



MONTGOMERY
ENGINEERING & MANAGEMENT, L.L.C.

WATER SERVICE IMPACT STUDY

**Camelback Lands 7
A Lot Split of
Camelback Lands Lot 81
5307 N. Invergordon Rd.
Paradise Valley, Arizona**

**May 23, 2019
Revision 2**

Prepared for:
Cullum Homes
8408 E. Shea Boulevard, Suite D-100
Scottsdale, Arizona 85260

Submitted to:
Town of Paradise Valley
6401 E. Lincoln Drive
Paradise Valley, Arizona 85253

Prepared by:
Montgomery Engineering and Management, L.L.C.
16716 E. Parkview Ave. Suite 204
Fountain Hills, Arizona 85268



16716 E. Parkview Avenue, Suite 204 • Fountain Hills, Arizona 85268
(480) 837-1845 • (480) 837-8668 fax • dave@civilaz.com

TABLE OF CONTENTS

	<u>PAGE</u>
1. Introduction.....	1
2. Domestic Water and Fire Suppression System.....	1
3. References.....	2

APPENDICES

Appendix A-1 Vicinity map.....	3
Appendix A-2 Water Flow Test.....	4
Appendix A-3 Will Serve Letter.....	5

1. INTRODUCTION

This Water Service Impact Study and related design have been developed in accordance with the current Town of Paradise Valley Design Standards, Codes and adopted Ordinance. The report provides engineering analysis and assessment of the required water services and fire flow demand for the proposed lot split development.

The subject property located 5307 N. Invergordon Road, Paradise Valley, Arizona. The 2.24-acre parcel is in a subdivided plat, being a replat of lot 81, Camelback Lands, recorded in Book 31, Page 26, MCR and also being a portion of NE ¼ of section 15, T2N, R4E. The property is bounded by Invergordon Drive (westerly) and large residential lots on the remaining sides. Lot 81 is zoned R-43, which in accordance with the Town of Paradise valley Zoning Ordinance allows for one dwelling unit per acre density. The property has a current residence that is proposed to be demolished. Refer to Appendix A-1-Vicinity Map for the site location.

As part of the project development process, a lot split map subject to the Town of Paradise Valley review and approval is prepared. The development is proposing to split the parcel into two lots. The prepared lot split map defines the new property line, new tract for access roadway, location and distances of new building setback lines and public utility easements. Both lots will exceed the minimum required area of 1 acre.

The site is located within EPCOR water service area and Paradise Valley Sewer Service area. There is an existing 6-inch water line in Invergordon Road with an existing fire hydrant at the south west corner of lot 81.

No sewer is available at this site. The site's terrain slopes easterly with desert vegetation and native trees plus a residence, guest house and tennis court that will be demolished.

2. DOMESTIC WATER AND FIRE SUPPRESSION SYSTEM

There is an existing water meter at the southwest corner of lot 81 to be used by the proposed lot 2. A water service line and water meter for the additional lot 1 will be sized in accordance with the currently adopted Plumbing Code and will be installed at the southwest corner of the lot 1.

New homes are proposed to utilize a septic sewer system due to excessive cost to extend a new line to this site.

The fire hydrant coverage for this site is provided by an existing fire hydrant located 27 feet south of the southwest property corner on Invergordon Road.

Fire flow test was conducted on October 2018 by Sunstate Fire Protection. Based on the results of the fire flow test, the existing water infrastructure is capable of supplying the required fire flow protection per the Town Code 13.1.6 (1,500 gpm at 20 psi). Fire sprinklers for the new residence will be fed off the domestic water service.

3. REFERENCES

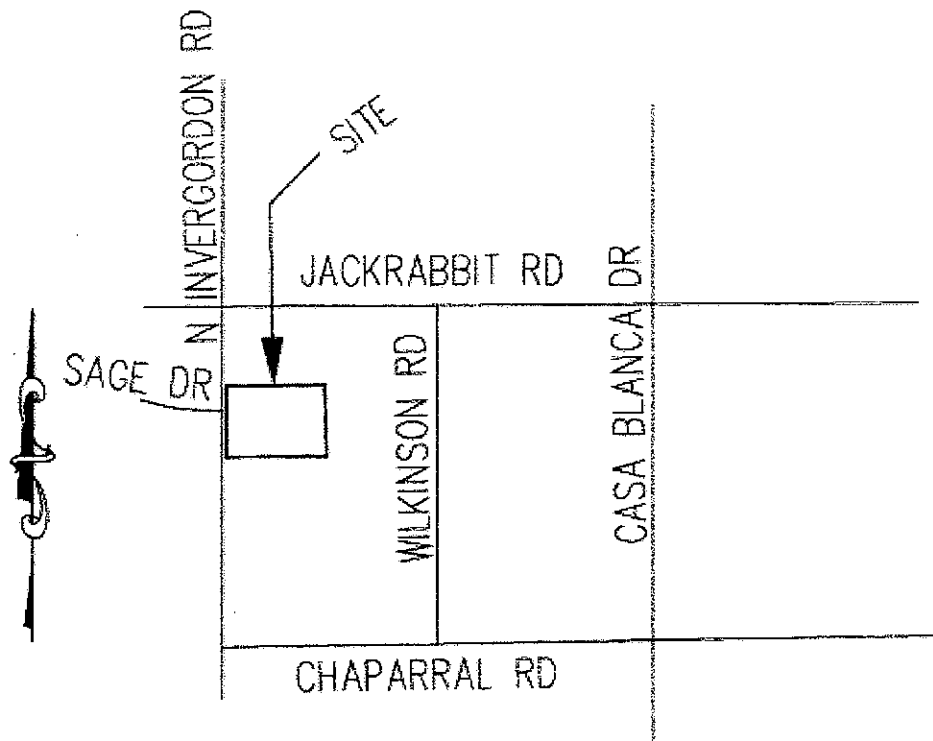
- Town of Paradise Valley Design Standards and Policies.
- 2015 International Fire Code, Appendix B, Fire Flow Requirements for Buildings.

APPENDIX A-1

Vicinity Map

EXHIBIT A

Location of the Two Lots



VICINITY MAP
NO SCALE

APPENDIX A-2

Water Flow Test

Hydrant Flow Test Report

Test Date 10/18/2018

Test Time 0815 Hrs.

Location

5307 N. Invergordon Paradise Valley, AZ
85253

Tested by

Sunstate Fire Protection

Notes

Read Hydrant

63 psi static pressure

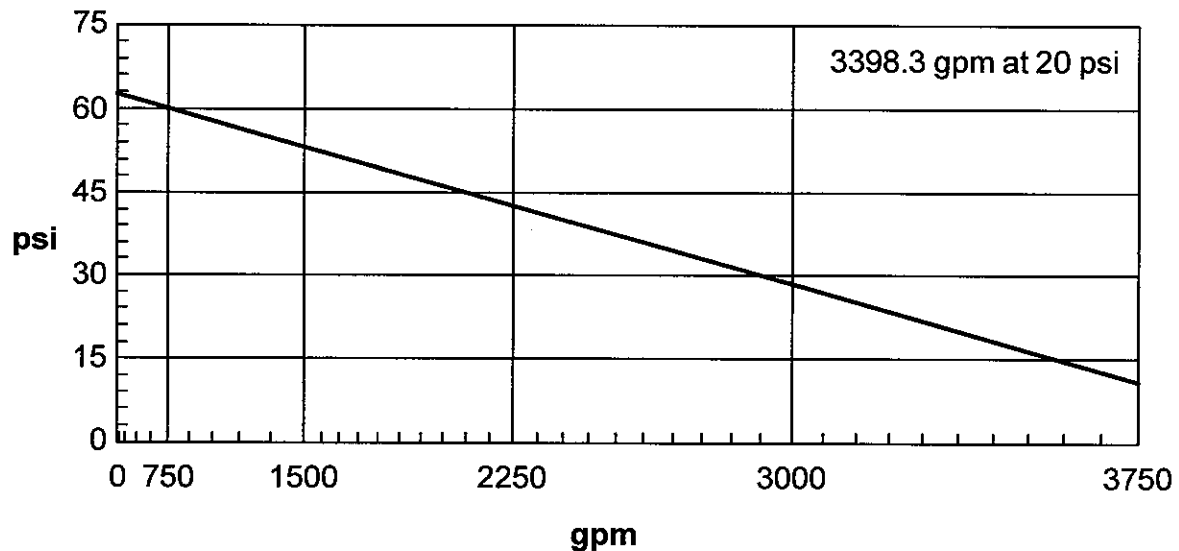
58 psi residual pressure

2 ft hydrant elevation

Flow Hydrant(s)

Outlet	Elev	Size	C	Pitot Pressure	Flow
#1	2	2.5	.9	40	1062 gpm

Flow Graph



APPENDIX A-3
Will Serve Letter



2355 West Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027 USA
epcor.com

September 24, 2018

Brad Cullum
Cullum Homes, Inc.
8408 E. Shea Blvd, Suite D-100
Scottsdale, AZ 85260

Sent via e-mail to: brad@cullumhomes.com

Re: Will-Serve Letter for Water Service
Lot 81, Camelback Lands

Dear Mr. Cullum;

This letter is in response to your request to EPCOR Water Arizona Inc. ("EPCOR") regarding EPCOR's willingness to provide water service to two lots (the "Two Lots") that will be created after the split of Lot 81 of the Camelback Lands development. The Two Lots will each be approximately 2.21 acres, and are located along the east side of Invergordon Road, south of Jackrabbit Road, in the Town of Paradise Valley as shown in Exhibit A. EPCOR provides the following information for your consideration:

1. EPCOR has confirmed that the Two Lots are located within the area encompassed by EPCOR's Certificate of Convenience & Necessity ("CC&N") as issued by the Arizona Corporation Commission.
2. Based on water service currently provided by EPCOR in the CC&N, EPCOR will have adequate water capacity for normal use in the Two Lots. Please note that EPCOR does not guarantee the adequacy of its water capacity for fire protection.
3. Developer will be required, as a condition to EPCOR providing water service to the Two Lots, to pay all required fees pursuant to EPCOR's then-current tariffs.

This letter does not independently create any rights or obligations in either developer or EPCOR, and is provided to developer for information only.

For additional information, please contact me at (623) 445-2402 or at bfinke@epcor.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Finke", is positioned above the typed name.

Brad Finke, P.E.
Engineering Manager of Developer Services