Desert Wells	5.40	89.2	1,626.1
J-DU7-140	1,425.0	Desert Wells	105.00	86.9	1,625.7
J-DU7-150	1,419.0	Desert Wells	113.40	89.3	1,625.4
J-DU7-160	1,435.0	Desert Wells	72.00	82.8	1,626.4
J-DU7-170	1,432.0	Desert Wells	32.10	84.2	1,626.6
J-DU7-180	1,433.0	Desert Wells	56.10	83.9	1,627.0
J-DU7-190	1,437.0	Desert Wells	90.30	82.7	1,628.0
J-DU7-200	1,432.0	Desert Wells	152.10	83.9	1,625.9
J-DU8-010	1,420.0	Desert Wells	0.00	89.4	1,626.7
J-DU8-020	1,419.5	Desert Wells	0.00	89.7	1,626.9
J-DU8-030	1,421.0	Desert Wells	0.00	89.3	1,627.3
J-DU8-040	1,418.0	Desert Wells	20.10	90.8	1,628.0
J-DU8-050	1,422.0	Desert Wells	0.00	89.3	1,628.4
J-DU8-060	1,420.0	Desert Wells	27.00	89.5	1,626.9
J-DU8-070	1,420.0	Desert Wells	46.20	89.5	1,626.9
J-DU8-080	1,422.0	Desert Wells	13.20	88.7	1,627.0
J-DU8-090	1,424.0	Desert Wells	33.00	87.8	1,627.0
J-DU8-100	1,425.0	Desert Wells	27.60	87.4	1,627.0
J-DU8-110	1,430.0	Desert Wells	99.00	85.2	1,626.9
J-DU8-120	1,431.0	Desert Wells	51.30	84.8	1,626.9
J-DU8-130	1,427.0	Desert Wells	63.00	86.6	1,627.1
J-DU9-010	1,419.0	Desert Wells	59.10	89.9	1,626.8
J-DU9-020	1,415.0	Desert Wells	107.40	91.6	1,626.8

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU9-030	1,416.0	Desert Wells	97.80	91.2	1,626.8
J-DU9-040	1,416.0	Desert Wells	23.40	91.2	1,626.8
J-DU9-050	1,419.0	Desert Wells	0.00	89.9	1,626.8
J-DU9-060	1,422.0	Desert Wells	94.20	88.8	1,627.3
J-DU9-070	1,414.0	Desert Wells	94.50	92.0	1,626.7
J-DU9-080	1,419.0	Desert Wells	115.50	89.9	1,626.7
J-DU9-090	1,414.0	Desert Wells	0.00	92.1	1,626.9
J-DU9-100	1,414.0	Desert Wells	0.00	92.4	1,627.7

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-160EX	16.0	2,721.65	120.0	-577.70	0.92
P-170EX	16.0	5,365.91	120.0	-577.70	0.92
P-180EX	16.0	5,395.89	120.0	841.08	1.34
P-190EX	16.0	5,727.93	120.0	841.08	1.34
P-200EX	16.0	888.87	120.0	-1,671.27	2.67
P-210EX	16.0	509.51	120.0	-2,078.27	3.32
P-220EX	16.0	2,908.75	120.0	895.76	1.43
P-240EX	16.0	1,386.71	120.0	-2,205.72	3.52
P-250EX	16.0	2,610.66	120.0	584.06	0.93
P-310	30.0	4,936.64	120.0	845.69	0.38
P-340EX	16.0	5,775.00	120.0	-577.70	0.92
P-410EX	16.0	5,368.22	120.0	841.08	1.34
P-970	24.0	1,001.45	120.0	-263.84	0.19
P-980	24.0	1,934.58	120.0	-1,580.08	1.12
P-1060EX	16.0	1,328.19	120.0	349.15	0.56
P-1070EX	16.0	2,607.17	120.0	349.15	0.56
P-1630EX	16.0	1,793.28	120.0	575.46	0.92
P-1640EX	16.0	1,447.45	120.0	1,020.29	1.63
P-1780	24.0	1,527.79	120.0	-263.84	0.19
P-1790	24.0	1,115.45	120.0	-263.84	0.19
P-1940EX	16.0	1,171.38	120.0	896.75	1.43
P-1950EX	16.0	1,440.76	120.0	896.75	1.43
P-1970EX	16.0	816.47	120.0	774.35	1.24
P-1980EX	16.0	1,103.17	120.0	713.45	1.14
P-2040EX	16.0	10,634.81	120.0	-195.80	0.31
P-2055EX	16.0	10,453.02	120.0	723.11	1.15
P-2070EX	24.0	5,328.61	120.0	-803.31	0.57
P-2500EX	24.0	2,750.22	120.0	179.73	0.13
P-2510EX	24.0	2,726.43	120.0	129.42	0.09
P-2540EX	12.0	2,624.38	120.0	472.91	1.34
P-2570EX	16.0	2,640.03	120.0	1,386.35	2.21
P-2655EX	16.0	2,870.17	120.0	-234.92	0.37
P-2660EX	24.0	2,796.67	120.0	335.87	0.24
P-2665EX	16.0	2,715.77	120.0	-234.92	0.37
P-2690EX	16.0	2,914.43	120.0	-344.09	0.55
P-2700EX	16.0	3,115.09	120.0	239.97	0.38
P-2710EX	16.0	1,822.64	120.0	77.83	0.12
P-2720EX	12.0	3,042.02	120.0	-162.14	0.46
P-2800	24.0	5,785.85	120.0	2,372.28	1.68
P-2830	16.0	2,890.37	120.0	312.75	0.50
P-2860EX	24.0	761.21	120.0	335.87	0.24
P-2880EX	12.0	382.67	120.0	0.00	0.00
P-2890EX	8.0	3,147.74	120.0	-0.86	0.01
P-2900	24.0	1,422.97	120.0	325.22	0.23
P-2910EX	24.0	496.51	120.0	335.01	0.24
P-2950	12.0	1,088.63	120.0	50.30	0.14
P-2970EX	12.0	1,118.68	120.0	102.09	0.29
P-2990EX	8.0	2,810.72	120.0	14.67	0.09
P-3010EX	12.0	471.37	120.0	0.86	0.00
P-3020EX	12.0	1,167.01	120.0	116.76	0.33
P-3030EX	12.0	378.09	120.0	0.00	0.00
P-3040EX	8.0	3,081.05	120.0	24.98	0.16
P-3060EX	12.0	595.31	120.0	0.00	0.00

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-3070EX	8.0	2,921.51	120.0	141.74	0.90
P-3080EX	12.0	1,396.97	120.0	521.50	1.48
P-3090EX	12.0	1,108.96	120.0	414.32	1.18
P-3100EX	12.0	694.82	120.0	-58.58	0.17
P-3110EX	12.0	664.35	120.0	48.60	0.14
P-3120EX	8.0	1,851.06	120.0	107.18	0.68
P-3130EX	12.0	1,154.91	120.0	-141.73	0.40
P-3140EX	16.0	1,782.97	120.0	1,196.02	1.91
P-3150EX	16.0	958.12	120.0	1,386.35	2.21
P-3160EX	8.0	3,801.45	120.0	190.33	1.21
P-3170EX	8.0	2,837.60	120.0	-9.79	0.06
P-3180EX	8.0	735.68	120.0	25.84	0.16
P-3190EX	30.0	2,558.57	120.0	6,052.08	2.75
P-3240EX	16.0	810.36	120.0	465.39	0.74
P-3240EX(2)	16.0	452.50	120.0	553.20	0.88
P-3250EX	12.0	844.21	120.0	-311.70	0.88
P-3260EX	16.0	1,108.49	120.0	895.76	1.43
P-3270EX	16.0	1,509.41	120.0	662.45	1.06
P-3280EX	12.0	2,890.26	120.0	-233.31	0.66
P-3290EX	12.0	2,432.48	120.0	78.39	0.22
P-3930EX	16.0	794.17	120.0	-1,037.19	1.66
P-3940EX	16.0	509.16	120.0	-1,037.19	1.66
P-3970EX	16.0	1,445.13	120.0	1,037.19	1.66
P-4720EX	16.0	1,215.66	120.0	389.48	0.62
P-4730EX	16.0	455.51	120.0	311.18	0.50
P-4750EX	16.0	715.18	120.0	311.18	0.50
P-4760EX	16.0	774.38	120.0	-338.77	0.54
P-4780EX	24.0	2,143.12	120.0	-1,237.31	0.88
P-4790EX	16.0	1,816.22	120.0	-176.62	0.28
P-4860EX	24.0	985.98	120.0	1,237.31	0.88
P-4870EX	24.0	619.54	120.0	1,237.31	0.88
P-5700EX	16.0	1,175.56	120.0	1,415.04	2.26
P-5710EX	16.0	1,171.19	120.0	1,415.04	2.26
P-5740	24.0	1,547.92	120.0	1,237.31	0.88
P-5780	16.0	683.67	120.0	498.60	0.80
P-6064	16.0	846.07	120.0	-1,134.98	1.81
P-6065	16.0	3,442.89	120.0	-1,134.98	1.81
P-6070	16.0	247.15	120.0	-864.87	1.38
P-6160	48.0	931.87	120.0	10,232.73	1.81
P-6161	48.0	820.29	120.0	10,232.73	1.81
P-6162	36.0	861.98	120.0	3,791.06	1.19
P-6163	36.0	895.14	120.0	3,791.06	1.19
P-6166EX	16.0	1,496.42	130.0	-793.73	1.27
P-6167EX	16.0	2,351.14	120.0	-1,264.27	2.02
P-6198	30.0	559.22	120.0	6,052.08	2.75
P-6218	30.0	458.03	120.0	3,917.06	1.78
P-6219	30.0	1,679.89	120.0	-3,917.06	1.78
P-6223	16.0	1,042.80	120.0	-553.20	0.88
P-6226	16.0	139.10	120.0	2,135.02	3.41
P-6236EX	24.0	2,939.36	130.0	-342.77	0.24
P-7000	12.0	741.92	120.0	-575.32	1.63
P-COMWTREX	36.0	1,202.28	120.0	1,722.22	0.54
P-DU-3-4-080	12.0	797.04	120.0	40.44	0.11

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU-3-4-090	12.0	702.19	120.0	101.34	0.29
P-DU-3-4-100	12.0	909.19	120.0	-140.64	0.40
P-DU-3-4-110	16.0	597.34	120.0	-183.30	0.29
P-DU-3-4-120	16.0	1,153.09	120.0	-257.40	0.41
P-DU-3-4-130	12.0	706.88	120.0	-328.40	0.93
P-DU-3-4-70	12.0	1,647.45	120.0	-377.36	1.07
P-DU-3S-130	16.0	2,122.39	120.0	-658.91	1.05
P-DU2-060	12.0	1,914.95	120.0	-294.05	0.83
P-DU2-070	12.0	951.56	120.0	-294.05	0.83
P-DU2-080	20.0	631.03	120.0	-1,169.23	1.19
P-DU2-090	20.0	1,106.44	120.0	-1,169.23	1.19
P-DU3-4-010A	12.0	1,447.93	120.0	-88.83	0.25
P-DU3-4-010B	12.0	847.20	120.0	-340.53	0.97
P-DU3-4-020	24.0	1,289.68	120.0	-581.03	0.41
P-DU3-4-060	12.0	733.41	120.0	-526.76	1.49
P-DU3-4-160	12.0	578.86	120.0	-417.80	1.19
P-DU3-4-170	16.0	1,187.74	120.0	-32.20	0.05
P-DU3-4-180	16.0	876.41	120.0	-76.90	0.12
P-DU3-4-190	20.0	1,405.86	120.0	-1,500.83	1.53
P-DU3-4-200	8.0	1,000.70	120.0	46.81	0.30
P-DU3-4-210	8.0	1,083.47	120.0	-143.04	0.91
P-DU3-4-220	8.0	2,361.07	120.0	92.45	0.59
P-DU3-4-30	24.0	1,116.54	120.0	-708.80	0.50
P-DU3-4-40	24.0	496.31	120.0	-870.20	0.62
P-DU3-4-50	24.0	1,092.47	120.0	-1,024.41	0.73
P-DU3S-010	8.0	260.69	120.0	289.55	1.85
P-DU3S-020	8.0	1,373.83	120.0	124.78	0.80
P-DU3S-030	8.0	1,542.05	120.0	91.78	0.59
P-DU3S-040	8.0	1,241.65	120.0	46.78	0.30
P-DU3S-050	8.0	1,016.55	120.0	-55.25	0.35
P-DU3S-060	8.0	974.34	120.0	-41.46	0.26
P-DU3S-070	8.0	1,383.69	120.0	-77.76	0.50
P-DU3S-080	8.0	1,241.43	120.0	-113.16	0.72
P-DU3S-090	8.0	620.85	120.0	-134.16	0.86
P-DU3S-100	16.0	788.42	120.0	-212.52	0.34
P-DU3S-110	16.0	1,850.66	120.0	-284.56	0.45
P-DU3S-120	16.0	822.09	120.0	-445.96	0.71
P-DU5N-010	16.0	337.08	120.0	-574.86	0.92
P-DU5N-020	16.0	1,977.53	120.0	-557.16	0.89
P-DU5N-030	16.0	528.70	120.0	709.44	1.13
P-DU5N-040	16.0	2,706.37	120.0	-267.24	0.43
P-DU5N-050	20.0	416.37	120.0	-1,436.47	1.47
P-DU5N-060	20.0	1,208.29	120.0	-1,085.59	1.11
P-DU5N-070	20.0	1,779.99	120.0	-1,085.59	1.11
P-DU5N-080	12.0	450.13	120.0	381.89	1.08
P-DU5N-090	12.0	2,293.31	120.0	-413.24	1.17
P-DU5N-100	12.0	2,325.96	130.0	173.87	0.49
P-DU5N-110	16.0	958.50	130.0	1,142.87	1.82
P-DU6-010	12.0	1,162.55	120.0	283.11	0.80
P-DU6-020	16.0	123.88	120.0	127.45	0.20
P-DU6-050	12.0	2,221.22	120.0	-283.84	0.81
P-DU6-060	12.0	2,209.31	120.0	283.11	0.80
P-DU6-070	16.0	142.12	120.0	1,261.35	2.01

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU6-080	12.0	1,134.59	120.0	283.84	0.81
P-DU6-130	16.0	1,866.29	120.0	-2,047.20	3.27
P-DU6-140	16.0	823.26	120.0	-1,880.34	3.00
P-DU6-150	8.0	1,139.37	120.0	90.53	0.58
P-DU6-180	12.0	1,701.72	120.0	-218.39	0.62
P-DU6-190	12.0	1,447.65	120.0	609.06	1.73
P-DU6-200	12.0	1,510.55	120.0	142.61	0.40
P-DU6-210	20.0	548.31	120.0	-1,766.73	1.80
P-DU6-220	20.0	1,003.42	120.0	-1,932.38	1.97
P-DU6-230	8.0	2,333.32	120.0	108.25	0.69
P-DU6-240	12.0	696.34	120.0	760.27	2.16
P-DU6-250	8.0	2,342.14	120.0	-83.95	0.54
P-DU6-260	8.0	656.01	120.0	-320.28	2.04
P-DU6-270	12.0	803.20	120.0	71.09	0.20
P-DU6-290	8.0	936.11	120.0	90.53	0.58
P-DU6-300	20.0	514.67	120.0	-1,842.63	1.88
P-DU6-310	12.0	1,616.85	120.0	-382.38	1.08
P-DU7-010	12.0	1,114.60	120.0	443.57	1.26
P-DU7-020	12.0	1,146.78	120.0	-281.22	0.80
P-DU7-030	12.0	1,044.06	120.0	-156.22	0.44
P-DU7-040	24.0	1,409.98	120.0	-1,451.34	1.03
P-DU7-050	24.0	1,075.39	120.0	-2,407.14	1.71
P-DU7-060	24.0	1,253.80	120.0	-2,440.44	1.73
P-DU7-070	24.0	1,205.32	120.0	-3,059.40	2.17
P-DU7-080	24.0	2,338.72	120.0	-3,501.18	2.48
P-DU7-090	16.0	941.19	120.0	-1,245.65	1.99
P-DU7-100	16.0	1,562.41	120.0	-1,158.95	1.85
P-DU7-110	16.0	1,741.52	120.0	-826.47	1.32
P-DU7-120	16.0	778.48	120.0	534.36	0.85
P-DU7-130	20.0	316.65	120.0	-1,072.24	1.10
P-DU7-140	20.0	1,206.89	120.0	-1,066.84	1.09
P-DU7-150	20.0	1,235.71	120.0	-1,147.88	1.17
P-DU7-160	20.0	891.94	120.0	-1,034.48	1.06
P-DU7-170	12.0	1,072.99	120.0	141.31	0.40
P-DU7-180	12.0	827.71	120.0	-213.31	0.61
P-DU7-190	12.0	398.61	120.0	-583.56	1.66
P-DU7-200	12.0	2,378.07	120.0	-80.01	0.23
P-DU7-210	12.0	1,048.78	120.0	-649.95	1.84
P-DU7-220	12.0	1,053.72	120.0	-559.65	1.59
P-DU7-230	12.0	1,714.23	120.0	-338.15	0.96
P-DU7-240	12.0	1,014.45	120.0	-186.05	0.53
P-DU8-010	16.0	1,107.48	120.0	-780.13	1.24
P-DU8-020	16.0	713.88	120.0	-610.59	0.97
P-DU8-030	16.0	1,312.24	120.0	-648.01	1.03
P-DU8-040	16.0	1,371.08	120.0	-813.30	1.30
P-DU8-050	16.0	520.30	120.0	-1,006.98	1.61
P-DU8-060	16.0	1,021.04	120.0	-1,316.24	2.10
P-DU8-070	8.0	541.92	120.0	-34.87	0.22
P-DU8-080	8.0	253.35	120.0	-1.61	0.01
P-DU8-090	8.0	1,138.34	120.0	-47.81	0.31
P-DU8-100	12.0	598.81	120.0	166.08	0.47
P-DU8-110	12.0	709.10	120.0	47.55	0.13
P-DU8-120	8.0	678.33	120.0	-60.26	0.38

Eastmark Master Water Report

Active Scenario: Peak Hour Demand, Served by DWGWF (FBO Condition)

FlexTable: Pipe Table

Label	Diameter (in)	Length (Scaled) (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-DU8-130	8.0	1,315.41	120.0	43.12	0.28
P-DU8-140	8.0	965.85	120.0	-25.91	0.17
P-DU8-150	6.0	737.49	120.0	55.51	0.63
P-DU8-160	8.0	1,265.36	120.0	48.51	0.31
P-DU8-170	8.0	2,613.46	120.0	-7.37	0.05
P-DU8-180	8.0	1,777.60	120.0	-58.67	0.37
P-DU8-190	8.0	1,184.98	120.0	51.91	0.33
P-DU8-200	8.0	1,054.34	120.0	173.58	1.11
P-DU9-010	16.0	903.69	120.0	270.11	0.43
P-DU9-020	8.0	226.81	120.0	169.54	1.08
P-DU9-030	8.0	1,616.12	120.0	41.47	0.26
P-DU9-040	8.0	745.70	120.0	-72.30	0.46
P-DU9-050	8.0	868.53	120.0	6.37	0.04
P-DU9-060	8.0	1,549.98	120.0	-109.77	0.70
P-DU9-070	8.0	1,000.62	120.0	-11.92	0.08
P-DU9-080	8.0	643.77	120.0	-35.32	0.23
P-DU9-090	8.0	3,091.64	120.0	30.26	0.19
P-DU9-100	8.0	1,618.99	120.0	-50.16	0.32
P-DU9-110	8.0	3,057.43	120.0	-14.08	0.09
P-DU9-120	8.0	901.10	120.0	61.86	0.39
P-DU9-130	8.0	878.92	120.0	-147.34	0.94
P-DU9-140	8.0	429.87	120.0	-309.26	1.97
P-DU9-150	8.0	4,470.55	120.0	-67.72	0.43

Max-Day Demand Plus Fire Flow

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow, Served by DWGWF (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	4,000.00	20.0	90.8	J-1010EX	3.62	P-240EX
J-110EX	1,418.0	True	4,038.20	5,038.20	20.0	85.1	J-1010EX	4.17	P-210EX
J-120EX	1,462.0	True	2,000.00	4,000.00	20.0	74.2	J-1010EX	2.82	P-240EX
J-135EX	1,460.0	True	2,000.00	4,000.00	20.0	72.7	J-1010EX	4.39	P-5700EX
J-150EX	1,472.0	True	2,000.00	4,000.00	20.0	66.2	J-1010EX	3.31	P-240EX
J-160EX	1,435.0	True	2,000.00	4,000.00	20.0	77.1	J-1010EX	3.26	P-340EX
J-170EX	1,430.0	True	2,000.00	4,000.00	20.0	79.7	J-1010EX	3.78	P-170EX
J-180EX	1,410.0	True	2,000.00	4,000.00	20.0	96.6	J-1010EX	2.87	P-240EX
J-190EX	1,395.0	True	2,000.00	4,000.00	20.0	93.1	J-1010EX	4.18	P-180EX
J-200EX	1,385.0	True	2,000.00	4,000.00	20.0	96.2	J-1010EX	3.36	P-410EX
J-220EX	1,480.0	True	2,000.00	4,000.00	20.0	62.3	J-1440EX	3.61	P-6226
J-230EX	1,475.0	True	2,000.00	4,000.00	20.0	64.5	J-1010EX	3.72	P-6226
J-250EX	1,452.0	True	4,015.60	5,015.60	20.0	76.2	J-1010EX	3.41	P-240EX
J-260EX	1,453.0	True	4,036.40	5,036.40	20.0	74.3	J-1010EX	4.71	P-5780
J-270EX	1,429.0	True	2,000.00	4,000.00	20.0	86.1	J-1010EX	3.22	P-240EX
J-280EX	1,460.0	True	2,000.00	4,000.00	20.0	72.2	J-1010EX	3.22	P-240EX
J-300EX	1,392.0	True	4,035.40	5,035.40	20.0	97.1	J-1010EX	3.55	P-240EX
J-320EX	1,422.0	True	2,000.00	4,000.00	20.0	89.0	J-1010EX	3.21	P-240EX
J-330EX	1,455.0	True	2,000.00	4,000.00	20.0	73.2	J-1010EX	3.26	P-240EX
J-340EX	1,440.0	True	2,000.00	4,000.00	20.0	81.1	J-1010EX	3.25	P-240EX
J-360EX	1,400.0	True	5,375.00	8,375.00	20.0	83.5	J-1010EX	5.52	P-1950EX
J-550EX	1,425.0	True	2,000.00	4,000.00	20.0	87.6	J-1010EX	3.25	P-240EX
J-590EX	1,413.0	True	4,000.00	5,000.00	20.0	84.6	J-1010EX	4.26	P-1060EX
J-920EX	1,434.0	True	2,000.00	4,000.00	20.0	83.8	J-1010EX	3.26	P-240EX
J-960EX	1,402.0	True	2,000.00	4,000.00	20.0	91.1	J-1010EX	4.10	P-3970EX
J-970EX	1,397.0	True	2,000.00	4,000.00	20.0	93.6	J-1010EX	4.33	P-1940EX
J-1000EX	1,455.0	True	2,000.00	4,000.00	20.0	76.3	J-1010EX	2.86	P-240EX
J-1010EX	1,485.0	True	2,000.00	4,000.00	20.0	63.4	J-1310EX	2.84	P-240EX
J-1020EX	1,425.0	True	2,000.00	4,000.00	20.0	82.9	J-1010EX	3.35	P-240EX
J-1030EX	1,480.0	True	2,000.00	4,000.00	20.0	66.6	J-1010EX	2.83	P-240EX
J-1050EX	1,445.0	True	2,000.00	4,000.00	20.0	77.5	J-1010EX	3.42	P-4720EX
J-1120EX	1,456.0	True	2,000.00	4,000.00	20.0	74.1	J-1010EX	4.96	P-6226
J-1130EX	1,445.0	True	4,407.00	6,407.00	20.0	70.6	J-1010EX	7.14	P-210EX
J-1160EX	1,445.0	True	2,000.00	4,000.00	20.0	59.3	J-1010EX	11.35	P-3030EX
J-1170EX	1,470.0	True	2,000.00	4,000.00	20.0	69.7	J-1010EX	2.85	P-240EX
J-1180EX	1,440.0	True	2,000.00	4,000.00	20.0	74.1	J-1010EX	5.49	P-3080EX
J-1190EX	1,420.0	True	2,000.00	4,000.00	20.0	84.1	J-1010EX	3.83	P-3150EX
J-1200EX	1,445.0	True	2,000.00	4,000.00	20.0	45.6	J-1370EX	11.35	P-3060EX
J-1210EX	1,455.0	True	2,000.00	3,750.62	20.0	42.9	J-1300EX	12.00	P-3180EX
J-1220EX	1,475.0	True	2,000.00	4,000.00	20.0	67.9	J-1010EX	2.83	P-240EX
J-1230EX	1,460.0	True	2,000.00	4,000.00	20.0	69.3	J-1010EX	3.39	P-2665EX
J-1235EX	1,440.0	True	2,000.00	4,000.00	20.0	80.0	J-1010EX	3.29	P-240EX
J-1240EX	1,455.0	True	2,000.00	4,000.00	20.0	72.8	J-1010EX	3.28	P-240EX
J-1280	1,410.0	True	2,000.00	4,000.00	20.0	94.5	J-1010EX	3.16	P-240EX
J-1290EX	1,480.0	True	2,000.00	4,000.00	20.0	65.7	J-1010EX	2.83	P-240EX
J-1300EX	1,465.0	True	2,000.00	3,750.62	20.0	44.2	J-1350EX	12.00	P-3180EX
J-1310EX	1,480.0	True	2,000.00	4,000.00	20.0	65.6	J-1010EX	2.83	P-240EX
J-1330EX	1,465.0	True	2,000.00	4,000.00	20.0	65.3	J-1010EX	6.75	P-2950
J-1340EX	1,450.0	True	2,000.00	4,000.00	20.0	70.3	J-1010EX	7.36	P-2970EX
J-1350EX	1,465.0	True	2,000.00	3,663.84	20.0	48.2	J-1300EX	12.00	P-3180EX
J-1360EX	1,445.0	True	2,000.00	4,000.00	20.0	65.6	J-1010EX	7.54	P-3020EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow, Served by DWGWF (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1370EX	1,430.0	True	2,000.00	4,000.00	20.0	62.0	J-1200EX	8.65	P-3130EX
J-1380EX	1,450.0	True	2,000.00	4,000.00	20.0	70.3	J-1010EX	6.71	P-3080EX
J-1390EX	1,430.0	True	2,000.00	4,000.00	20.0	75.5	J-1010EX	6.73	P-3100EX
J-1400EX	1,430.0	True	2,000.00	4,000.00	20.0	71.7	J-1010EX	7.71	P-3110EX
J-1410	1,458.0	True	2,000.00	4,000.00	20.0	74.6	J-1010EX	3.19	P-240EX
J-1410EX	1,420.0	True	2,000.00	4,000.00	20.0	84.4	J-1010EX	3.59	P-3140EX
J-1420EX	1,460.0	True	2,000.00	4,000.00	20.0	72.7	J-1010EX	4.73	P-6226
J-1430EX	1,455.0	True	2,000.00	4,000.00	20.0	71.6	J-1010EX	5.58	P-3250EX
J-1440EX	1,478.0	True	2,000.00	4,000.00	20.0	63.3	J-220EX	3.74	P-6226
J-1680EX	1,401.0	True	4,000.00	5,000.00	20.0	88.7	J-1010EX	4.54	P-3970EX
J-1990EX	1,447.0	True	2,052.20	4,052.20	20.0	76.8	J-1010EX	3.88	P-4720EX
J-2000EX	1,442.0	True	2,000.00	4,000.00	20.0	79.0	J-1010EX	3.30	P-240EX
J-2010EX	1,419.0	True	2,000.00	4,000.00	20.0	90.4	J-1010EX	3.18	P-240EX
J-2040EX	1,427.0	True	2,000.00	4,000.00	20.0	86.9	J-1010EX	3.22	P-240EX
J-2120EX	1,453.0	True	2,000.00	4,000.00	20.0	73.8	J-1010EX	5.51	P-240EX
J-2140EX	1,450.0	True	2,407.00	4,407.00	20.0	73.8	J-1010EX	6.11	P-210EX
J-2295	1,415.0	True	2,000.00	4,000.00	20.0	89.1	J-1010EX	4.58	P-DU9-020
J-2340EX	1,434.0	True	4,038.20	6,038.20	20.0	75.8	J-1010EX	5.23	P-210EX
J-2353	1,456.0	True	2,000.00	4,000.00	20.0	75.1	J-1010EX	3.26	P-240EX
J-2361	1,456.9	True	2,000.00	4,000.00	20.0	74.8	J-1010EX	3.26	P-240EX
J-2364	1,457.4	True	2,000.00	4,000.00	20.0	74.2	J-1010EX	5.84	P-6226
J-DU2-020	1,411.5	True	2,000.00	4,000.00	20.0	90.0	J-1010EX	3.64	P-240EX
J-DU2-030	1,408.0	True	4,000.00	6,346.24	20.0	72.6	J-1010EX	10.00	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	5,107.60	20.0	89.4	J-1010EX	4.21	P-DU3S-120
J-DU3-4-020	1,402.0	True	4,107.60	5,107.60	20.0	94.3	J-1010EX	3.60	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	5,144.40	20.0	98.4	J-1010EX	3.60	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	4,167.80	20.0	92.9	J-1010EX	6.62	P-DU3-4-010B
J-DU3-4-040	1,403.0	True	4,071.60	5,071.60	20.0	94.0	J-1010EX	3.60	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	4,149.40	20.0	87.2	J-1010EX	7.72	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	4,000.00	20.0	88.0	J-1010EX	4.55	P-DU-3-4-130
J-DU3-4-070	1,404.0	True	2,040.60	4,040.60	20.0	87.0	J-1010EX	6.23	P-DU-3-4-080
J-DU3-4-080	1,400.0	True	4,026.20	5,026.20	20.0	85.0	J-1010EX	8.44	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	5,070.20	20.0	95.6	J-1010EX	4.54	P-1640EX
J-DU3-4-100	1,391.0	True	4,090.80	5,090.80	20.0	98.7	J-1010EX	3.61	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	5,040.60	20.0	94.8	J-1010EX	4.59	P-1970EX
J-DU3-4-120	1,393.0	True	4,000.00	5,000.00	20.0	95.1	J-1010EX	3.76	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	5,049.40	20.0	93.7	J-1010EX	4.25	P-DU-3-4-110
J-DU3-4-140	1,403.0	True	4,068.80	5,068.80	20.0	90.8	J-1010EX	3.75	P-240EX
J-DU3-4-150	1,407.0	True	2,059.60	4,059.60	20.0	87.9	J-1010EX	6.20	P-DU-3-4-130
J-DU3-4-160	1,406.0	True	2,029.80	4,029.80	20.0	91.5	J-1010EX	3.93	P-DU3-4-180
J-DU3-4-170	1,410.0	True	2,169.80	4,169.80	20.0	90.9	J-1010EX	3.61	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	4,046.60	20.0	88.7	J-1010EX	3.45	P-DU-3S-130
J-DU3-4-210	1,406.0	True	2,188.20	4,188.20	20.0	71.4	J-1010EX	10.37	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,380.18	20.0	85.0	J-1010EX	12.00	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,732.45	20.0	55.2	J-1010EX	12.00	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	3,158.60	20.0	44.1	J-1010EX	12.00	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	3,396.78	20.0	67.2	J-1010EX	12.00	P-DU3S-050
J-DU3S-050	1,404.0	True	2,024.20	3,038.03	20.0	49.1	J-DU3S-060	12.00	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,836.51	20.0	47.1	J-1010EX	12.00	P-DU3S-010
J-DU3S-070	1,417.0	True	2,014.00	2,590.66	20.0	64.6	J-1010EX	12.00	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	5,141.20	20.0	95.0	J-1010EX	3.95	P-DU3S-100

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow, Served by DWGWF (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU5N-010	1,436.0	True	4,059.20	5,059.20	20.0	76.3	J-1010EX	5.05	P-DU6-140
J-DU5N-020	1,424.5	True	4,153.40	5,153.40	20.0	81.2	J-1010EX	4.52	P-DU6-140
J-DU5N-030	1,426.0	True	4,040.20	5,040.20	20.0	80.6	J-1010EX	4.40	P-DU6-140
J-DU5N-040	1,414.0	True	4,000.00	5,000.00	20.0	87.4	J-1010EX	3.90	P-210EX
J-DU5N-050	1,414.0	True	5,375.00	6,375.00	20.0	87.1	J-1010EX	3.95	P-210EX
J-DU5N-060	1,417.0	True	4,000.00	5,000.00	20.0	85.4	J-1010EX	4.05	P-210EX
J-DU5N-070	1,439.5	True	2,969.00	4,969.00	20.0	73.9	J-1010EX	6.20	P-DU5N-110
J-DU5N-080	1,427.3	True	2,969.00	4,969.00	20.0	79.3	J-1010EX	7.31	P-DU5N-080
J-DU6-010	1,459.0	True	2,000.00	4,000.00	20.0	65.3	J-1010EX	6.30	P-DU6-010
J-DU6-020	1,453.0	True	4,694.40	7,694.40	20.0	69.7	J-1010EX	8.42	P-DU6-020
J-DU6-050	1,448.0	True	4,000.00	5,000.00	20.0	66.3	J-1010EX	8.52	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,694.40	20.0	72.3	J-1010EX	7.86	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	5,171.60	20.0	73.7	J-1010EX	5.69	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	3,690.28	20.0	45.9	J-1010EX	12.00	P-DU6-150
J-DU6-100	1,439.0	True	4,108.40	5,108.40	20.0	75.2	J-1010EX	5.25	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	4,098.20	20.0	75.4	J-1010EX	6.85	P-DU6-270
J-DU6-120	1,422.0	True	2,100.60	4,100.60	20.0	84.1	J-1010EX	3.76	P-DU6-130
J-DU6-130	1,416.0	True	2,082.20	4,082.20	20.0	88.7	J-1010EX	3.56	P-240EX
J-DU6-140	1,417.0	True	4,132.00	5,132.00	20.0	87.8	J-1010EX	4.00	P-DU6-220
J-DU6-150	1,427.0	True	2,084.60	4,084.60	20.0	81.9	J-1010EX	6.34	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	3,776.91	20.0	63.1	J-1010EX	12.00	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	4,050.60	20.0	88.7	J-1010EX	3.54	P-240EX
J-DU7-010	1,415.0	True	2,004.80	4,004.80	20.0	89.8	J-1010EX	3.38	P-240EX
J-DU7-020	1,425.0	True	2,046.60	4,046.60	20.0	80.1	J-1010EX	6.14	P-DU7-010
J-DU7-030	1,416.0	True	2,125.00	4,125.00	20.0	83.1	J-1010EX	6.77	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	5,037.60	20.0	91.7	J-1010EX	3.60	P-240EX
J-DU7-050	1,416.0	True	4,038.60	5,038.60	20.0	89.2	J-1010EX	3.59	P-240EX
J-DU7-060	1,423.0	True	2,022.20	4,022.20	20.0	87.0	J-1010EX	3.42	P-240EX
J-DU7-070	1,430.0	True	2,000.00	4,000.00	20.0	84.2	J-1010EX	3.40	P-240EX
J-DU7-080	1,434.0	True	2,081.00	4,081.00	20.0	82.8	J-1010EX	3.37	P-240EX
J-DU7-090	1,437.0	True	2,000.00	4,000.00	20.0	82.7	J-1010EX	3.27	P-240EX
J-DU7-100	1,435.0	True	2,057.80	4,057.80	20.0	81.8	J-1010EX	4.59	P-DU7-090
J-DU7-110	1,435.0	True	2,057.60	4,057.60	20.0	81.5	J-1010EX	3.35	P-240EX
J-DU7-120	1,420.0	True	2,000.00	4,000.00	20.0	88.3	J-1010EX	3.38	P-240EX
J-DU7-130	1,420.0	True	4,003.60	5,003.60	20.0	87.3	J-1010EX	3.58	P-DU7-130
J-DU7-140	1,425.0	True	4,070.00	5,070.00	20.0	84.9	J-1010EX	3.55	P-240EX
J-DU7-150	1,419.0	True	2,075.60	4,075.60	20.0	88.3	J-1010EX	3.42	P-240EX
J-DU7-160	1,435.0	True	2,048.00	4,048.00	20.0	77.1	J-1010EX	5.88	P-DU7-170
J-DU7-170	1,432.0	True	2,021.40	4,021.40	20.0	80.2	J-1010EX	5.32	P-DU7-190
J-DU7-180	1,433.0	True	2,037.40	4,037.40	20.0	80.0	J-1010EX	4.63	P-DU7-190
J-DU7-190	1,437.0	True	2,060.20	4,060.20	20.0	76.3	J-1010EX	6.41	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	4,101.40	20.0	76.8	J-1010EX	6.74	P-DU7-240
J-DU8-010	1,420.0	True	2,000.00	4,000.00	20.0	87.7	J-1010EX	4.20	P-DU9-020
J-DU8-020	1,419.5	True	2,000.00	4,000.00	20.0	87.6	J-1010EX	3.35	P-240EX
J-DU8-030	1,421.0	True	2,000.00	4,000.00	20.0	86.6	J-1010EX	3.63	P-DU8-060
J-DU8-040	1,418.0	True	2,013.40	4,013.40	20.0	88.3	J-1010EX	4.29	P-DU8-060
J-DU8-050	1,422.0	True	2,000.00	4,000.00	20.0	87.0	J-1010EX	4.69	P-DU8-060
J-DU8-060	1,420.0	True	2,018.00	4,018.00	20.0	74.7	J-1010EX	11.10	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,950.10	20.0	75.9	J-1010EX	12.00	P-DU8-080
J-DU8-080	1,422.0	True	2,008.80	4,008.80	20.0	79.1	J-1010EX	6.92	P-DU8-110
J-DU8-090	1,424.0	True	2,022.00	4,022.00	20.0	67.2	J-1010EX	9.50	P-DU8-150

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow, Served by DWGWF (FBO Condition)

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-100	1,425.0	True	2,018.40	4,018.40	20.0	81.8	J-1010EX	7.50	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	4,066.00	20.0	48.4	J-DU8-120	11.03	P-DU8-130
J-DU8-120	1,431.0	True	2,034.20	3,366.37	20.0	20.0	J-1010EX	11.81	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	4,042.00	20.0	54.4	J-DU8-120	11.99	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	4,039.40	20.0	86.5	J-1010EX	7.20	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,476.08	20.0	68.1	J-1010EX	12.00	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	5,011.44	20.0	54.7	J-DU9-040	12.00	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	3,617.31	20.0	50.3	J-1010EX	12.00	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	3,366.25	20.0	63.2	J-1010EX	12.00	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,717.17	20.0	76.0	J-1010EX	12.00	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	3,804.07	20.0	34.4	J-DU9-080	12.00	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	3,294.96	20.0	48.3	J-1010EX	12.00	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	4,000.00	20.0	89.8	J-1010EX	5.04	P-DU9-020
J-DU9-100	1,414.0	True	2,000.00	4,000.00	20.0	89.3	J-1010EX	4.44	P-DU9-020

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-100EX	1,406.0	True	2,000.00	2,188.20	20.0	92.6	J-1010EX	3.80	P-240EX
J-110EX	1,418.0	True	4,038.20	4,039.20	20.0	85.1	J-1010EX	4.34	P-240EX
J-120EX	1,462.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	3.28	P-240EX
J-135EX	1,460.0	True	2,000.00	2,188.20	20.0	73.1	J-1010EX	3.94	P-6226
J-150EX	1,472.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	3.67	P-240EX
J-160EX	1,435.0	True	2,000.00	2,188.20	20.0	79.0	J-1010EX	3.70	P-240EX
J-170EX	1,430.0	True	2,000.00	2,188.20	20.0	81.2	J-1010EX	3.70	P-240EX
J-180EX	1,410.0	True	2,000.00	2,188.20	20.0	91.7	J-1010EX	3.70	P-240EX
J-190EX	1,395.0	True	2,000.00	2,188.20	20.0	95.8	J-1010EX	3.71	P-240EX
J-200EX	1,385.0	True	2,000.00	2,188.20	20.0	100.0	J-1010EX	3.72	P-240EX
J-220EX	1,480.0	True	2,000.00	2,188.20	20.0	63.9	J-1010EX	3.60	P-240EX
J-230EX	1,475.0	True	2,000.00	2,188.20	20.0	65.6	J-1010EX	3.68	P-240EX
J-250EX	1,452.0	True	4,015.60	4,031.21	20.0	74.7	J-1010EX	4.00	P-240EX
J-260EX	1,453.0	True	4,036.40	4,072.80	20.0	73.6	J-1010EX	4.01	P-240EX
J-270EX	1,429.0	True	2,000.00	2,188.20	20.0	84.2	J-1010EX	3.69	P-240EX
J-280EX	1,460.0	True	2,000.00	2,188.20	20.0	70.7	J-1010EX	3.69	P-240EX
J-300EX	1,392.0	True	4,035.40	4,069.81	20.0	96.0	J-1010EX	4.12	P-240EX
J-320EX	1,422.0	True	2,000.00	2,188.20	20.0	87.1	J-1010EX	3.69	P-240EX
J-330EX	1,455.0	True	2,000.00	2,188.20	20.0	73.2	J-1010EX	3.68	P-240EX
J-340EX	1,440.0	True	2,000.00	2,188.20	20.0	79.7	J-1010EX	3.68	P-240EX
J-360EX	1,400.0	True	5,375.00	6,750.00	20.0	86.4	J-1010EX	4.54	P-240EX
J-550EX	1,425.0	True	2,000.00	2,188.20	20.0	86.1	J-1010EX	3.69	P-240EX
J-590EX	1,413.0	True	4,000.00	4,001.00	20.0	85.5	J-1010EX	4.25	P-240EX
J-920EX	1,434.0	True	2,000.00	2,188.20	20.0	82.5	J-1010EX	3.68	P-240EX
J-960EX	1,402.0	True	2,000.00	2,188.20	20.0	93.5	J-1010EX	3.80	P-240EX
J-970EX	1,397.0	True	2,000.00	2,188.20	20.0	95.7	J-1010EX	3.79	P-240EX
J-1000EX	1,455.0	True	2,000.00	2,188.20	20.0	76.9	J-1010EX	3.29	P-240EX
J-1010EX	1,485.0	True	2,000.00	2,188.20	20.0	64.0	J-220EX	3.28	P-240EX
J-1020EX	1,425.0	True	2,000.00	2,188.20	20.0	85.6	J-1010EX	3.59	P-240EX
J-1030EX	1,480.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	3.28	P-240EX
J-1050EX	1,445.0	True	2,000.00	2,188.20	20.0	77.7	J-1010EX	3.67	P-240EX
J-1120EX	1,456.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	3.97	P-6226
J-1130EX	1,445.0	True	4,407.00	4,814.00	20.0	72.9	J-1010EX	6.02	P-210EX
J-1160EX	1,445.0	True	2,000.00	2,188.20	20.0	74.1	J-1010EX	6.21	P-3030EX
J-1170EX	1,470.0	True	2,000.00	2,188.20	20.0	70.4	J-1010EX	3.29	P-240EX
J-1180EX	1,440.0	True	2,000.00	2,188.20	20.0	79.2	J-1010EX	3.66	P-3080EX
J-1190EX	1,420.0	True	2,000.00	2,188.20	20.0	87.0	J-1010EX	3.72	P-240EX
J-1200EX	1,445.0	True	2,000.00	2,188.20	20.0	68.6	J-1010EX	6.21	P-3060EX
J-1210EX	1,455.0	True	2,000.00	2,188.20	20.0	64.5	J-1300EX	7.02	P-3180EX
J-1220EX	1,475.0	True	2,000.00	2,188.20	20.0	68.3	J-1010EX	3.28	P-240EX
J-1230EX	1,460.0	True	2,000.00	2,188.20	20.0	70.2	J-1010EX	3.68	P-240EX
J-1235EX	1,440.0	True	2,000.00	2,188.20	20.0	79.9	J-1010EX	3.67	P-240EX
J-1240EX	1,455.0	True	2,000.00	2,188.20	20.0	73.3	J-1010EX	3.67	P-240EX
J-1280	1,410.0	True	2,000.00	2,188.20	20.0	92.1	J-1010EX	3.70	P-240EX
J-1290EX	1,480.0	True	2,000.00	2,188.20	20.0	66.2	J-1010EX	3.28	P-240EX
J-1300EX	1,465.0	True	2,000.00	2,188.20	20.0	62.3	J-1350EX	7.02	P-3180EX
J-1310EX	1,480.0	True	2,000.00	2,188.20	20.0	66.1	J-1010EX	3.28	P-240EX
J-1330EX	1,465.0	True	2,000.00	2,188.20	20.0	70.3	J-1010EX	3.72	P-2950
J-1340EX	1,450.0	True	2,000.00	2,188.20	20.0	76.3	J-1010EX	4.11	P-2970EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1350EX	1,465.0	True	2,000.00	2,188.20	20.0	63.3	J-1300EX	7.18	P-3180EX
J-1360EX	1,445.0	True	2,000.00	2,188.20	20.0	76.1	J-1010EX	4.20	P-3020EX
J-1370EX	1,430.0	True	2,000.00	2,188.20	20.0	78.4	J-1010EX	4.63	P-3130EX
J-1380EX	1,450.0	True	2,000.00	2,188.20	20.0	75.4	J-1010EX	4.32	P-3080EX
J-1390EX	1,430.0	True	2,000.00	2,188.20	20.0	82.7	J-1010EX	3.61	P-3100EX
J-1400EX	1,430.0	True	2,000.00	2,188.20	20.0	81.4	J-1010EX	4.22	P-3110EX
J-1410	1,458.0	True	2,000.00	2,188.20	20.0	74.2	J-1010EX	3.55	P-240EX
J-1410EX	1,420.0	True	2,000.00	2,188.20	20.0	87.3	J-1010EX	3.67	P-240EX
J-1420EX	1,460.0	True	2,000.00	2,188.20	20.0	72.8	J-1010EX	4.42	P-6226
J-1430EX	1,455.0	True	2,000.00	2,188.20	20.0	73.8	J-1010EX	3.95	P-6226
J-1440EX	1,478.0	True	2,000.00	2,188.20	20.0	64.6	J-1010EX	3.66	P-240EX
J-1680EX	1,401.0	True	4,000.00	4,001.00	20.0	89.8	J-1010EX	4.22	P-240EX
J-1990EX	1,447.0	True	2,052.20	2,240.40	20.0	77.0	J-1010EX	3.67	P-240EX
J-2000EX	1,442.0	True	2,000.00	2,188.20	20.0	79.0	J-1010EX	3.67	P-240EX
J-2010EX	1,419.0	True	2,000.00	2,188.20	20.0	88.3	J-1010EX	3.70	P-240EX
J-2040EX	1,427.0	True	2,000.00	2,188.20	20.0	85.0	J-1010EX	3.69	P-240EX
J-2120EX	1,453.0	True	2,000.00	2,188.20	20.0	74.6	J-1010EX	4.87	P-240EX
J-2140EX	1,450.0	True	2,407.00	2,814.00	0.0	74.7	J-1010EX	5.17	P-210EX
J-2295	1,415.0	True	2,000.00	2,188.20	20.0	89.3	J-1010EX	3.71	P-240EX
J-2340EX	1,434.0	True	4,038.20	4,076.41	20.0	78.0	J-1010EX	4.52	P-240EX
J-2353	1,456.0	True	2,000.00	2,188.20	20.0	74.6	J-1010EX	3.62	P-240EX
J-2361	1,456.9	True	2,000.00	2,188.20	20.0	74.4	J-1010EX	3.61	P-240EX
J-2364	1,457.4	True	2,000.00	2,188.20	20.0	73.8	J-1010EX	4.88	P-6226
J-DU2-020	1,411.5	True	2,000.00	2,188.20	20.0	90.5	J-1010EX	3.80	P-240EX
J-DU2-030	1,408.0	True	4,000.00	4,001.00	20.0	82.8	J-1010EX	6.20	P-DU2-070
J-DU3-4-010	1,405.0	True	4,107.60	4,215.20	20.0	89.0	J-1010EX	4.13	P-240EX
J-DU3-4-020	1,402.0	True	4,107.60	4,215.20	20.0	92.9	J-1010EX	4.15	P-240EX
J-DU3-4-030	1,392.0	True	4,144.40	4,288.80	20.0	97.1	J-1010EX	4.16	P-240EX
J-DU3-4-030A	1,394.5	True	2,167.80	2,356.00	20.0	96.3	J-1010EX	3.74	P-240EX
J-DU3-4-040	1,403.0	True	4,071.60	4,143.20	20.0	92.7	J-1010EX	4.14	P-240EX
J-DU3-4-050	1,408.0	True	2,149.40	2,337.60	20.0	90.6	J-1010EX	4.44	P-DU3-4-060
J-DU3-4-060	1,408.0	True	2,000.00	2,188.20	20.0	90.8	J-1010EX	3.76	P-240EX
J-DU3-4-070	1,404.0	True	2,040.60	2,228.80	20.0	91.6	J-1010EX	3.76	P-240EX
J-DU3-4-080	1,400.0	True	4,026.20	4,052.40	20.0	87.2	J-1010EX	6.81	P-DU-3-4-100
J-DU3-4-090	1,393.0	True	4,070.20	4,140.40	20.0	95.2	J-1010EX	4.17	P-240EX
J-DU3-4-100	1,391.0	True	4,090.80	4,181.60	20.0	97.4	J-1010EX	4.15	P-240EX
J-DU3-4-110	1,393.0	True	4,040.60	4,081.20	20.0	94.7	J-1010EX	4.18	P-240EX
J-DU3-4-120	1,393.0	True	4,000.00	4,001.00	20.0	95.0	J-1010EX	4.18	P-240EX
J-DU3-4-130	1,395.0	True	4,049.40	4,098.80	20.0	93.7	J-1010EX	4.20	P-240EX
J-DU3-4-140	1,403.0	True	4,068.80	4,137.60	20.0	90.7	J-1010EX	4.20	P-240EX
J-DU3-4-150	1,407.0	True	2,059.60	2,247.80	20.0	91.1	J-1010EX	3.77	P-240EX
J-DU3-4-160	1,406.0	True	2,029.80	2,218.00	20.0	92.6	J-1010EX	3.78	P-240EX
J-DU3-4-170	1,410.0	True	2,169.80	2,358.00	20.0	91.2	J-1010EX	3.79	P-240EX
J-DU3-4-200	1,412.5	True	2,046.60	2,234.80	20.0	89.8	J-1010EX	3.73	P-240EX
J-DU3-4-210	1,406.0	True	2,188.20	2,376.40	20.0	85.6	J-1010EX	5.88	P-DU3-4-200
J-DU3S-010	1,412.0	True	2,020.40	2,208.60	20.0	84.2	J-1010EX	11.14	P-DU3S-010
J-DU3S-020	1,407.0	True	2,022.00	2,210.20	20.0	66.3	J-1010EX	9.80	P-DU3S-010
J-DU3S-030	1,401.0	True	2,030.00	2,218.20	20.0	68.0	J-1010EX	8.59	P-DU3S-010
J-DU3S-040	1,399.0	True	2,022.00	2,210.20	20.0	82.5	J-1010EX	7.88	P-DU3S-050

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU3S-050	1,404.0	True	2,024.20	2,212.40	20.0	68.2	J-1010EX	8.75	P-DU3S-060
J-DU3S-060	1,410.0	True	2,023.60	2,211.80	20.0	62.5	J-1010EX	9.47	P-DU3S-010
J-DU3S-070	1,417.0	True	2,014.00	2,202.20	20.0	69.5	J-1010EX	10.22	P-DU3S-090
J-DU3S-080	1,396.0	True	4,141.20	4,282.40	20.0	93.9	J-1010EX	4.15	P-240EX
J-DU5N-010	1,436.0	True	4,059.20	4,118.40	20.0	76.4	J-1010EX	4.59	P-DU6-140
J-DU5N-020	1,424.5	True	4,153.40	4,306.80	20.0	81.1	J-1010EX	4.26	P-240EX
J-DU5N-030	1,426.0	True	4,040.20	4,080.40	20.0	80.7	J-1010EX	4.25	P-240EX
J-DU5N-040	1,414.0	True	4,000.00	4,001.00	20.0	87.0	J-1010EX	4.26	P-240EX
J-DU5N-050	1,414.0	True	5,375.00	6,750.00	20.0	84.7	J-1010EX	4.61	P-240EX
J-DU5N-060	1,417.0	True	4,000.00	4,001.00	20.0	85.3	J-1010EX	4.30	P-240EX
J-DU5N-070	1,439.5	True	2,969.00	3,938.00	0.0	75.0	J-1010EX	4.98	P-DU5N-110
J-DU5N-080	1,427.3	True	2,969.00	3,938.00	0.0	80.3	J-1010EX	5.77	P-DU5N-080
J-DU6-010	1,459.0	True	2,000.00	2,188.20	20.0	70.4	J-1010EX	4.56	P-240EX
J-DU6-020	1,453.0	True	4,694.40	5,388.80	20.0	71.9	J-1010EX	6.38	P-240EX
J-DU6-050	1,448.0	True	4,000.00	4,001.00	20.0	69.6	J-1010EX	6.85	P-DU6-080
J-DU6-060	1,458.0	True	4,694.40	5,388.80	20.0	71.6	J-1010EX	7.36	P-DU6-070
J-DU6-080	1,444.6	True	4,171.60	4,343.20	20.0	73.5	J-1010EX	5.27	P-DU6-130
J-DU6-090	1,439.0	True	2,000.00	2,188.20	20.0	66.6	J-1010EX	7.11	P-DU6-150
J-DU6-100	1,439.0	True	4,108.40	4,216.80	20.0	75.2	J-1010EX	4.77	P-DU6-140
J-DU6-110	1,432.0	True	2,098.20	2,286.40	20.0	79.7	J-1010EX	3.80	P-DU6-270
J-DU6-120	1,422.0	True	2,100.60	2,288.80	20.0	85.6	J-1010EX	3.78	P-240EX
J-DU6-130	1,416.0	True	2,082.20	2,270.40	20.0	88.8	J-1010EX	3.77	P-240EX
J-DU6-140	1,417.0	True	4,132.00	4,264.00	20.0	86.6	J-1010EX	4.19	P-240EX
J-DU6-150	1,427.0	True	2,084.60	2,272.80	20.0	83.7	J-1010EX	3.85	P-DU6-240
J-DU6-160	1,436.0	True	2,097.20	2,285.40	20.0	73.9	J-1010EX	7.34	P-DU6-260
J-DU6-170	1,416.5	True	2,050.60	2,238.80	20.0	88.7	J-1010EX	3.76	P-240EX
J-DU7-010	1,415.0	True	2,004.80	2,193.00	20.0	89.6	J-1010EX	3.72	P-240EX
J-DU7-020	1,425.0	True	2,046.60	2,234.80	20.0	83.4	J-1010EX	3.73	P-240EX
J-DU7-030	1,416.0	True	2,125.00	2,313.20	20.0	87.0	J-1010EX	3.80	P-DU7-030
J-DU7-040	1,409.0	True	4,037.60	4,075.20	20.0	90.4	J-1010EX	4.13	P-240EX
J-DU7-050	1,416.0	True	4,038.60	4,077.20	20.0	87.8	J-1010EX	4.13	P-240EX
J-DU7-060	1,423.0	True	2,022.20	2,210.40	20.0	86.5	J-1010EX	3.72	P-240EX
J-DU7-070	1,430.0	True	2,000.00	2,188.20	20.0	83.7	J-1010EX	3.71	P-240EX
J-DU7-080	1,434.0	True	2,081.00	2,269.20	20.0	82.3	J-1010EX	3.70	P-240EX
J-DU7-090	1,437.0	True	2,000.00	2,188.20	20.0	81.6	J-1010EX	3.67	P-240EX
J-DU7-100	1,435.0	True	2,057.80	2,246.00	20.0	81.6	J-1010EX	3.69	P-240EX
J-DU7-110	1,435.0	True	2,057.60	2,245.80	20.0	81.3	J-1010EX	3.71	P-240EX
J-DU7-120	1,420.0	True	2,000.00	2,188.20	20.0	87.7	J-1010EX	3.72	P-240EX
J-DU7-130	1,420.0	True	4,003.60	4,007.20	20.0	85.9	J-1010EX	4.10	P-240EX
J-DU7-140	1,425.0	True	4,070.00	4,140.00	20.0	83.5	J-1010EX	4.12	P-240EX
J-DU7-150	1,419.0	True	2,075.60	2,263.80	20.0	88.0	J-1010EX	3.73	P-240EX
J-DU7-160	1,435.0	True	2,048.00	2,236.20	20.0	79.9	J-1010EX	3.71	P-240EX
J-DU7-170	1,432.0	True	2,021.40	2,209.60	20.0	81.8	J-1010EX	3.71	P-240EX
J-DU7-180	1,433.0	True	2,037.40	2,225.60	20.0	81.5	J-1010EX	3.70	P-240EX
J-DU7-190	1,437.0	True	2,060.20	2,248.40	20.0	79.3	J-1010EX	3.85	P-DU7-210
J-DU7-200	1,432.0	True	2,101.40	2,289.60	20.0	80.5	J-1010EX	3.72	P-240EX
J-DU8-010	1,420.0	True	2,000.00	2,188.20	20.0	87.5	J-1010EX	3.71	P-240EX
J-DU8-020	1,419.5	True	2,000.00	2,188.20	20.0	87.7	J-1010EX	3.71	P-240EX
J-DU8-030	1,421.0	True	2,000.00	2,188.20	20.0	86.9	J-1010EX	3.71	P-240EX

Eastmark Master Water Report

Active Scenario: Max Day + Fire Flow - Served by SCAP (FBO Condition) - Actual Velocity

Fire Flow Node FlexTable: Fire Flow Report

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (Zone)	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-DU8-040	1,418.0	True	2,013.40	2,201.60	20.0	88.3	J-1010EX	3.70	P-240EX
J-DU8-050	1,422.0	True	2,000.00	2,188.20	20.0	86.8	J-1010EX	3.70	P-240EX
J-DU8-060	1,420.0	True	2,018.00	2,206.20	20.0	83.2	J-1010EX	6.13	P-DU8-070
J-DU8-070	1,420.0	True	2,030.80	2,219.00	20.0	79.9	J-1010EX	9.02	P-DU8-080
J-DU8-080	1,422.0	True	2,008.80	2,197.00	20.0	84.1	J-1010EX	3.95	P-DU8-100
J-DU8-090	1,424.0	True	2,022.00	2,210.20	20.0	79.5	J-1010EX	5.29	P-DU8-150
J-DU8-100	1,425.0	True	2,018.40	2,206.60	20.0	84.1	J-1010EX	4.27	P-DU8-100
J-DU8-110	1,430.0	True	2,066.00	2,254.20	20.0	71.4	J-1010EX	6.15	P-DU8-130
J-DU8-120	1,431.0	True	2,034.20	2,222.40	20.0	53.1	J-1010EX	7.80	P-DU8-180
J-DU8-130	1,427.0	True	2,042.00	2,230.20	20.0	74.3	J-1010EX	6.68	P-DU8-200
J-DU9-010	1,419.0	True	2,039.40	2,227.60	20.0	87.3	J-1010EX	4.22	P-DU9-020
J-DU9-020	1,415.0	True	4,071.60	4,143.20	20.0	68.7	J-1010EX	11.13	P-DU9-040
J-DU9-030	1,416.0	True	4,065.20	4,130.40	20.0	62.9	J-1010EX	9.94	P-DU9-050
J-DU9-040	1,416.0	True	2,015.60	2,203.80	20.0	72.9	J-1010EX	7.27	P-DU9-080
J-DU9-050	1,419.0	True	2,000.00	2,188.20	20.0	75.8	J-1010EX	8.12	P-DU9-140
J-DU9-060	1,422.0	True	2,062.80	2,251.00	20.0	77.8	J-1010EX	10.03	P-DU9-140
J-DU9-070	1,414.0	True	2,063.00	2,251.20	20.0	68.3	J-1010EX	7.41	P-DU9-140
J-DU9-080	1,419.0	True	2,077.00	2,265.20	20.0	67.2	J-1010EX	8.45	P-DU9-140
J-DU9-090	1,414.0	True	2,000.00	2,188.20	20.0	89.8	J-1010EX	3.71	P-240EX
J-DU9-100	1,414.0	True	2,000.00	2,188.20	20.0	89.7	J-1010EX	3.71	P-240EX

APPENDIX D

CITY OF MESA COMPASS DATA CENTER LETTER

mesa-az
WATER RESOURCES
mesaaz.gov

640 N Mesa Dr
PO Box 1466
Mesa, Arizona 85211-1466

November 6, 2017

14180 North Dallas Parkway, Suite 610
Dallas, TX 75254
Phone: 214-452-0354

Re: Water Report for Compass Data Center – Mesa – PHX II

Dear Mr. Chris Curtis:

Thank you for taking the time to meet with the City of Mesa to explain your plans for developing the property located at 4058 S. Signal Butte Road. It is our understanding that the Compass Data Center will not require water for cooling and that the Compass Data Center Team is committed to a sustainable non-water cooling system. The Water Basis of Design Report by Hilgart Wilson and dated October 30th reflects the low water demand. There is currently an existing 16-inch waterline located in Signal Butte Road adjacent to the property, which is sufficiently sized to meet the projected low water demand outlined in the Report. There is a planned 30-inch water transmission main in Signal Butte Road that is not required at this time based on the Compass Data Center's current demands. Should demands at the Compass Data Center increase above what is shown in the report, the City of Mesa would need to re-evaluate the requirement to extend the 30-inch waterline.

Utility service is provided subject to payment of applicable fees, rates and charges. Additional information can be found in the City's Terms and Conditions for the Sale of Utilities, and the Mesa City Code, including Title 5, Chapter 17, Title 8 Section 4, and Title 9 Section 8.

Please be advised that this letter does *not* serve as a reservation of capacity. Service connections are available on a first come first serve impartial and non-discriminatory basis. Although water service capacity for the proposed project is sufficient as of the date of this letter, the City's water service capacity may become inadequate to service this Project *if it is not timely connected*. The City of Mesa reserves all rights to exercise discretion before allowing the extension or increase of its water and/or wastewater system.

Sincerely,

Jesse Heywood

Jesse Heywood, P.E.

c: Beth Hughes-Ornelas

480.644.4444 (tel)
480.644.2768 (fax)

APPENDIX E

DEVELOPMENT UNITS 1, 2, AND 5W DEMANDS PER OLSSON ENGINEERS

Steven McKee

From: Daniel Matthews
Sent: Wednesday, January 20, 2021 7:49 AM
To: Steven McKee
Subject: FW: Eastmark - Coordination for Master Plan Updates for Project Huckleberry - A20-1829
Attachments: Eastmark Master Water Exhibit_Olsson.pdf; Eastmark Master Wastewater Exhibit_Olsson.pdf; 020-1829 Mesa_Vol Required 2021-01-15.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dan Matthews, PE
Principal

D: 602.335.8542
M: 602.341.8505
dmatthews@woodpatel.com
www.woodpatel.com

From: Josh Elledge [mailto:jelledge@olsson.com]
Sent: Friday, January 15, 2021 8:57 AM
To: Daniel Matthews
Cc: Cardell Andrews; eric.tune@brookfieldpropertiesdevelopment.com; christina.christian@brookfieldpropertiesdevelopment.com; 020-1829-A
Subject: RE: Eastmark - Coordination for Master Plan Updates for Project Huckleberry - A20-1829

Dan,

We had a pretty in-depth call with the City of Mesa yesterday morning and they have asked that we try and set-up a meeting with our office, your office, and the City to discuss water and sewer connection points before the Master Reports are finalized, as a few flows will trigger additional offsite improvements required for the Eastmark Development. If that works, I can try and coordinate with the City to determine a day and time that works best for everyone.

More specifically we are working with the following people at the City:

- Jessie Haywood
- Brian Draper
- Stephen Ganstrom

Below is a look at the proposed flow and peaking factors. Please note that this site will not operate like Apple, as we do not have onsite storage tanks to regulate the flow. You will also notice that the peaking factors get pretty low in the winter months, unlike Apple, as the outside air is used more to help with cooling.

- You can assume a linear ramp up based on:
    - 1/1/2021: No Demand
    - 7/1/2022: Demand shown on Phase 1

- 1/1/2024: Demand of Final Phase (full build out)

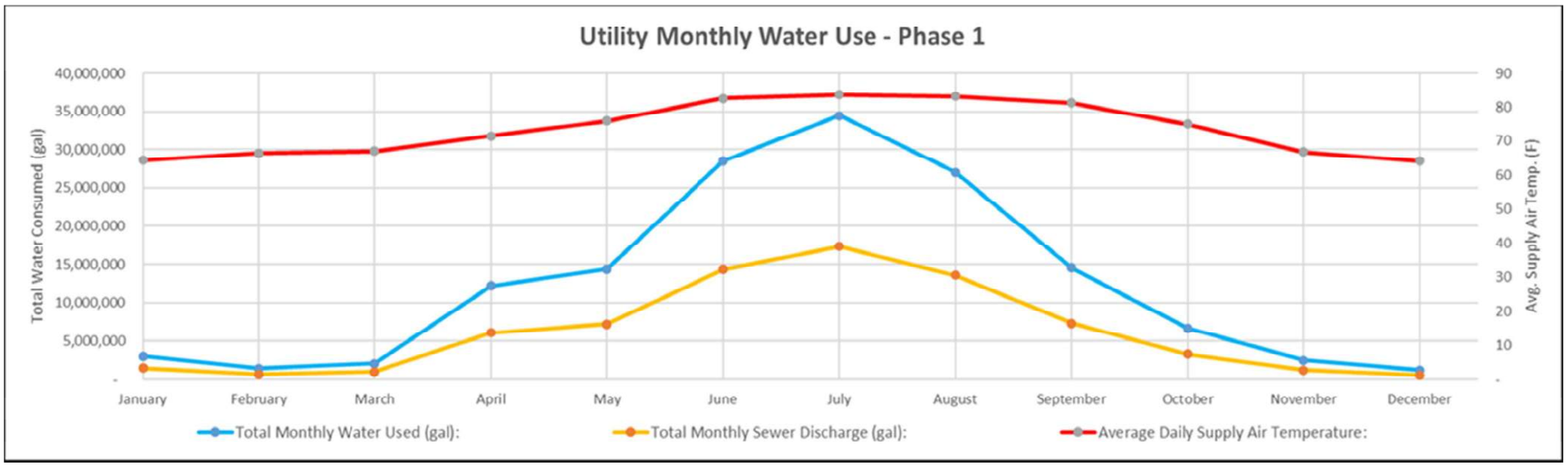
Phase 1 (7/1/2022)	Water	Sewer
Utility	148,132,298	74,066,149
Peak GPMo	34,683,887	17,354,093
Peak GPD	1,576,600	788,300
Peak GPH	105,224	52,612
Peak GPM	1,754	877
Max 48 Hour Use	2,991,740	1,495,870
Domestic Water		
GPY	3,650,400	3,650,400
GPD	14,040	14,040
Peak GPM	58	58

Final Phase (1/1/2024)	Water	Sewer
Utility	370,330,745	185,165,372
Peak GPMo	86,770,467	43,385,234
Peak GPD	3,941,501	1,970,750
Peak GPH	263,060	131,529
Peak GPM	4,384	2,192
Max 48 Hour Use	7,479,350	3,739,676
Domestic Water		
GPY	4,539,600	4,539,600
GPD	17,460	17,460
Peak GPM	72	72

- "Utility" is Gallons per year
- We use "Phases" rather than buildings. Phase 1 is the targeting 7/1/2022 to use the water shown. Final Phase targeted for 1/1/2024 is the total demand for the project. There will be a ramp between those phases but this will hopefully give you an idea of our growth projection for the entire site.
- Majority of the water use is for evaporative cooling. So these metrics are based on a typical weather year. The water usage is nonlinear. Summer is very high due to the heat. Winter is very low due to the cooler temperatures. The system also varies day to night due to temperature changes. You can follow the same principles of a cooling tower.
- Below is the monthly peaking factors where the numbers represent percentage of peak month volume. (i.e- So you would multiply these by 34.7 MG for Phase 1 and 86.8 MG for Phase 2)

	Monthly peaking factors:
January	0.09
February	0.04
March	0.06
April	0.35
May	0.42

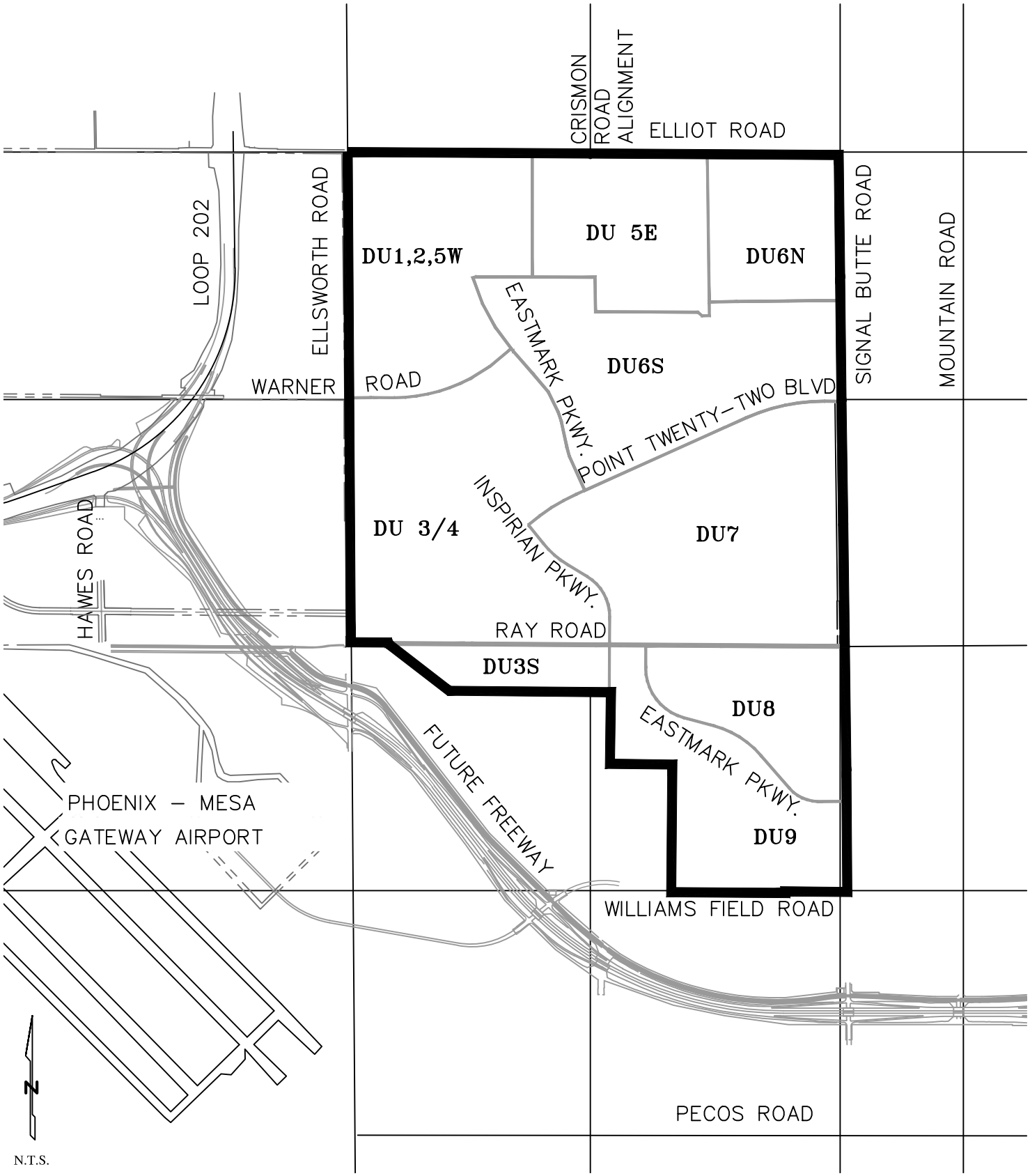
- Here is an estimate of the load profile for a typical year



	MONTHLY												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Total Monthly Water Used (gal):	3,047,372	1,421,699	2,085,337	12,177,693	14,393,932	28,486,000	34,455,907	27,053,935	14,564,812	6,696,260	2,517,884	1,231,468	148,132,298
Peak 24 hr Makeup / month	380,794	290,882	298,471	916,939	1,218,174	1,492,612	1,571,404	1,542,222	1,156,982	502,937	430,419	254,344	
Total Monthly Sewer Discharge (gal):	1,482,561	645,853	991,731	6,082,092	7,199,505	14,324,771	17,354,093	13,609,389	7,293,942	3,315,673	1,217,667	548,871	74,066,149
Average Daily Supply Air Temperature:	64	66	67	72	76	83	84	83	81	75	67	64	
Average Daily Water Used (gal):	98,302	50,775	67,269	405,923	464,320	949,533	1,111,481	872,708	485,494	216,008	83,929	39,725	
Average Daily Sewer Discharge (gal):	47,825	23,066	31,991	202,736	232,242	477,492	559,809	439,013	243,131	106,957	40,589	17,706	

EXHIBIT 1

VICINITY MAP



TOWNSHIP 1 SOUTH, RANGE 7 EAST
OF THE GILA AND SALT RIVER
MERIDIAN, MARICOPA COUNTY, ARIZONA

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NOT FOR CONSTRUCTION
OR RECORDING

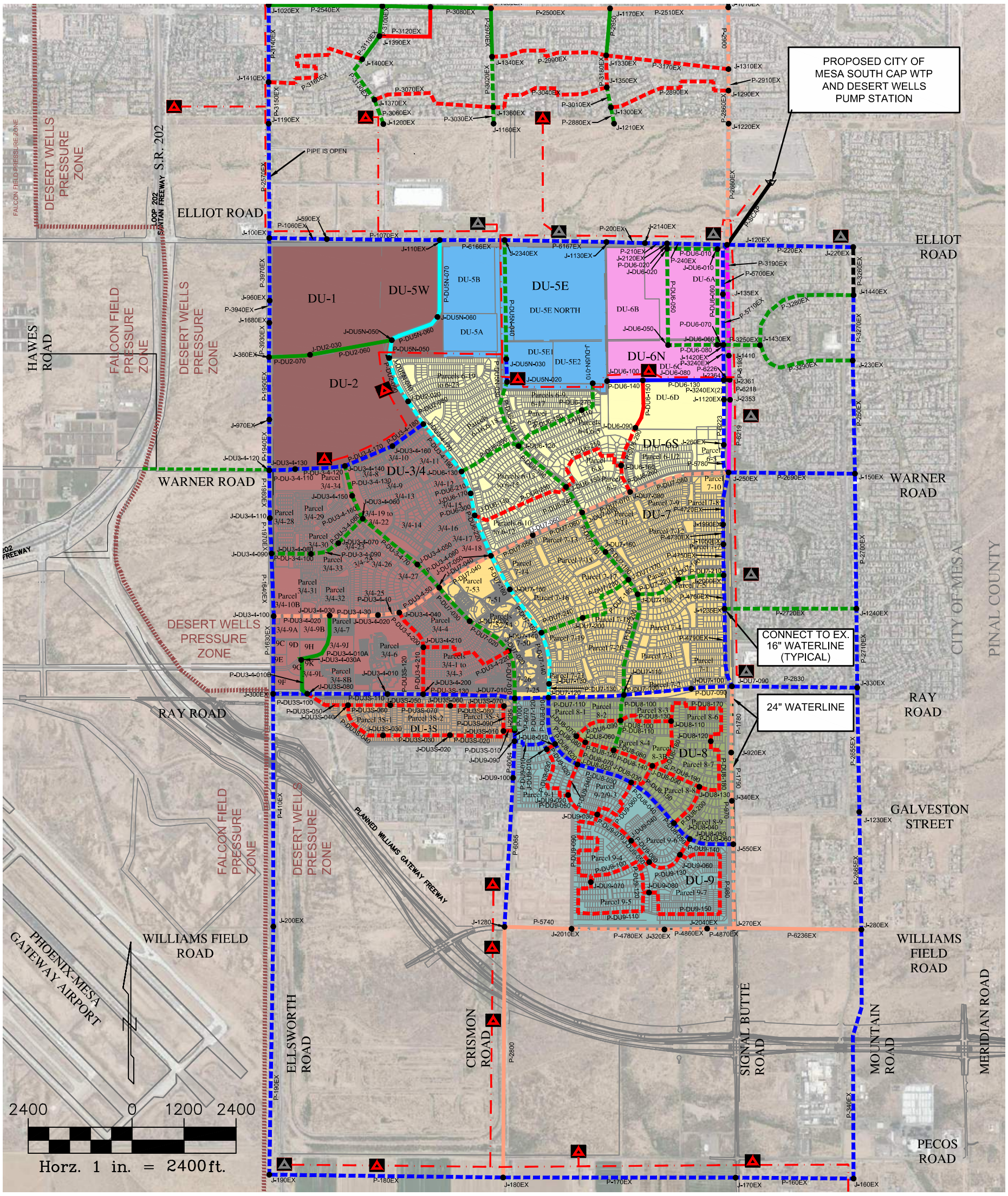
EXHIBIT 1: VICINITY MAP

EASTMARK
MESA, ARIZONA

WOOD PATEL

EXHIBIT 2

MASTER WATER EXHIBIT – INTERIM CONDITION
(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		

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

DU-XX DEVELOPMENT UNIT SUB-AREA

SITE BOUNDARY

PRESSURE ZONE BOUNDARY

EXHIBIT 2 - MASTER WATER EXHIBIT - INTERIM CONDITION SERVED BY SCAP

EASTMARK
MESA, ARIZONA

NOT FOR CONSTRUCTION OR RECORDING

WOOD PATEL

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EXHIBIT 3

MASTER WATER EXHIBIT – FULL BUILDOUT
(SERVED BY SCAP)

EXISTING CITY OF MESA SOUTH CAP WTP AND DESERT WELLS PUMP STATION

CONNECT TO EX. 16" WATERLINE (TYPICAL)

24" WATERLINE

PIPE IS OPEN

PLANNED WILLIAMS GATEWAY FREEWAY

DESERT WELLS PRESSURE ZONE

FALCON FIELD PRESSURE ZONE

ELLIOT ROAD

HAWES ROAD

WARNER ROAD

RAY ROAD

WILLIAMS FIELD ROAD

GALVESTON STREET

PECOS ROAD

ELLSWORTH ROAD

CRISMON ROAD

SIGNAL BUTTE ROAD

MOUNTAIN ROAD

MERIDIAN ROAD

LOOP 202 SANTAN FREEWAY S.R. 202

PHOENIX-MESA GATEWAY AIRPORT

CITY OF MESA

PINAL COUNTY

DU-1

DU-2

DU-3/4

DU-3S

DU-5W

DU-5A

DU-5B

DU-5E

DU-5E NORTH

DU-5E1

DU-5E2

DU-6A

DU-6B

DU-6N

DU-6D

DU-6S

DU-7

DU-8

DU-9

2400 0 1200 2400

Horz. 1 in. = 2400 ft.

LEGEND

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

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

DU-XX DEVELOPMENT UNIT SUB-AREA

SITE BOUNDARY

PRESSURE ZONE BOUNDARY

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

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EXHIBIT 3 - MASTER WATER EXHIBIT - FULL BUILD OUT SERVED BY SCAP

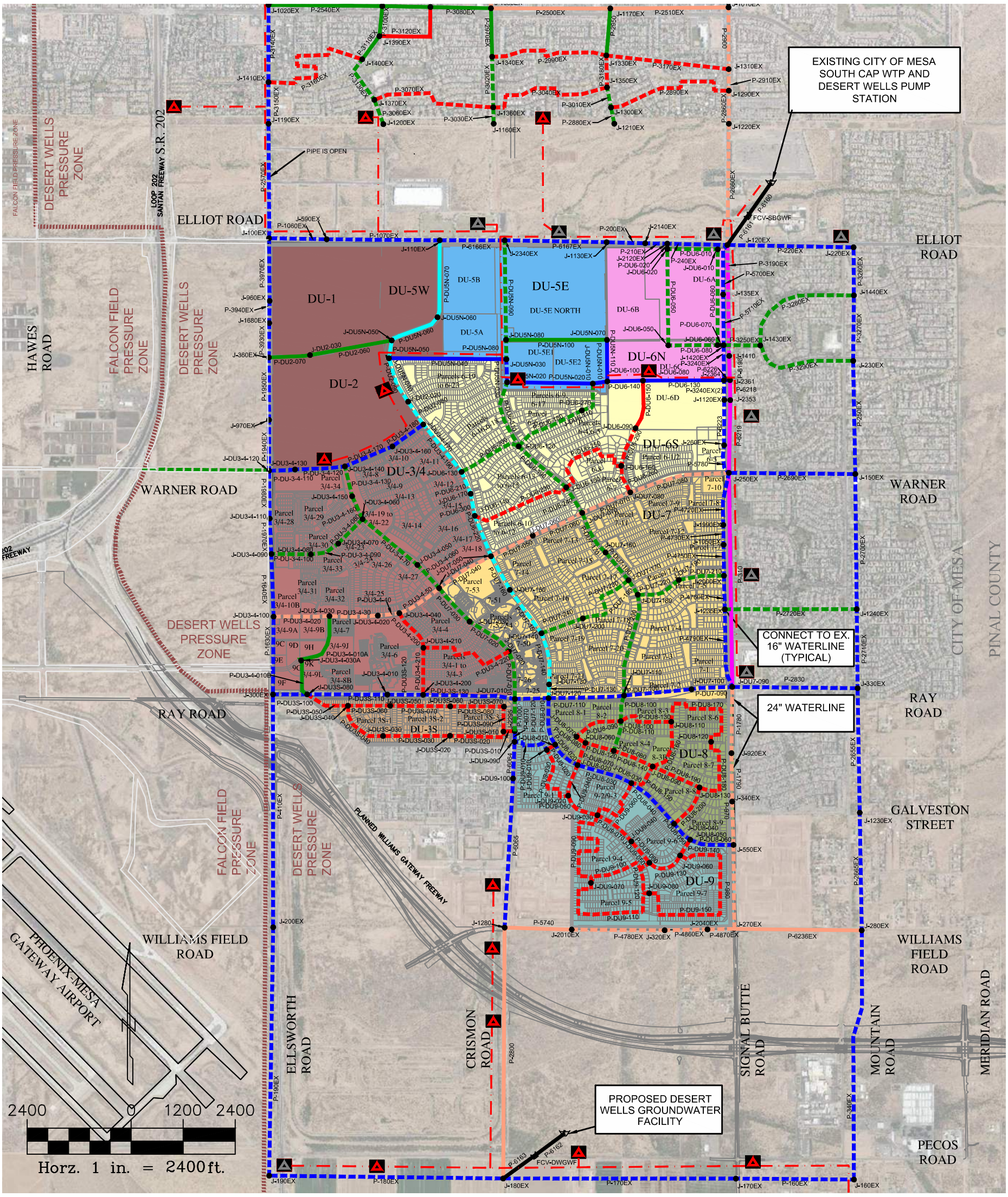
EASTMARK
MESA, ARIZONA

NOT FOR CONSTRUCTION OR RECORDING

WOOD PATEL

EXHIBIT 4

MASTER WATER EXHIBIT – FULL BUILDOUT
(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		

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

DU-XX DEVELOPMENT UNIT SUB-AREA

SITE BOUNDARY

PRESSURE ZONE BOUNDARY

EXHIBIT 4 - MASTER WATER EXHIBIT - FULL BUILD OUT SERVED BY DWGWF

NOT FOR CONSTRUCTION OR RECORDING

EASTMARK
MESA, ARIZONA

WOOD PATEL

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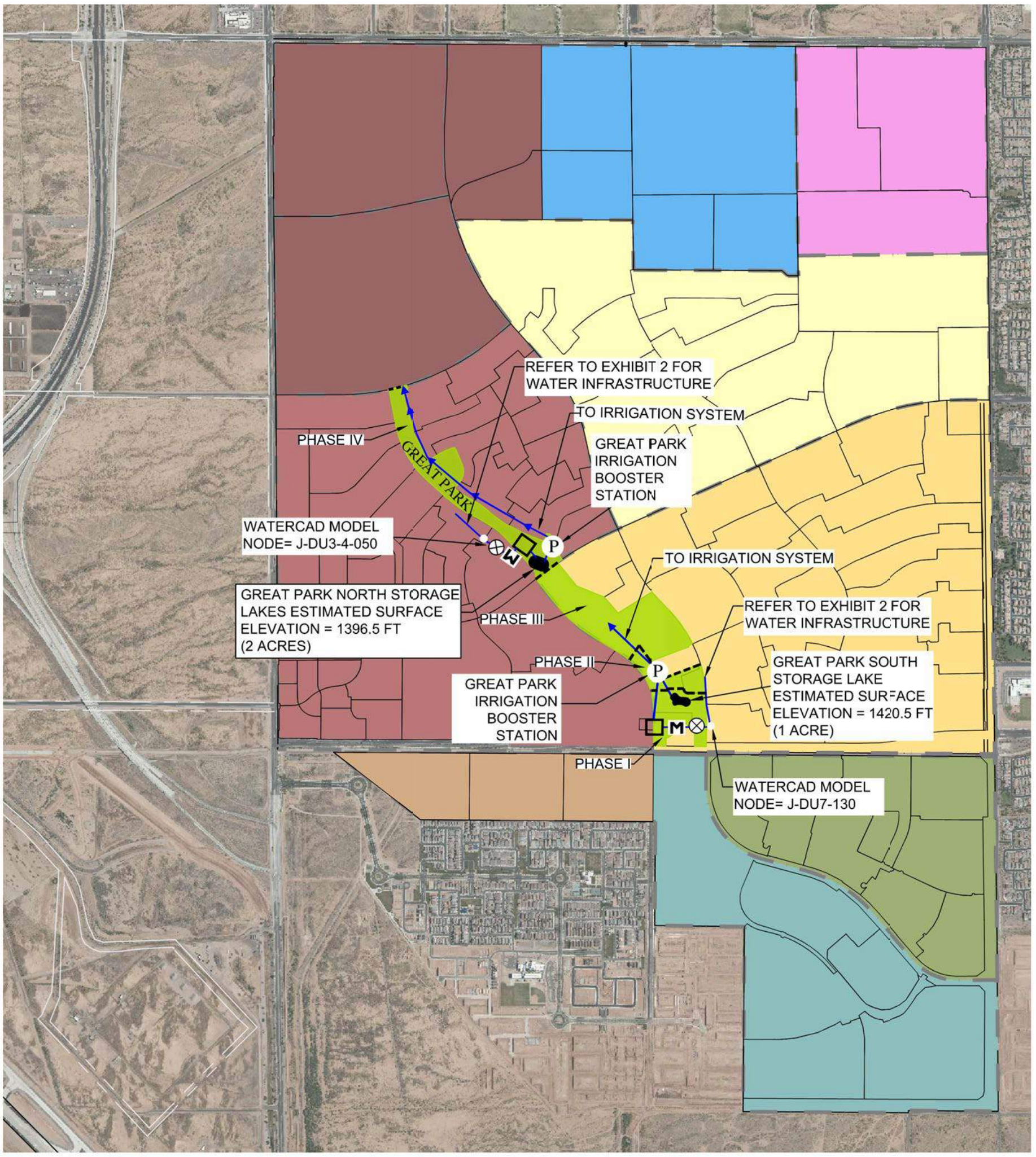
EXHIBIT 5

GREAT PARK IRRIGATION EXHIBIT



N

1600 0 800 1600

Horz. 1 in. = 1600 ft.

LEGEND

NOTES:
1. INFRASTRUCTURE SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE.
2. IRRIGATION WATER LINES AND APPURTENANCES ARE SHOWN SCHEMATICALLY.

ON-SITE DEVELOPMENT UNITS

- DU-1-2-5W
- DU-3S
- DU-3/4
- DU-5E
- DU-6N
- DU-6S
- DU-7
- DU-8
- DU-9
- DU-4A DEVELOPMENT UNIT SUB-AREA
- SITE BOUNDARY

GREAT PARK IRRIGATION SYMBOLS

- GREAT PARK
- LAKE
- AIR GAP DISCHARGE STRUCTURE
- M WATER METER
- P PUMP STATION
- MANUAL ISOLATION VALVE
- GREAT PARK PHASE LINE

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EXHIBIT 5- GREAT PARK IRRIGATION EXHIBIT SERVED BY SCAP

EASTMARK
MESA, ARIZONA

NOT FOR CONSTRUCTION
OR RECORDING

WOOD PATEL