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Sw-01428A-15-0259

Arizona Corporation Commission

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Exhibit #: A-1 - A-3

S-1, S-2

MWD-1 - MWD-10

NEW APPLICATION

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AZ CORP COMMISSION DOCKET CONTROL

Arizona Corporation Commission

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JUL 10 2015

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1 SHAPIRO LAW FIRM, P.C.
Jay L. Shapiro (No. 014650)
2 1819 E. Morten Avenue, Suite 280
Phoenix, Arizona 85020
3 Telephone (602) 559-9575

4 Liberty Utilities
Todd C. Wiley (No. 015358)
5 12725 W. Indian School Road
Suite D-101
6 Avondale, AZ 85392
7 Telephone: (623) 240-2087

8 Attorneys for Liberty Utilities (Litchfield Park Water & Sewer) Corp.

9 **BEFORE THE ARIZONA CORPORATION COMMISSION**

10
11 IN THE MATTER OF THE APPLICATION
OF LIBERTY UTILITIES (LITCHFIELD
12 PARK WATER & SEWER) CORP. FOR A
CERTIFICATE OF CONVENIENCE AND
13 NECESSITY TO PROVIDE WASTEWATER
UTILITY SERVICE IN MARICOPA
14 COUNTY, ARIZONA.

DOCKET NO: SW-01428A-15-0259

**APPLICATION FOR EXTENSION
OF CERTIFICATE OF
CONVENIENCE AND NECESSITY**

15 In accordance with A.A.C. R14-2-602, Liberty Utilities (Litchfield Park Water &
16 Sewer) Corp. ("Liberty" or "Applicant"), an Arizona public service corporation, applies to
17 the Arizona Corporation Commission ("Commission") for an order approving the
18 extension of Liberty's existing Certificate of Convenience and Necessity ("CC&N") for
19 wastewater utility service to include the Zanjero Trails development located in certain
20 defined portions of Maricopa County, Arizona.

21 **ZANJERO TRAILS**

22 1. Zanjero Trails is an approximately 1,740 acre property generally bound by
23 Camelback Road on the south, Peoria Avenue on the north, Perryville Road on the east
24 and the Beardsley Canal on the west. The Zanjero Trails property lies within Sections 4, 9
25 and 16 of Township 2 North, Range 2 West and in Sections 28 and 33 of Township 3
26 North, Range 2 West of the Gila and Salt River Meridian (the "Property").

EXHIBIT
A-1
ADMITTED

1 The names, titles and mailing addresses for Liberty's officers and directors are also set
2 forth on the attached **Exhibit 1**. Applicant does not own an interest in any other utility
3 companies. Liberty's parent company owns five other public service corporations
4 providing water and wastewater utility service in Arizona.

5 6. Liberty's Certificate of Good Standing from the Commission is attached
6 hereto as **Exhibit 2**.

7 7. Liberty's management contact is Matthew Garlick, President, 12725 W.
8 Indian School Road, Suite D-101, Avondale, AZ 85392. Mr. Garlick's telephone number
9 is (623) 298-3763 and his email address is Matthew.Garlick@LibertyUtilities.com.

10 8. Liberty's operator certified by the Arizona Department of Environmental
11 Quality (ADEQ) is Clint Arndt, Senior Operations Manager, whose business address is
12 12725 W. Indian School Road, Suite D-101, Avondale, AZ 85392. Mr. Arndt's telephone
13 number is (623) 298-4824. Mr. Arndt also is the on-site manager for Liberty.

14 9. Liberty's attorneys for this application are as follows:

15 Jay L. Shapiro
16 SHAPIRO LAW FIRM
17 1819 E. Morten Avenue, Suite 280
18 Phoenix, Arizona 85020
Telephone: (602) 559-9575
Email: Jay@shaplawaz.com

19 Todd C. Wiley
20 Assistant General Counsel – Liberty Utilities
21 12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392
Telephone: (623) 240-2087
Email: Todd.Wiley@LibertyUtilities.com

22 All case filings, correspondence, data requests and/or other requests for information
23 should be directed to both Mr. Shapiro and Mr. Wiley, as well as to Whitney Birk at
24 whitney@shaplawaz.com.

25 10. The area covered by this Application is the Zanjero Trails Property, which
26 includes approximately 1,740 acres ("Extension Area") and is owned solely by MWD.

1 All property included within the Extension Area is part of the Zanjero Trails development.
2 As such, there are no landowners within the Extension Area who did not request an
3 extension of wastewater utility service by Liberty. The City of Buckeye and the City of
4 Goodyear are the closest municipalities. The City of Glendale, the City of Litchfield
5 Park, and the City of Surprise are located within five miles of the Extension Area.

6 11. The legal description for the Extension Area is attached as **Exhibit 3**.

7 12. The Master Wastewater Plan for Zanjero Trails (November 2014) prepared
8 by Hilgart Wilson LLC is attached as **Exhibit 4**. That Master Wastewater Plan includes a
9 complete description of the wastewater facilities proposed to be constructed for service to
10 Zanjero Trails in the Extension Area. The name of each county in which the Extension
11 Area is located and location of the Extension Area in relation to the closest municipalities
12 are set forth in **Exhibit 4**, Figure 1 (Vicinity Map). A complete description of the
13 facilities proposed to be constructed, including a preliminary engineering report and the
14 principal components of each sewer system is attached as **Exhibit 4**, Tables B.3 and B.4.

15 13. The estimated total cost for construction of facilities required to provide
16 wastewater service to the Extension Area is attached as **Exhibit 5**. Construction of the
17 offsite and onsite facilities will be financed through a combination of contributions and
18 advances in aid of construction (Hook-Up Feeds) made by MWD and/or subsequent
19 developers, as well as capital improvements (equity) paid by Liberty.

20 14. A general Statement of Financial Condition for Liberty is attached as
21 **Exhibit 6**.

22 15. For service to the Extension Area, Liberty will be charging its existing rates
23 and charges as approved by the Commission. A copy of Liberty's existing tariff schedule
24 is attached as **Exhibit 7**.

25 16. Liberty's estimated annual operating revenue and operating expenses for the
26 first five years of operation in the Extension Area is attached as **Exhibit 8**.

1 17. Phase 1 of Zanjero Trails is located in the southern portion of the Extension
2 Area (Camelback Road on the south, Bethany Home Road on the north, Perryville Road
3 on the east, and Beardsley Canal on the west) and is planned to contain 1,067 single
4 family homes. Construction of the first phase off-site and on-site wastewater facilities to
5 serve the development is estimated to begin within 12 months of receipt of Commission
6 approval of this CC&N Application and is expected to take approximately one year to
7 complete. The phase 1 on-site construction will be done on a parcel by parcel basis with
8 timing being associated with demand. All additional phases of Zanjero Trails will be
9 coordinated with actual market demands. A detailed description of the proposed
10 construction timeline for facilities and construction phases is attached as **Exhibit 4**,
11 pages 8-9.

12 18. The written request for extension of wastewater utility service to the
13 Extension Area by MWD as owner of the Property is attached as **Exhibit 9**.

14 19. Detailed maps of Liberty's existing wastewater CC&N area and the
15 Extension Area are attached as **Exhibit 10**. **Exhibit 10** includes five separate maps,
16 including (i) Zanjero Trails Liberty CC&N Expansion Map, (ii) Zanjero Trails Vicinity
17 Map, (iii) Zanjero Trails Land Use Plan, (iv) Zanjero Trails Wastewater Exhibit,
18 (v) Zanjero Trails Phasing Plan, (vi) CC&N Extension and Nearby Municipalities/Private
19 Sewer Providers within 1 Mile, (vii) CC&N Extension and Nearby Municipalities/Private
20 Sewer Providers within 5 Miles, and (viii) Appendix D to Zanjero Trails Master
21 Wastewater Plan. These maps show the Extension Area and municipal corporate limits
22 that overlap with or are within five miles of the Extension Area; and the Extension Area
23 and its relationship to the service areas of other public service corporations, municipalities
24 and/or districts currently providing water or wastewater service within one mile of the
25 Extension Area, with identification of the entity providing service and each type of service
26 being provided. These maps also include:

- 1 • the boundaries of the Extension Area, with the total acreage noted.
- 2 • the land ownership boundaries within the Extension Area, with the acreage
- 3 of each separately owned parcel within the Extension Area noted.
- 4 • the owner of each parcel within the Extension Area, which as noted above is
- 5 exclusively MWD.
- 6 • that there are not any known wastewater service connections that are already
- 7 being provided service by the Applicant within the Extension Area.
- 8 • the location of all parcels for which a copy of a request for service
- 9 has been submitted.

10 These maps further show the location of Zanjero Trails, the only proposed development
11 within the Extension Area, and the proposed location of the principal components of the
12 wastewater system planned for the Extension Area.

13 20. A copy of the form of notice to be sent to municipal
14 managers/administrators for municipalities within a five (5) mile radius of the Extension
15 Area is attached as **Exhibit 11**.

16 21. The Extension Area is already included within Liberty's Maricopa
17 Association of Governments ("MAG") 208 Water Quality Management Plan.

18 22. The estimated numbers of customers to be served during the first five years
19 of wastewater utility service to the Extension Area are shown in attached **Exhibit 12**.

20 23. Liberty is submitting a franchise application to the Maricopa County Board
21 of Supervisors concurrently with this filing. Liberty anticipates the franchise application
22 to go before the Board at the next formal meeting.

23 24. ADEQ Approvals to Construct issued for facilities to be constructed in the
24 Extension Area will be provided to the Commission as soon as Liberty receives them.

25 25. The Extension Area is currently within EPCOR's water service area.
26 Applicant will treat all wastewater generated within the Extension Area at Liberty's Palm

1 Valley Water Reclamation Facility. Treated effluent either will be delivered for direct use
2 or recharged into the regional aquifer.

3 26. ADEQ no longer issues compliance status reports directly to wastewater
4 providers. Applicant will send a written request to ADEQ asking that the agency send the
5 most current compliance status report for Liberty directly to the Commission.

6 27. Liberty's Aquifer Protection Permit issued by ADEQ is attached as
7 **Exhibit 13.**

8 28. Liberty's Wastewater Use Data Sheet for the period from June 2014 to
9 May 2015 is attached as **Exhibit 14.**

10 29. A notarized signature on behalf of Applicant is attached as **Exhibit 15.**

11 30. For the reasons stated herein, Liberty maintains that this Application is in
12 the public interest and should be granted. There is a need for regulated wastewater utility
13 service to the Extension Area in Maricopa County to ensure the public health, and foster
14 orderly growth.

15 WHEREFORE, Liberty Utilities (Litchfield Park Water & Sewer) Corp.
16 respectfully requests the following:

17 A. That the Commission consider and act upon this Application as timely as
18 possible and to schedule a hearing, if necessary, on this matter;

19 B. That upon completion of said hearing, the Commission enter an Order
20 approving this Application and extending Liberty's CC&N to include the Extension Area
21 as shown on **Exhibit 3**; and,

22 C. That the Commission grant such other and further relief as may be
23 appropriate under the circumstances herein.

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RESPECTFULLY SUBMITTED this 10th day of July, 2015.

SHAPIRO LAW FIRM, P.C.

By: _____

Jay L. Shapiro
1819 E. Morten Avenue, Suite 280
Phoenix, Arizona 85020

and

LIBERTY UTILITIES

Todd C. Wiley
Assistant General Counsel
12725 W. Indian School Road, Suite D-101
Avondale, Arizona 85392

Attorneys for Liberty Utilities (Litchfield Park
Water & Sewer) Corp.

ORIGINAL and fifteen (15) copies
of the foregoing were filed
this 10th day of July, 2015, with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

By: Whitney Birk

EXHIBITS

- 1
- 2 **1. Corporate Information for Liberty Utilities (Litchfield Park Water & Sewer)**
- 3 **Corp.**
- 4 **2. Applicant's Certificate of Good Standing from the Arizona Corporation**
- 5 **Commission.**
- 6 **3. Legal Description of Extension Area.**
- 7 **4. Master Wastewater Plan for Zanjero Trails dated November 2014.**
- 8 **5. Estimated Total Construction Costs and Plant Cost Projections.**
- 9 **6. General Statement of Financial Condition.**
- 10 **7. Liberty's Schedule of Rates and Charges.**
- 11 **8. Annual Revenue and Expenses – First Five Years.**
- 12 **9. Written Request for Service.**
- 13 **10. Maps of Existing CC&N and Extension Area.**
- 14 **11. Form of Notice to be Sent to Municipalities within 5 mile of Extension Area.**
- 15 **12. Estimated Number of Customers – First Five Years.**
- 16 **13. ADEQ Aquifer Protection Permit.**
- 17 **14. Applicant's Wastewater Use Data Sheet.**
- 18 **15. Notarized Signature On Behalf of Applicant.**
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EXHIBIT 1

CORPORATE INFORMATION

Applicant Proper Name: Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Applicant Address: 12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392

Corporate Structure: For-profit Chapter "C" Corporation
500,000 Shares authorized
7,820 shares issued on February 24, 2003

Officers: Matthew Garlick, President
12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392

Todd Wiley, Treasurer and Secretary
12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392

Directors: Ian Robertson, Director
354 Davis Road
Oakville, ON L6J 2X1

Richard Leehr, Director
28 South Shore Road
Salem, NH 03079

Gregory S. Sorensen, Director
701 National Ave
Tahoe Vista, CA 96148

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EXHIBIT 2

ARIZONA CORPORATION COMMISSION

CERTIFICATE OF GOOD STANDING

FOR

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

STATE OF ARIZONA



Office of the
CORPORATION COMMISSION

CERTIFICATE OF GOOD STANDING

To all to whom these presents shall come, greeting:

I, Jodi A. Jerich, Executive Director of the Arizona Corporation Commission, do hereby certify that

*****LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.*****

a domestic corporation organized under the laws of the State of Arizona, did incorporate on September 21 1954.

I further certify that according to the records of the Arizona Corporation Commission, as of the date set forth hereunder, the said corporation is not administratively dissolved for failure to comply with the provisions of the Arizona Business Corporation Act; and that its most recent Annual Report, subject to the provisions of A.R.S. sections 10-122, 10-123, 10-125 & 10-1622, has been delivered to the Arizona Corporation Commission for filing; and that the said corporation has not filed Articles of Dissolution as of the date of this certificate.

This certificate relates only to the legal existence of the above named entity as of the date issued. This certificate is not to be construed as an endorsement, recommendation, or notice of approval of the entity's condition or business activities and practices.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Arizona Corporation Commission. Done at Phoenix, the Capital, this 30th day of June, 2015, A. D.




Jodi A. Jerich, Executive Director

By: 1257411

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EXHIBIT 3

LEGAL DESCRIPTION OF EXTENSION AREA

LEGAL DESCRIPTION
Zanjero Trails - Legal Description
(Liberty CC&N Expansion)

Parcel 1:

Portions of land situated within Sections 28 & 33 of Township 3 North, Range 2 West and Sections 4, 9, & 16 of Township 2 North, Range 2 West of the Gila and Salt River Meridian, Maricopa County, Arizona, being more particularly described as follows:

Beginning at a Flush Brass Cap (MCDOT) accepted as the Northeast corner of said Section 28;

Thence, South 00°20'19" West, 2638.46 feet along the east line of said section to a Masonry Nail accepted as the East 1/4 corner of said section 28;

Thence, continuing along said east line, South 00°21'13" West, 2635.60 feet to a Flush Brass Cap accepted as the Southeast corner of said section;

Thence, South 00°22'08" West, 2640.72 feet along the east line of said Section 33 to an Aluminum Cap stamped 2003 accepted as the East 1/4 corner of said Section 33;

Thence, continuing along said east line, South 00°21'40" West, 2639.95 feet to an Aluminum Cap stamped 2009 accepted as the Southeast corner of said Section 33;

Thence, South 00°33'38" East, 2640.27 feet along the east line of said Section 4 to a Brass Cap stamped LS 33307 accepted as the East 1/4 corner of said Section 4;

Thence, continuing along said east line, South 00°33'48" East, 2630.48 feet to a Brass Cap in Handhole stamped MCDOT 2003 accepted as the Southeast Corner of said section 4;

Thence, South 00°23'42" West, 5273.14 feet along the east line of said Section 9 to a 3" Aluminum Cap stamped FCD 2009 accepted as the Southeast corner of said Section 9;

Thence, South 00°24'28" West, 2637.84 feet along the east of Section 16 to a Flush Brass Cap stamped MCDOT accepted as the East 1/4 of said Section 16;

Thence, continuing along said east line, South 00°24'32" West, 2637.33 feet to a found Brass Cap in Handhole stamped SE COR SEC 16 T2N R2W accepted as the Southeast corner of said Section 16;

Thence, leaving said east line, North 89°36'46" West, 2529.49 feet along the south line of said Section 16 to a found Brass Cap stamped S1/4 S16 accepted as the South 1/4 corner of said Section 16;

Thence, North 00°30'54" East, 2464.95 feet along the north-south of said Section 16;

Thence, North 89°51'17" West, 2654.20 feet along a line 162.00 feet south of and parallel with the east-west mid-section line of said Section 16 to a point on the west line of said Section 16;

Thence, along said west line, North 00°23'25" East 162.00 feet to a found Flush Brass Cap stamped MCDOT accepted as the West 1/4 corner of said Section 16;

Thence, continuing along said west line, North 00°30'12" East, 2635.21 feet to a found Flush Brass Cap stamped MCDOT 2003 accepted as the Northwest corner of said Section 16;

Thence, South 89°50'46" East, 2655.09 feet along the north line of said Section 16 to a Flush Brass Cap stamped MCDOT 2003 accepted as the North 1/4 corner of said Section 16;

Thence, North 89°46'46" East, 75.00 feet to a line 75 feet east of and parallel with the west line of the east half of said Section 9;

Thence, North 00°27'02" East, 5268.31 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 9;

Thence, North 00°44'08" West, 5280.79 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 4;

Thence, North 00°21'39" East, 5282.64 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 33;

Thence, North 00°20'37" East, 5276.35 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 28;

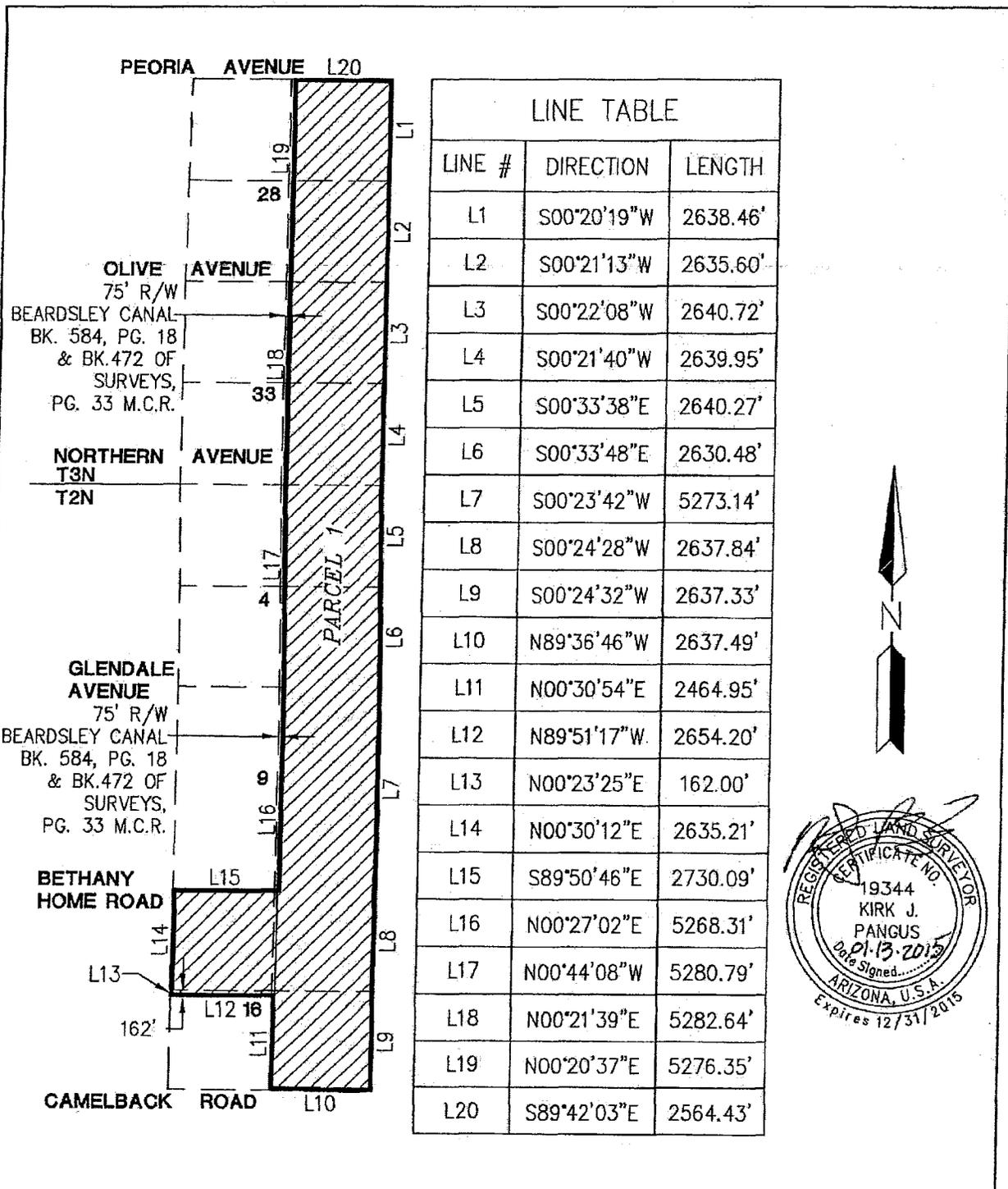
Thence, South 89°42'03" East, 2564.43 feet along the north line of said Section 28 to the **POINT OF BEGINNING**.

Parcel 1 as described hereon contains 75,288,064 sq.ft. or 1728.38 acres, more or less.

This description shown hereon is not to be used to violate subdivision regulations of the state, county and/or municipality of any other land division restrictions.

Prepared by: HilgartWilson
2141 E Highland Ave., Suite 250
Phoenix, AZ 85016
Project No. 1078
Date: January 2015





LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S00°20'19"W	2638.46'
L2	S00°21'13"W	2635.60'
L3	S00°22'08"W	2640.72'
L4	S00°21'40"W	2639.95'
L5	S00°33'38"E	2640.27'
L6	S00°33'48"E	2630.48'
L7	S00°23'42"W	5273.14'
L8	S00°24'28"W	2637.84'
L9	S00°24'32"W	2637.33'
L10	N89°36'46"W	2637.49'
L11	N00°30'54"E	2464.95'
L12	N89°51'17"W	2654.20'
L13	N00°23'25"E	162.00'
L14	N00°30'12"E	2635.21'
L15	S89°50'46"E	2730.09'
L16	N00°27'02"E	5268.31'
L17	N00°44'08"W	5280.79'
L18	N00°21'39"E	5282.64'
L19	N00°20'37"E	5276.35'
L20	S89°42'03"E	2564.43'



PROJ.NO.: 1078	ZANJERO TRAILS LIBERTY CC&N EXPANSION PEORIA, ARIZONA	 HILGARTWILSON 2141 E. HIGHLAND AVE., STE. 250 PHOENIX, AZ 85016 P: 602.490.0535 / F: 602.368.2436
DATE: JAN 2015		
SCALE: 1" = 3500'	EXHIBIT 'B'	
DRAWN BY: DSP		
CHECKED BY: KJP		

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EXHIBIT 4

MASTER WASTEWATER PLAN FOR ZANJERO TRAILS
NOVEMBER 2014



HILGARTWILSON
ENGINEER | PLAN | SURVEY | MANAGE

MASTER WASTEWATER PLAN
FOR
ZANJERO TRAILS

MARICOPA COUNTY, ARIZONA

Prepared For:
Maricopa Water District



14825 West Grand Avenue
Surprise, Arizona 85374
Phone: (623) 546-8266
Fax: (623) 584-2536

Wastewater Service Provider:



Liberty Utilities

12725 West Indian School Road, Suite D101
Avondale, Arizona 85392
Phone: (623) 298-3760
Fax: (623) 935-1020

Prepared By:
HILGARTWILSON, LLC
2141 East Highland Avenue, Suite 250
Phoenix, AZ 85016
Phone: (602) 490-0535
Fax: (602) 368-2436



November 2014
HW Project No. 1003.00



MASTER WASTEWATER PLAN FOR ZANJERO TRAILS

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1. INTRODUCTION

1.1 PROJECT LOCATION

Zanjero Trails consists of approximately 1,740 acres of land in western Maricopa County, approximately two miles west of Arizona Loop 303 and three miles north of U.S. Interstate 10. The property is currently vacant native desert land and is located in unincorporated Maricopa County. The property is generally bound by Camelback Road on the south, Peoria Avenue on the north, Perryville Road on the east and the Beardsley Canal on the west. The property lies within Sections 4, 9, and 16 of Township 2 North, Range 2 West and in Sections 28 and 33 of Township 3 North, Range 2 West of the Gila and Salt River Meridian. A vicinity map is included as Figure 1 in Appendix A.

1.2 GENERAL DESCRIPTION

Zanjero Trails is master-planned community in the western part of Maricopa County, Arizona. It consists of single-family residential, multi-family residential, commercial, and office zonings. The project also includes three schools and three neighborhood parks. Zoning for Zanjero Trails exists as part of a Unit Plan of Development (UPD) (Case #Z-2005-031) that was approved and adopted by the Maricopa County Board of Supervisors on February 21, 2007. A preliminary plat for Phase 1 (Case #S2005-020) has also been approved by the County. Phase 1 is located between Bethany Home Road and Camelback Road and between Perryville Road and the Beardsley Canal within the east half of Section 16, Township 2 North, Range 2 West. A master wastewater report was prepared as part of the preliminary plat process for Phase 1. Cover sheets of the approved preliminary plat and associated wastewater report are included in Appendix D for reference. Currently, portions of Phase 1 are in the final platting process within Maricopa County. A land use plan is included as Figure 2 in Appendix A. It is anticipated that wastewater service for Zanjero Trails will be provided by Liberty Utilities, and that all wastewater flows generated by Zanjero Trails will be routed to Liberty Utilities treatment facilities.

1.3 SCOPE

The purpose of this study is to discuss the requirements, construction phasing, and anticipated costs for the wastewater facilities within Zanjero Trails, as well as its proposed service by Liberty Utilities. The report has been prepared in support of a proposal by Liberty Utilities to expand their Certificate of Convenience and Necessity (CC&N) area to include Zanjero Trails. Zanjero Trails is currently located in the planned service area shown in the White Tank Mountain Regional Sewer Solution (United Engineering Group, July 14, 2004) for the Litchfield Park Service Company (LPSCO). Zanjero Trails is comprised of approximately 1,740 acres with 4,595 single-family dwelling units, and a projected average day flow of 1.223 MGD.

The proposed wastewater collection system improvements described herein meets Liberty Utilities standards for wastewater system design.



2. LAND USE AND POPULATION PROJECTIONS

A summary of the proposed land uses, areas, and number of dwelling units for each of the parcels within Zanjero Trails is provided in Table B.1 in Appendix B. The land uses are also shown on Figure 2, the Land Use Plan. Table B.2 in Appendix B (Wastewater Flow Calculations) summarizes the projected populations for each parcel based on population densities of 2.0 people per dwelling unit and 3.2 people per dwelling unit for multi-family and single-family residential, respectively. The total estimated population for Zanjero Trails is 14,391 persons.

It is anticipated that Zanjero Trails will have a total of 4,595 residential dwelling units. Based on the projected average daily wastewater flow for the entire project, including residential, commercial, school, and park areas, and assuming a flow of 250 gallons per single family dwelling unit per day, Zanjero Trails will have an equivalent population of 15,660 persons and 4,894 equivalent dwelling units.

3. WASTEWATER DESIGN CRITERIA

The wastewater design criteria used in this report is based upon several criteria and standards. A summary of the criteria is listed below. Table 1 summarizes the design criteria used for this report. The superscript numbers shown in Table 1 correspond to the design criteria references listed below.

1. A Preliminary Wastewater Report was prepared by HILGARTWILSON for Phase 1 of Zanjero Trails (between Camelback Road and Bethany Home Road) and approved by Liberty Utilities on May 19, 2009. The report was designed in accordance with the design criteria established in the White Tank Mountain Regional Sewer Solution Conceptual Plan (Regional Plan) prepared by United Engineering Group (UEG) dated July 14, 2004.
2. Design criteria specified in the October 2009 *Liberty Water Development Guide* (Liberty Water 2009).
3. Peak hour flow rates are based on Arizona Administrative Code (AAC) R18-9-E301.
4. A previous study for Zanjero Trails was prepared for Epcor Water. The flow rates within the study were based on historical flow trends from other municipalities and were consistent with Epcor's Loop 303 Wastewater Master Plan. For consistency with the previously proposed wastewater flow rates and pipe diameters, these flow rates are being used in this study. The flow rates used are also generally consistent with the Unit Design Flows listed in Arizona Administrative Code Title 19, Chapter 9, which indicates a sewage design flow of 80 gallons/day/capita for dwelling units.

TABLE 1: WASTEWATER DESIGN CRITERIA	
DESIGN COMPONENT	CRITERIA
AVERAGE DAY FLOW	
Single Family Residential ⁴	250 gallons/du/day (3.2 persons/du)
Multiple Family Residential ⁴	160 gallons/du/day (2.0 persons/du)
Commercial ⁴	1,250 gallons/acre/day
Office ⁴	1,000 gallons/acre/day
Parks ⁴	200 gallons/acre/day
Schools ⁴	500 gallons/acre/day
PEAK HOUR FLOW ^{1,3,4}	Arizona Administrative Code (AAC) R18-9-E301
PIPE DESIGN	
Manning's Roughness Coefficient ²	0.013
Minimum Pipe Diameter ²	8" minimum
	12" minimum along section lines
Velocities ²	Minimum 2.0 fps at peak hour
	Minimum 2.0 fps at average day flow for trunk-lines
	Maximum 10.0 fps
Sewer Capacity Ratio ²	d / D = 0.75 maximum at peak hour
Depth of Cover ²	7.5-feet minimum for trunk lines.
	5.0-feet for all other provided that service lines have 4'-5" minimum cover at the property line.
MANHOLE DESIGN	
Minimum Size ²	5-feet with 30-inch ring and cover
Manhole Drops ²	0.1' drop for < 45 degrees
	0.2' drop for >= 45 degrees
Minimum Spacing ²	Every 500 feet for less than 18-inch diameter
	Per AAC R18-9-E301 for 18-inch and larger

4. WASTEWATER FLOW PROJECTIONS

Based on the design criteria listed in Table 1, Zanjero Trails will produce a total average daily flow of 1.223 MGD and peak flow of 2.176 MGD (peaking factor of 1.78). A detailed table listing the projected wastewater flows from each parcel is provided as Table B.2 in Appendix B.

5. EXISTING WASTEWATER FACILITIES

5.1 SEWER LINES

There are currently no existing sanitary sewer lines within the boundaries of this project. The neighboring residential units in the area utilize individual septic systems or are within a different service provider's area. A 12-inch sewerline in Camelback Road that provides outfall for Jackrabbit Estates (north of Camelback Road and west of Beardsley Canal) exists and continues west to Perryville Road.



The sewerline increases to a 21-inch line at Camelback Road and a 24-inch line at 181st Avenue. The 24-inch line continues along Camelback Road to Citrus Road, then south along Citrus Road to Indian School Road, then east to Cotton Lane, then south to McDowell Road where it transitions to a 30-inch line east of the intersection of Cotton Lane and McDowell Road. The line continues east to the Sarival lift station and Sarival Road and McDowell Road. The sewerline is owned and maintained by LPSCO. See the wastewater exhibit (Figure 3) in Appendix A for a map of existing facilities.

5.2 TREATMENT FACILITIES

Wastewater flows from Zanjero Trails will outfall to the Sarival lift station located at the intersection of McDowell Road and Sarival Road. Wastewater is ultimately conveyed to the Palm Valley Water Reclamation Facility (PVWRF) located north of Camelback Road, approximately one-half mile east of Bullard Avenue. Rim and invert elevations of the existing sewer lines have been obtained from the LPSCO Regional Sanitary Sewer As-built plans dated April 30, 2007. Relevant portions of these plans are included in Appendix E for reference. See the wastewater exhibit (Figure 3) in Appendix A for a map of the treatment facilities.

6. PROPOSED WASTEWATER FACILITIES

6.1 SEWER LINES

A sewer trunk line is proposed to provide wastewater service to the majority of Zanjero Trails. This trunk line will extend from the intersection of Perryville Road and Camelback Road north along the Perryville Road alignment to one-half mile south of Peoria Avenue. The proposed sewer trunk line will increase in diameter from 8-inches at the upstream end to 18-inches at the downstream end.

An additional 8-inch sewer line will be required on the west side of the Beardsley Canal (east of Jackrabbit Estates) to provide service to Parcels 33 and 34. The 8-inch line will extend from Camelback Road to approximately one-half mile north of Camelback Road. An exhibit showing the proposed trunk main alignment* is included as Figure 3 in Appendix A.

A network of 8-inch sewer lines following local and collector street alignments will provide service to the individual lots within each parcel. The sewerlines for Phase 1, which is bound by Camelback Road to the South, Perryville Road to the east, Bethany Home Road to the north, and the Beardsley Canal to the west, have been laid out based on the site plan shown on the approved preliminary plat (Appendix D). Phase 1 is currently in the final design process and construction plans for three of the parcels within Phase 1 have been submitted to the County for review. The wastewater exhibit in Figure 3 depicts the final sewerline alignments based on the preliminary plat for Phase 1. To allow for design flexibility, Figure 3 does not show the locations of sewer lines within the local roadways of future phases within Zanjero Trails. Quantities for future phases have been estimated based on area and dwelling units for each parcel and are included in the cost estimates.



Zanjero Trails will ultimately gravity sewer to the LPSCO PVWRF. The connection will be made at the intersection of Perryville Road and Camelback Road. No additional lift stations will be required.

6.2 WASTEWATER TREATMENT FACILITIES

The Liberty PVWRF, located north of Camelback Road, approximately one-half mile east of Bullard Avenue, will treat wastewater flows from Zanjero Trails. The PVWRF is anticipated to have capacity available to serve Zanjero Trails. Additional treatment facilities or expansions to the existing PVWRF are not anticipated to be required.

7. HYDRAULIC ANALYSIS

A hydraulic model of the sewer trunk line in Perryville Road was completed using Bentley SewerCAD V8i. Model results for the average daily flow and peak flow scenarios are included in Appendix C. Manhole loading calculations used for the model are provided in Table C.1 in Appendix C.

8. PHASING

Zanjero Trails is anticipated to be constructed in several phases, starting from the southern end of the project, and will continue to the north. Each section of land is assumed to be completed as a single phase, with the quarter-section of land located west of the Beardsley Canal and south of Bethany Home Road being completed last. A phasing map is included as Figure 4 in Appendix A. Table 2 below summarizes the parcels and associated average daily and peak flows associated with each phase. A detailed phasing table is included as Table B.3 in Appendix B. It should be noted that actual phasing could vary dependent on market conditions and homebuilder demand. In the event phasing varies from that noted above, an amendment to this master plan reflecting the revised phasing will be submitted to Liberty for review and comment.

TABLE 2: PHASING SUMMARY FOR ZANJERO TRAILS

Phase	Parcel	Land Use	Gross Area (AC)	Average Daily Flow (gpd)	Peak Flow (gpd)	EDUs	Anticipated Construction Year
Phase 1	35A	SF	32.9	29,000	84,100	116	2015
	35B	SF	37.0	28,750	83,375	115	
	36	SF	25.9	28,250	81,925	113	
	37A	SF	28.9	22,750	71,435	91	
	37B	SF	14.2	14,500	52,490	58	
	38	Park	6.8	1,362	4,930	5	
	39	School	17.1	8,530	30,879	34	
	40	SF	37.5	30,000	87,000	120	
	41	MF	13.8	41,760	110,246	167	
	42	Office	4.3	4,280	15,494	17	
	43	SF	28.8	24,500	71,050	98	
	44	SF	21.9	23,750	68,875	95	
45	Commercial	15.9	19,913	62,525	80		
Phase 1 Total			285.0	277,345	569,071	1,109	
Phase 2	29	School	14.2	7,100	21,300	28	2019
	30	Park	8.7	1,740	5,220	7	
	31	SF	166.3	124,750	374,250	499	
	32	SF	129.5	32,250	96,750	129	
Phase 2 Total			318.7	165,840	360,316	663	
Phase 3	27	SF	161.0	122,500	367,500	490	2023
	28	SF	152.4	37,750	113,250	151	
Phase 3 Total			313.4	160,250	349,545	641	
Phase 4	22	Office	5.0	5,000	15,000	20	2027
	23	SF	26.2	46,000	138,000	184	
	24	SF	167.6	83,750	251,250	335	
	25	SF	90.8	68,000	204,000	272	
	26	SF	47.8	35,750	107,250	143	
Phase 4 Total			337.4	238,500	497,471	954	
Phase 5	16	SF	162.9	129,250	387,750	517	2031
	17	Park	8.6	1,720	5,160	7	
	18	School	16.3	8,150	24,450	33	
	19	SF	65.3	48,750	146,250	195	
	20	SF	43.3	32,250	96,750	129	
	21	Commercial	17.9	22,375	67,125	90	
Phase 5 Total			314.3	242,495	504,883	971	
Phase 6	33	Commercial	14.4	18,000	54,000	72	2035
	34	SF	155.7	121,000	363,000	484	
Phase 6 Total			170.1	139,000	308,243	556	
Project Total			1,738.9	1,223,430	2,176,134	4,894	



Based on the phasing summary, the population projections and associated wastewater flows by year are listed in the table below. The population projections are based on the persons per dwelling unit listed in Section 3 of this report.

TABLE 3: POPULATION AND WASTEWATER FLOW PROJECTIONS				
Year	Phase	Projected Population	Projected Equivalent Population	Projected Average Day Wastewater Flows (gpd)
2015	Begin Phase 1	0	0	0
2016		775	888	69,336
2017		1,551	1,775	138,672
2018		2,326	2,663	208,008
2019	Begin Phase 2	3,101	3,550	277,345
2020		3,604	4,081	318,805
2021		4,106	4,611	360,265
2022		4,608	5,142	401,725
2023	Begin Phase 3	5,111	5,673	443,185
2024		5,624	6,186	483,247
2025		6,136	6,698	523,310
2026		6,649	7,211	563,372
2027	Begin Phase 4	7,162	7,724	603,435
2028		7,909	8,487	663,060
2029		8,656	9,250	722,685
2030		9,404	10,014	782,310
2031	Begin Phase 5	10,151	10,777	841,935
2032		10,824	11,553	902,558
2033		11,496	12,329	963,182
2034		12,169	13,105	1,023,806
2035	Begin Phase 6	12,842	13,881	1,084,430
2036		13,229	14,325	1,119,180
2037		13,616	14,770	1,153,930
2038		14,004	15,215	1,188,680
2039		14,391	15,660	1,223,430

9. COST ESTIMATE

A cost estimate broken down by project phase is included as Table B.4 in Appendix B. The cost estimate uses current market pricing and accounts for hard construction costs for the sewer lines only. A summary of the anticipated construction costs is shown in Table 3 below.

Phase	Anticipated Construction Year	Total Anticipated Cost	Cost Per EDU	Total Incurred Cost	Incurred Cost Per Total EDU
1	2015	\$4,572,357	\$4,123	\$4,572,357	\$4,123
2	2019	\$3,576,501	\$5,394	\$8,148,858	\$4,599
3	2023	\$3,689,493	\$5,756	\$11,838,351	\$4,906
4	2027	\$4,414,518	\$4,627	\$16,252,869	\$4,827
5	2031	\$3,789,129	\$3,902	\$20,041,997	\$4,620
6	2035	\$2,702,646	\$4,861	\$22,744,643	\$4,647

Using the above table and interpolating between years, the anticipated construction costs in five year increments is listed in Table 4 below:

Year	Total Cost
2015	\$4,572,357
2020	\$8,148,858
2025	\$11,838,351
2030	\$16,252,869
2035	\$22,744,643

10. CONCLUSIONS

As discussed in this study, wastewater service for Zanjero Trails will be provided by Liberty Utilities. Based upon this study, the following can be concluded:

- Zanjero Trails will be served by a gravity sewer trunk line along the Perryville Road alignment from Camelback Road to one-half mile south of Cactus Road.
- Wastewater from Zanjero Trails will be treated at the existing Palm Valley Water Reclamation Facility.
- The sizing and configuration of the sewer trunk main is illustrated in Figure 3. The proposed trunk main adheres to the 2009 Liberty Developer's Guide presented in Section 3 of this report.



- Phasing for Zanjero Trails is anticipated to begin at the southern boundary of the project and continue north. The quarter-section of land located west of the Beardsley Canal and south of Bethany Home Road is anticipated to be completed last.
- A cost estimate was developed based on future projections and phasing and is included in Appendix B. The total anticipated cost of the sewer lines within Zanjero Trails is approximately \$22.7 million.

11. REFERENCES

LPSCO dba Liberty Water (2009). *Liberty Water Development Guide*. October 2009, Avondale, Arizona.

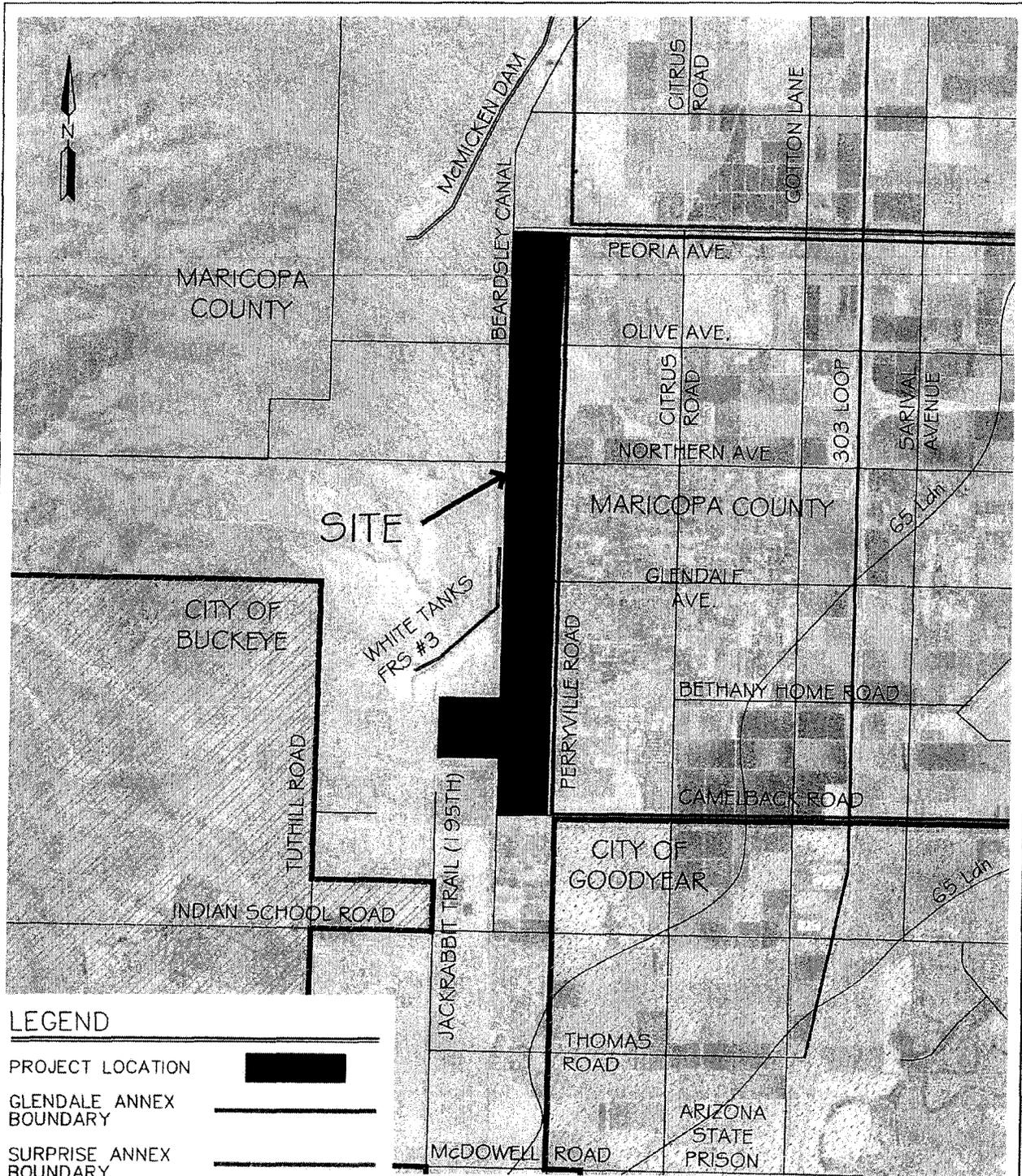
Wood/Patel, LPSCO Regional Sanitary Sewer As-Builts. April 30, 2007, Litchfield Park, Arizona.

United Engineering Group (2004). *White Tank Mountain Regional Sewer Solution*. Litchfield Park Service Company. July 14, 2004. Phoenix, AZ.



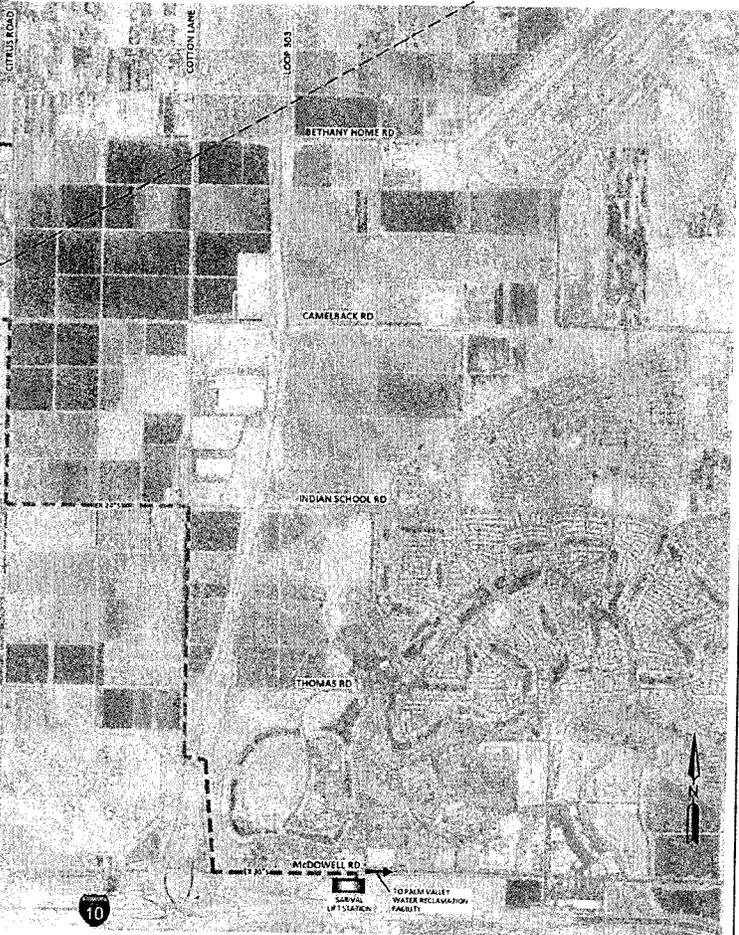
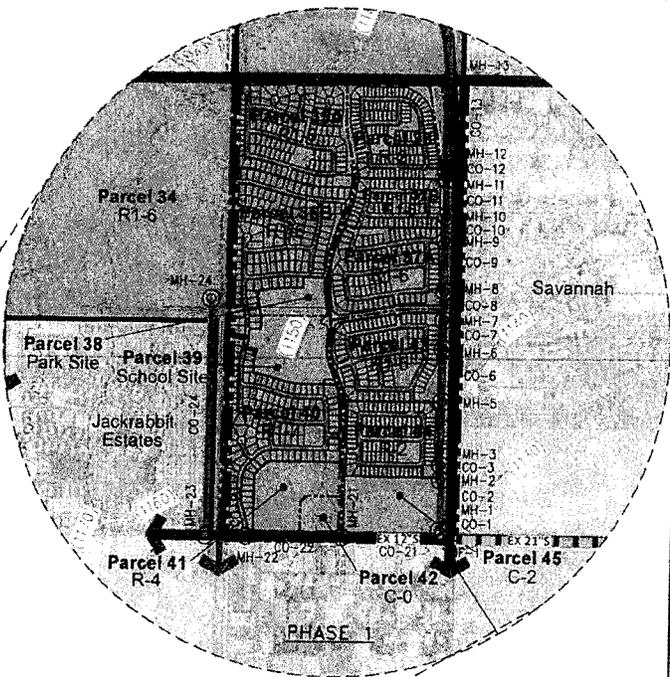
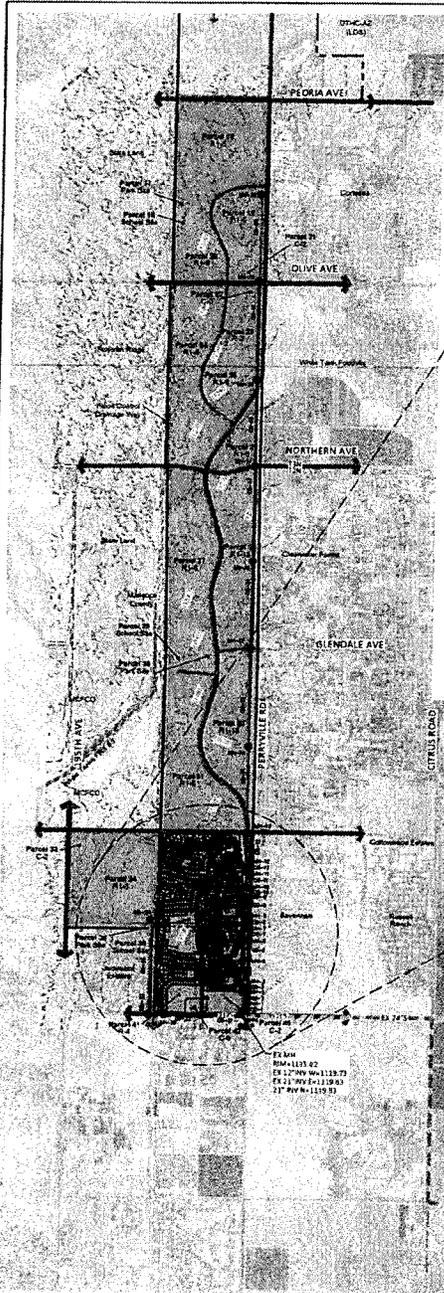
APPENDIX A

FIGURES



PROJ.NO.: 1003	ZANJERO TRAILS	
DATE: APRIL 2014		
SCALE: NTS	MARICOPA COUNTY, ARIZONA	HILGARTWILSON
DRAWN BY: HW	FIG 1: VICINITY MAP	2141 E. HIGHLAND AVE., STE. 250
CHECKED BY: HW		PHOENIX, AZ 85016
		P: 602.490.0535 / F: 602.368.2436

U:\1000\1003\1003.0000, 1003.0100 & 1003.0101 - MWD\Reports\Master Wastewater Report for MAG 208\EXHIBITS\1003 FIG 1 - VICINITY.dwg 4/17/2014 2:34 PM



LEGEND

- PROPOSED SEWER MAIN
- EXISTING SEWER MAIN

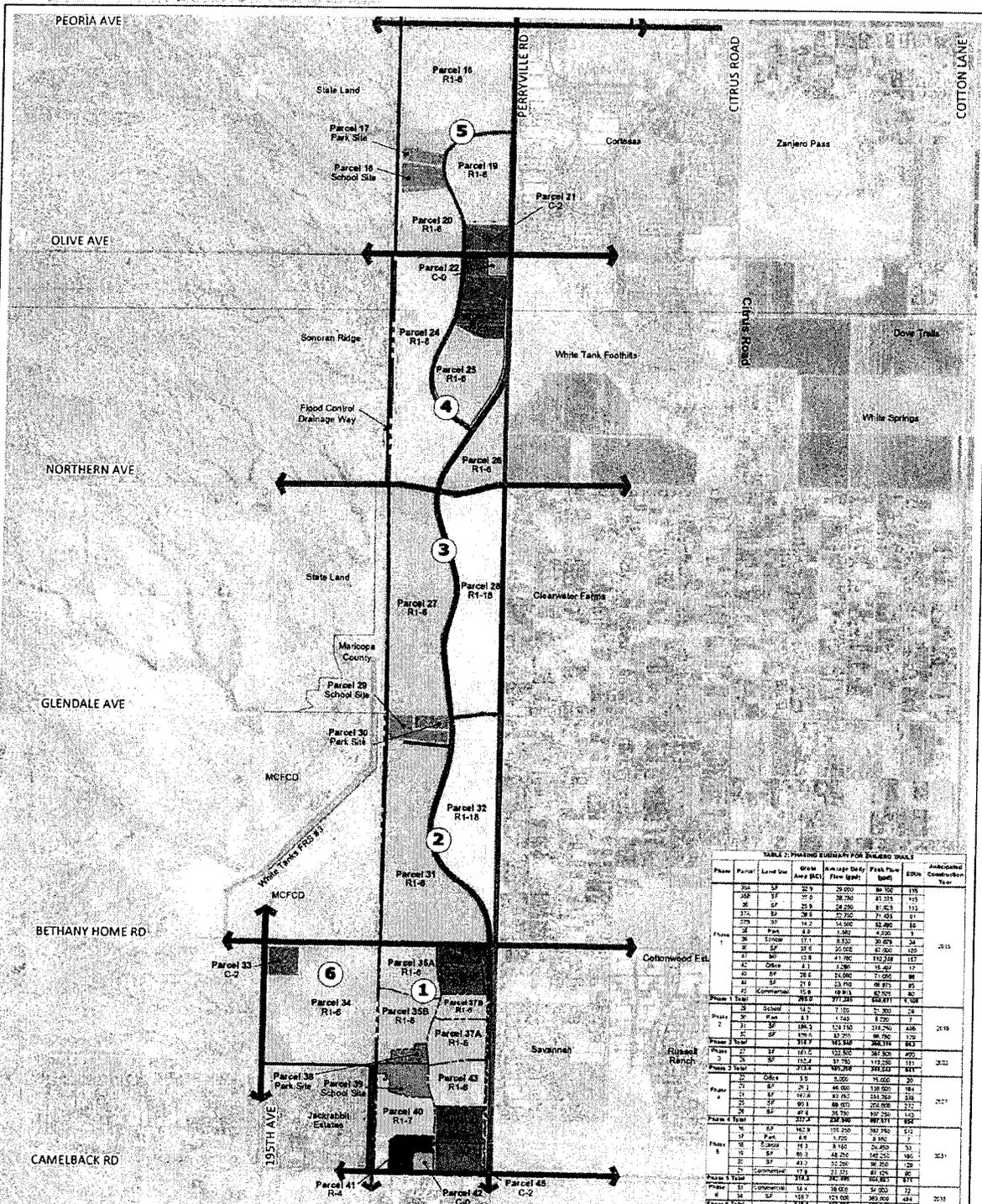
Color Coding Legend	
Conduit: Diameter (in)	
	<= 8.0
	<= 10.0
	<= 12.0
	<= 15.0
	<= 18.0
	<= 21.0
	<= 24.0
	<= 30.0

HILGARTWILSON
 PROJ. NO.: 1003
 DATE: NOV 2014
 SCALE: NTS
 DRAWN: HW
 DESIGNED: HW
 APPROVED: HW

ZANJERO TRAILS
 PERRYVILLE ROAD
 MARICOPA COUNTY, ARIZONA
FIG 3: WASTEWATER EXHIBIT

HILGARTWILSON
 ENGINEER | PLANNING | SURVEY | MANAGER
 211 E. MIDLAND AVE., SUITE 250 P.O. BOX 490, GILLESPIE, ARIZONA 85008
 PHOENIX, AZ 85008

REV.	DESCRIPTION



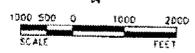
Color Coding Legend
Conduit: Diameter (in)

Thick solid line	<= 8.0
Medium solid line	<= 10.0
Thin solid line	<= 12.0
Dashed line	<= 15.0
Dotted line	<= 18.0
Light gray shading	<= 21.0
Dark gray shading	<= 24.0

LEGEND
PHASING ①

TABLE 2. PHASING SUMMARY FOR BULKHEAD WALLS

Phase	Parcel	Land Use	Gross Area (AC)	Average Depth (ft)	Peak Flow (cfs)	SDOs	Anticipated Construction Year
Phase 1	20A	SF	22.9	28.000	86,500	118	2015
	20B	SF	22.9	28.000	86,500	118	
	20C	SF	22.9	28.000	86,500	118	
	20D	SF	22.9	28.000	86,500	118	
	20E	SF	22.9	28.000	86,500	118	
	20F	SF	22.9	28.000	86,500	118	
	20G	SF	22.9	28.000	86,500	118	
	20H	SF	22.9	28.000	86,500	118	
	20I	SF	22.9	28.000	86,500	118	
	20J	SF	22.9	28.000	86,500	118	
Phase 2	21	SF	17.1	33.000	56,676	24	2019
	22	SF	22.9	28.000	86,500	118	
	23	SF	13.8	41.800	142,348	117	
	24	SF	4.2	3.200	16,427	17	
	25	SF	29.0	14.000	71,000	88	
	26	SF	21.0	13.700	68,875	85	
	27	Commercial	15.0	19.000	63,000	80	
	28	Commercial	15.0	19.000	63,000	80	
	29	SF	21.0	13.700	68,875	85	
	30	SF	21.0	13.700	68,875	85	
Phase 3	31	SF	196.3	13.000	254,250	408	2019
	32	SF	196.3	13.000	254,250	408	
	33	SF	196.3	13.000	254,250	408	
	34	SF	196.3	13.000	254,250	408	
	35	SF	196.3	13.000	254,250	408	
	36	SF	196.3	13.000	254,250	408	
	37	SF	196.3	13.000	254,250	408	
	38	SF	196.3	13.000	254,250	408	
	39	SF	196.3	13.000	254,250	408	
	40	SF	196.3	13.000	254,250	408	
Phase 4	41	SF	167.0	13.000	281,820	452	2021
	42	SF	167.0	13.000	281,820	452	
	43	SF	167.0	13.000	281,820	452	
	44	SF	167.0	13.000	281,820	452	
	45	SF	167.0	13.000	281,820	452	
	46	SF	167.0	13.000	281,820	452	
	47	SF	167.0	13.000	281,820	452	
	48	SF	167.0	13.000	281,820	452	
	49	SF	167.0	13.000	281,820	452	
	50	SF	167.0	13.000	281,820	452	
Phase 5	51	SF	20.1	46.000	138,000	184	2021
	52	SF	167.0	13.000	281,820	452	
	53	SF	80.1	48.700	224,000	272	
	54	SF	47.0	57.000	167,200	220	
	55	SF	20.1	57.000	167,200	220	
	56	SF	20.1	57.000	167,200	220	
	57	SF	20.1	57.000	167,200	220	
	58	SF	20.1	57.000	167,200	220	
	59	SF	20.1	57.000	167,200	220	
	60	SF	20.1	57.000	167,200	220	
Phase 6	61	Commercial	11.1	18.000	57,000	71	2015
	62	SF	157.0	13.000	281,820	452	
	63	SF	157.0	13.000	281,820	452	
	64	SF	157.0	13.000	281,820	452	
	65	SF	157.0	13.000	281,820	452	
	66	SF	157.0	13.000	281,820	452	
	67	SF	157.0	13.000	281,820	452	
	68	SF	157.0	13.000	281,820	452	
	69	SF	157.0	13.000	281,820	452	
	70	SF	157.0	13.000	281,820	452	



<p>HILGARTWILSON</p> <p>PROJ. NO. 1003 DATE: NOV 2014 SCALE: 1" = 1000' DRAWN: HW DESIGNED: HW APPROVED: HW</p>	<p>ZANJERO TRAILS</p> <p>PERRYVILLE ROAD MARICOPA COUNTY, ARIZONA</p>	<p>HILGARTWILSON ENGINEER PLANNER SURVEY MANAGER</p> <p>2111 E. HOGLAND AVE., STE. 200 P. 602.450.0205 F. 602.450.0251 www.hilgartwilson.com</p>	<p>REV.:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>								
<p>FIG 4: PHASING PLAN</p>											



APPENDIX B

TABLES

Table B.1: Land Use Table

Project: Zanjero Trails

Prepared By: Zach Hilgart, P.E.



Land Use Per Approved RUPD						Land Use Per Approved Preliminary Plat				Land Use Used for Wastewater		
Parcel	RUPD Zoning	Use	Area (ac)	No. Units	Density (du/ac)	Parcel	Area (ac)	No. Units	Density (du/ac)	Area (ac)	No. Units	Density (du/ac)
16	R1-6	SF	162.9	517	3.2					162.9	517	3.2
17	Rural-43	Park	8.6	-	-					8.6	-	-
18	R1-6	School	16.3	-	-					16.3	-	-
19	R1-6	SF	65.3	195	3.0					65.3	195	3.0
20	R1-6	SF	43.3	129	3.0					43.3	129	3.0
21	C-2	Commercial	17.9	-	-					17.9	-	-
22	C-0	Office	5.0	-	-					5.0	-	-
23	R-2	SF	26.2	184	7.0					26.2	184	7.0
24	R1-8	SF	167.6	335	2.0					167.6	335	2.0
25	R1-6	SF	90.8	272	3.0					90.8	272	3.0
26	R1-6	SF	47.8	143	3.0					47.8	143	3.0
27	R1-6	SF	161.0	490	3.0					161.0	490	3.0
28	R1-18	SF	152.4	151	1.0					152.4	151	1.0
29	R1-6	School	14.2	-	-					14.2	-	-
30	Rural-43	Park	8.7	-	-					8.7	-	-
31	R1-6	SF	166.3	499	3.0					166.3	499	3.0
32	R1-18	SF	129.5	129	1.0					129.5	129	1.0
33	C-2	Commercial	14.4	-	-					14.4	-	-
34	R1-6	SF	155.7	484	3.1					155.7	484	3.1
35	R1-6	SF	80.2	235	2.9	35A	32.9	116	3.5	32.9	116	3.5
36	R-2	SF	30.6	114	3.7	35B	37.0	115	3.1	37.0	115	3.1
37	R1-6	SF	45.4	157	3.5	36	25.9	113	4.4	25.9	113	4.4
38	Rural-43	Park	6.5	-	-	37A	28.9	91	3.1	28.9	91	3.1
39	R1-6	School	18.9	-	-	37B	14.2	58	4.1	14.2	58	4.1
40	R1-7	SF	53.8	121	2.2	38	6.8	-	-	6.8	-	-
41	R-4	MF	14.6	261	17.9	39	17.1	-	-	17.1	-	-
						40	37.5	120	3.2	37.5	120	3.2
						41	13.8	261	19.0	13.8	261	19.0

Table B.1: Land Use Table

Project: Zanjero Trails

Prepared By: Zach Hilgart, P.E.



Land Use Per Approved RUPD						Land Use Per Approved Preliminary Plat				Land Use Used for Wastewater		
Parcel	RUPD Zoning	Use	Area (ac)	No. Units	Density (du/ac)	Parcel	Area (ac)	No. Units	Density (du/ac)	Area (ac)	No. Units	Density (du/ac)
42	C-O	Office	5.0	-	-	42	4.3	-	-	4.3	-	-
43	R1-6	SF	30.4	98	3.2	43	28.8	98	3.4	28.8	98	3.4
44	R-2	SF	23.1	96	4.2	44	21.9	95	4.3	21.9	95	4.3
45	C-2	Commercial	18.6	-	-	45	15.9	-	-	15.9	-	-
Total			1,781.0	4,610	2.6		285.0	1067	3.7	1,738.9	4,595	2.6

Table B.2: Wastewater Flow Table

Project: Zanjero Tanks

Prepared By: Zach Hilgart, P.E.



Parcel / Tract	Zoning	Land Use	Gross Acreage	Dwelling Units	Population	Average Daily Flow (gpd)	Average Daily Flow (MGD)	Equivalent Population	Peaking Factor	Peak Flow (gpd)	Peak Flow (MGD)	EDUs
16	R1-6	SF	162.9	517	1,664	129,250	0.129	1,664	2.24	289,082	0.289	617
17	Rural-43	Park	8.6	-	-	1,720	0.002	22	3.62	6,226	0.006	7
18	R1-6	School	16.3	-	-	8,150	0.008	104	3.62	29,503	0.030	33
19	R1-6	SF	65.3	195	624	48,750	0.048	624	2.56	124,800	0.125	195
20	R1-6	SF	43.3	129	413	32,250	0.032	413	2.74	88,365	0.088	129
21	C-2	Commercial	17.9	-	-	22,375	0.022	286	3.14	70,258	0.070	90
22	C-0	Office	5.0	-	-	5,000	0.005	64	3.62	18,100	0.018	20
23	R2	SF	26.2	184	589	46,000	0.046	589	2.64	121,440	0.121	184
24	R1-6	SF	187.6	535	1,072	83,750	0.084	1,072	2.36	197,405	0.197	336
25	R1-6	SF	90.8	272	870	35,750	0.036	870	2.46	167,280	0.167	272
26	R1-6	SF	47.8	143	438	35,750	0.036	438	2.74	97,956	0.098	143
27	R1-6	SF	161.0	490	1,568	122,500	0.122	1,568	2.25	275,730	0.276	490
28	R1-1B	SF	152.4	151	483	37,750	0.038	483	2.74	133,435	0.133	151
29	R1-6	School	14.2	-	-	7,100	0.007	91	3.62	25,702	0.026	28
30	Rural-43	Park	8.7	-	-	1,740	0.002	22	3.62	6,298	0.006	7
31	R1-6	SF	166.3	499	1,597	124,750	0.125	1,597	2.25	280,189	0.280	499
32	R1-1B	SF	129.5	129	413	32,250	0.032	413	2.74	88,365	0.088	129
33	C-2	Commercial	14.4	-	-	18,000	0.018	230	3.14	56,520	0.057	72
34	R1-6	SF	155.7	484	1,549	121,000	0.121	1,549	2.25	272,752	0.273	484
35A	R1-6	SF	32.9	116	371	29,000	0.029	371	2.90	84,100	0.084	116
35B	R1-6	SF	37.0	115	368	28,750	0.029	368	2.90	83,375	0.083	115
36	R-2	SF	25.9	113	352	28,250	0.028	362	2.90	81,925	0.082	113
37A	R1-6	SF	28.9	91	291	24,500	0.024	291	3.14	71,435	0.071	91
37B	R1-6	SF	14.2	58	186	14,500	0.015	186	3.62	52,480	0.052	58
38	Rural-43	Park	6.8	-	-	1,362	0.001	17	3.62	4,930	0.005	5
39	R1-6	School	17.1	-	-	8,530	0.008	109	3.62	30,679	0.031	34
40	R4-7	SF	37.5	120	384	30,000	0.030	384	2.90	87,000	0.087	120
41	M4	MF	13.8	261	522	41,760	0.042	535	2.64	110,246	0.110	167
42	C-0	Office	4.3	-	-	4,280	0.004	55	3.62	15,494	0.015	17
43	R1-6	SF	28.8	98	314	24,500	0.025	314	2.90	71,050	0.071	98
44	R-2	SF	21.9	95	304	23,750	0.024	304	2.90	68,875	0.069	95
45	C-2	Commercial	15.9	-	-	19,913	0.020	255	3.14	62,525	0.063	80
Total			1,738	4,596	14,394	1,223,430	1.223	15,860	1.76	2,176,134	2.176	4,894

Population Factors:

Single Family (SF): 3.2 people/dwelling unit
 Multi-Family (MF): 2.0 people/dwelling unit

Average Daily Flow Factors:

Single Family Residential: 250 gal/dwelling unit/day
 Multi-Family Residential: 160 gal/dwelling unit/day
 Commercial Flow Factor: 1,250 gal/acre/day
 Office Flow Factor: 1,000 gal/acre/day
 Park Flow Factor: 200 gal/acre/day
 School Flow Factor: 500 gal/acre/day

Peaking Factors:

Use Arizona Administrative Code (AAC) R18-9-E301

Table B.3: Phasing

Project: Zanjero Trails
 Prepared By: Zach Hilgart, P.E.



Phase	Parcel	Zoning	Land Use	Gross Area (AC)	Dwelling Units	Population	Average Daily Flow (gpd)	Average Daily Flow (MGD)	Equivalent Population	Peaking Factor	Peak Flow (gpd)	Peak Flow (MGD)	EDUs	Anticipated Construction Year
Phase 1	35A	R1-6	SF	32.9	116	371	29,000	0.029	371	2.90	84,100	0.084	116	2015
	35B	R1-6	SF	37.0	115	368	28,750	0.029	368	2.90	83,375	0.083	115	
	36	R-2	SF	25.9	113	352	28,250	0.028	352	2.90	81,925	0.082	113	
	37A	R1-6	SF	28.9	91	291	22,750	0.023	291	3.14	71,425	0.071	91	
	37B	R1-6	SF	14.2	56	188	14,500	0.015	188	3.62	52,450	0.052	58	
	38	Rural-43	Park	8.8	-	-	1,362	0.001	17	3.62	4,930	0.005	5	
	39	R1-6	School	17.1	-	-	6,530	0.009	109	3.62	39,879	0.031	34	
	40	R1-7	SF	37.6	120	384	30,000	0.030	384	2.90	87,000	0.087	120	
	41	R-4	MF	13.8	261	522	41,760	0.042	535	2.64	110,246	0.110	167	
	42	C-O	Office	4.3	-	-	4,280	0.004	55	3.62	16,494	0.015	17	
	43	R1-6	SF	28.8	98	314	24,500	0.025	314	2.90	71,050	0.071	98	
	44	R-2	SF	21.9	85	304	23,750	0.024	304	2.90	68,875	0.069	95	
45	C-2	Commercial	15.3	-	-	19,813	0.020	255	3.14	82,525	0.083	80		
Phase 1 Total				285.0	1,067	3,101	277,345	0.277	3,560	2.05	568,071	0.569	1,109	
Phase 2	29	R1-6	School	14.2	-	-	7,100	0.007	91	3.62	21,300	0.021	28	2019
	30	Rural-43	Park	8.7	-	-	1,740	0.002	22	3.62	5,220	0.005	7	
	31	R1-6	SF	166.3	499	1,597	124,750	0.126	1,597	2.25	374,250	0.374	499	
	32	R1-1B	SF	129.6	129	413	22,250	0.022	413	2.74	95,750	0.095	129	
Phase 2 Total				318.7	628	2,010	168,640	0.168	2,123	2.17	380,316	0.380	663	
Phase 3	27	R1-6	SF	161.0	490	1,568	122,500	0.123	1,568	2.25	367,500	0.368	490	2023
	28	R1-1B	SF	152.4	151	483	37,750	0.038	483	2.74	113,250	0.113	151	
Phase 3 Total				313.4	641	2,051	160,250	0.160	2,051	2.18	349,545	0.350	641	
Phase 4	22	C-O	Office	5.0	-	-	6,000	0.005	64	3.62	15,000	0.015	20	2027
	23	R-2	SF	26.2	184	589	46,000	0.046	589	2.64	139,000	0.139	184	
	24	R1-8	SF	167.6	335	1,072	83,750	0.084	1,072	2.36	251,250	0.251	335	
	25	R1-6	SF	90.8	272	870	68,000	0.068	870	2.46	204,000	0.204	272	
	26	R1-6	SF	47.8	163	458	35,750	0.036	458	2.74	107,250	0.107	143	
Phase 4 Total				337.4	624	2,989	238,500	0.239	3,083	2.09	497,471	0.497	954	
Phase 5	16	R1-6	SF	162.9	517	1,654	129,250	0.129	1,654	2.24	387,750	0.388	517	2031
	17	Rural-43	Park	8.6	-	-	1,720	0.002	22	3.62	5,160	0.005	7	
	18	R1-6	School	16.3	-	-	8,150	0.008	104	3.62	24,450	0.024	33	
	19	R1-6	SF	65.3	195	624	48,750	0.049	624	2.56	148,250	0.148	195	
	20	R1-6	SF	43.3	129	413	32,250	0.032	413	2.74	95,750	0.095	129	
	21	C-2	Commercial	17.8	-	-	22,375	0.022	286	3.14	87,125	0.087	90	
Phase 5 Total				314.9	841	2,891	242,895	0.242	3,104	2.08	504,883	0.505	871	
Phase 6	33	C-2	Commercial	14.4	-	-	18,000	0.018	230	3.14	54,000	0.054	72	2035
	34	R1-6	SF	165.7	484	1,549	121,000	0.121	1,549	2.25	363,000	0.363	484	
Phase 6 Total				170.1	484	1,549	139,000	0.139	1,779	2.22	398,249	0.399	556	
Project Total				1,738.9	4,895	14,991	1,223,430	1.223	15,690	1.78	2,176,134	2.176	4,894	

Table B.4

ZANJERO TRAILS
 Camelback Road and Perryville Road
 Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 15,000.00	\$ 15,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 7,500.00	\$ 7,500.00
Liberty	1	LS	\$ 75,000.00	\$ 75,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 99,000.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 3,412,835.00	\$ 119,449.23
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 123,304.23
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 3,450,127.00	\$ 120,754.45
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,260	LF	\$ 4.75	\$ 24,985.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 3,412,835.00	\$ 85,320.88
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,260	LF	\$ 0.60	\$ 3,156.00
TOTAL SURVEYING				\$ 4,156.00
TOTAL CONSULTANT SERVICES				\$ 235,216.32
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 3,412,835.00	\$ 68,256.70
TOTAL CONSTRUCTION TESTING				\$ 68,256.70

Table B.4

ZANJERO TRAILS
Camelback Road and Perryville Road
Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY	\$ 10.00	\$ 200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY	\$ 35.00	\$ 700.00
Traffic Control Allowance	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
15" SDR 35 Sewerline (14' Avg Depth)	4,583	LF	\$ 50.00	\$ 229,150.00
18" F-679 Sewerline (12' Avg Depth)	677	LF	\$ 50.00	\$ 33,850.00
Manholes (5')	13	EA	\$ 4,000.00	\$ 52,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA	\$ 12,000.00	\$ 12,000.00
Air Test Manholes	13	EA	\$ 150.00	\$ 1,950.00
Camera Test Sewer	5,260	LF	\$ 1.00	\$ 5,260.00
TOTAL SEWERLINE EXTENSION				\$ 334,710.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,640	LF	\$ 24.00	\$ 63,360.00
8" SDR 35 PVC (Parcel 35A)	5,541	LF	\$ 24.00	\$ 132,984.00
8" SDR 35 PVC (Parcel 35B)	5,657	LF	\$ 24.00	\$ 135,768.00
8" SDR 35 PVC (Parcel 36)	4,891	LF	\$ 24.00	\$ 117,384.00
8" SDR 35 PVC (Parcel 37A)	5,657	LF	\$ 24.00	\$ 135,768.00
8" SDR 35 PVC (Parcel 37B)	2,589	LF	\$ 24.00	\$ 62,136.00
8" SDR 35 PVC (Parcel 38)	681	LF	\$ 24.00	\$ 16,344.00
8" SDR 35 PVC (Parcel 39)	2,232	LF	\$ 24.00	\$ 53,568.00
8" SDR 35 PVC (Parcel 40)	5,909	LF	\$ 24.00	\$ 141,816.00
8" SDR 35 PVC (Parcel 41)	5,221	LF	\$ 24.00	\$ 125,304.00
8" SDR 35 PVC (Parcel 42)	767	LF	\$ 24.00	\$ 18,408.00
8" SDR 35 PVC (Parcel 43)	4,575	LF	\$ 24.00	\$ 109,800.00
8" SDR 35 PVC (Parcel 44)	3,518	LF	\$ 24.00	\$ 84,432.00
8" SDR 35 PVC (Parcel 45)	3,266	LF	\$ 24.00	\$ 78,384.00
Manholes (5')	296	EA	\$ 4,000.00	\$ 1,184,000.00
Sewer Stubout	7	EA	\$ 300.00	\$ 2,100.00
Connect to Existing	13	EA	\$ 500.00	\$ 6,500.00
4" Services	1,067	EA	\$ 475.00	\$ 506,825.00
Air Test Manholes	296	EA	\$ 150.00	\$ 44,400.00
Camera Test Sewer	53,144	LF	\$ 1.00	\$ 53,144.00
TOTAL ONSITE SEWERLINES				\$ 3,072,425.00
TOTAL SEWER				\$ 3,407,135.00

Table B.4

ZANJERO TRAILS
 Camelback Road and Perryville Road
 Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	58,404	LF	\$ 0.50	\$ 29,202.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,260	LF	\$ 1.00	\$ 5,260.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,260	LF	\$ 0.50	\$ 2,630.00
TOTAL MISCELLANEOUS CLEANUP				\$ 37,092.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 3,450,127.00	\$ 34,501.27
TOTAL ONE YEAR WARRANTY COSTS				\$ 34,501.27
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 3,450,127.00	\$ 141,282.70
TOTAL SALES TAX				\$ 141,282.70
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 4,156,688.22	\$ 415,668.82
TOTAL CONTINGENCY				\$ 415,668.82
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 4,572,357.04

Table B.4

ZANJERO TRAILS
Bethany Home Road and Perryville Road
Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,691,274.00	\$ 94,194.59
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 98,049.59
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,723,168.00	\$ 95,310.88
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,324	LF	\$ 4.75	\$ 25,289.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,691,274.00	\$ 67,281.85
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,324	LF	\$ 0.60	\$ 3,194.40
TOTAL SURVEYING				<u>\$ 4,194.40</u>
TOTAL CONSULTANT SERVICES				\$ 192,076.13
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,691,274.00	\$ 53,825.48
TOTAL CONSTRUCTION TESTING				\$ 53,825.48
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Bethany Home Road and Perryville Road
Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
15" SDR 35 Sewerline (14' Avg Depth)	5,324	LF	\$ 50.00	\$ 266,200.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA	\$ 12,000.00	\$ 12,000.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,324	LF	\$ 1.00	\$ 5,324.00
TOTAL SEWERLINE EXTENSION				\$ 342,124.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,850	LF	\$ 24.00	\$ 68,400.00
8" SDR 35 PVC (Parcel 31)	25,862	LF	\$ 24.00	\$ 620,688.00
8" SDR 35 PVC (Parcel 32)	13,780	LF	\$ 24.00	\$ 330,720.00
Manholes (5')	237	EA	\$ 4,000.00	\$ 948,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	628	EA	\$ 475.00	\$ 298,300.00
Air Test Manholes	237	EA	\$ 150.00	\$ 35,550.00
Camera Test Sewer	42,492	LF	\$ 1.00	\$ 42,492.00
TOTAL ONSITE SEWERLINES				\$ 2,349,150.00
TOTAL SEWER				\$ 2,691,274.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	47,816	LF	\$ 0.50	\$ 23,908.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,324	LF	\$ 1.00	\$ 5,324.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,324	LF	\$ 0.50	\$ 2,662.00
TOTAL MISCELLANEOUS CLEANUP				\$ 31,894.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00

Table B.4

ZANJERO TRAILS
 Bethany Home Road and Perryville Road
 Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,723,168.00	\$ 27,231.68
TOTAL ONE YEAR WARRANTY COSTS				\$ 27,231.68
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,723,168.00	\$ 111,513.73
TOTAL SALES TAX				\$ 111,513.73
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,251,364.61	\$ 325,136.46
TOTAL CONTINGENCY				\$ 325,136.46
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,576,501.07

Table B.4

ZANJERO TRAILS
 Glendale Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014.

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,778,939.00	\$ 97,262.87
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 101,117.87
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,811,718.50	\$ 98,410.15
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,239	LF	\$ 4.75	\$ 24,885.25
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,778,939.00	\$ 69,473.48
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,239	LF	\$ 0.60	\$ 3,143.40
TOTAL SURVEYING				\$ 4,143.40
TOTAL CONSULTANT SERVICES				\$ 196,912.27
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,778,939.00	\$ 55,578.78
TOTAL CONSTRUCTION TESTING				\$ 55,578.78

Table B.4

ZANJERO TRAILS
Glendale Avenue and Perryville Road
Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY \$	10.00 \$	200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY \$	35.00 \$	700.00
Traffic Control Allowance	1	LS \$	5,000.00 \$	5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
12" SDR 35 Sewerline (20' Avg Depth)	5,239	LF \$	50.00 \$	261,950.00
Manholes (5')	14	EA \$	4,000.00 \$	56,000.00
Connect to Existing	1	EA \$	500.00 \$	500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA \$	12,000.00 \$	12,000.00
Air Test Manholes	14	EA \$	150.00 \$	2,100.00
Camera Test Sewer	5,239	LF \$	1.00 \$	5,239.00
TOTAL SEWERLINE EXTENSION				\$ 337,789.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,800	LF \$	24.00 \$	67,200.00
8" SDR 35 PVC (Parcel 27)	25,207	LF \$	24.00 \$	604,968.00
8" SDR 35 PVC (Parcel 28)	16,196	LF \$	24.00 \$	388,704.00
Manholes (5')	246	EA \$	4,000.00 \$	984,000.00
Sewer Stubout	5	EA \$	300.00 \$	1,500.00
Connect to Existing	7	EA \$	500.00 \$	3,500.00
4" Services	641	EA \$	475.00 \$	304,475.00
Air Test Manholes	246	EA \$	150.00 \$	36,900.00
Camera Test Sewer	44,203	LF \$	1.00 \$	44,203.00
TOTAL ONSITE SEWERLINES				\$ 2,435,450.00
TOTAL SEWER				\$ 2,773,239.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	49,442	LF \$	0.50 \$	24,721.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,239	LF \$	1.00 \$	5,239.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,239	LF \$	0.50 \$	2,619.50
TOTAL MISCELLANEOUS CLEANUP				\$ 32,579.50

Table B.4

ZANJERO TRAILS
 Glendale Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,811,718.50	\$ 28,117.19
TOTAL ONE YEAR WARRANTY COSTS				\$ 28,117.19
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,811,718.50	\$ 115,139.87
TOTAL SALES TAX				\$ 115,139.87
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,354,084.48	\$ 335,408.45
TOTAL CONTINGENCY				\$ 335,408.45
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,689,492.92

Table B.4

ZANJERO TRAILS
Northern Avenue and Perryville Road
Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 3,339,298.00	\$ 116,875.43
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 120,730.43
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 3,376,877.00	\$ 118,190.70
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,342	LF	\$ 4.75	\$ 25,374.50
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 3,339,298.00	\$ 83,482.45
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,342	LF	\$ 0.60	\$ 3,205.20
TOTAL SURVEYING				\$ 4,205.20
TOTAL CONSULTANT SERVICES				\$ 231,252.85
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 3,339,298.00	\$ 66,785.96
TOTAL CONSTRUCTION TESTING				\$ 66,785.96

Table B.4

ZANJERO TRAILS
Northern Avenue and Perryville Road
Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY	\$ 10.00	\$ 200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY	\$ 35.00	\$ 700.00
Traffic Control Allowance	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
10" SDR 35 Sewerline (18' Avg Depth)	5,342	LF	\$ 43.00	\$ 229,706.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	2	EA	\$ 12,000.00	\$ 24,000.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,342	LF	\$ 1.00	\$ 5,342.00
TOTAL SEWERLINE EXTENSION				\$ 317,648.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	3,250	LF	\$ 24.00	\$ 78,000.00
8" SDR 35 PVC (Parcel 23)	6,656	LF	\$ 24.00	\$ 159,744.00
8" SDR 35 PVC (Parcel 24)	21,951	LF	\$ 24.00	\$ 526,824.00
8" SDR 35 PVC (Parcel 25)	14,110	LF	\$ 24.00	\$ 338,640.00
8" SDR 35 PVC (Parcel 26)	7,423	LF	\$ 24.00	\$ 178,152.00
Manholes (5')	297	EA	\$ 4,000.00	\$ 1,188,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	297	EA	\$ 150.00	\$ 44,550.00
Camera Test Sewer	53,390	LF	\$ 1.00	\$ 53,390.00
TOTAL ONSITE SEWERLINES				\$ 3,015,950.00
TOTAL SEWER				\$ 3,333,598.00

Table B.4

ZANJERO TRAILS
Northern Avenue and Perryville Road
Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	58,732	LF	\$ 0.50	\$ 29,366.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,342	LF	\$ 1.00	\$ 5,342.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,342	LF	\$ 0.50	\$ 2,671.00
TOTAL MISCELLANEOUS CLEANUP				\$ 37,379.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 3,376,877.00	\$ 33,768.77
TOTAL ONE YEAR WARRANTY COSTS				\$ 33,768.77
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 3,376,877.00	\$ 138,283.11
TOTAL SALES TAX				\$ 138,283.11
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 4,013,198.12	\$ 401,319.81
TOTAL CONTINGENCY				\$ 401,319.81
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 4,414,517.93

Table B.4

ZANJERO TRAILS
Olive Avenue and Perryville Road
Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,872,625.00	\$ 100,541.88
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 104,396.88
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,901,719.50	\$ 101,560.18
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	2,500	LF	\$ 4.75	\$ 11,875.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,872,625.00	\$ 71,815.63
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	2,500	LF	\$ 0.60	\$ 1,500.00
TOTAL SURVEYING				\$ 2,500.00
TOTAL CONSULTANT SERVICES				\$ 187,750.81
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,872,625.00	\$ 57,452.50
TOTAL CONSTRUCTION TESTING				\$ 57,452.50
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Olive Avenue and Perryville Road
Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
8" SDR 35 Sewerline (12' Avg Depth)	2,500	LF	\$ 30.00	\$ 75,000.00
Manholes (5')	7	EA	\$ 4,000.00	\$ 28,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Air Test Manholes	7	EA	\$ 150.00	\$ 1,050.00
Camera Test Sewer	2,500	LF	\$ 1.00	\$ 2,500.00
TOTAL SEWERLINE EXTENSION				\$ 107,050.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,300	LF	\$ 24.00	\$ 55,200.00
8" SDR 35 PVC (Parcel 16)	26,024	LF	\$ 24.00	\$ 624,576.00
8" SDR 35 PVC (Parcel 17)	877	LF	\$ 24.00	\$ 21,048.00
8" SDR 35 PVC (Parcel 18)	2,145	LF	\$ 24.00	\$ 51,480.00
8" SDR 35 PVC (Parcel 19)	10,132	LF	\$ 24.00	\$ 243,168.00
8" SDR 35 PVC (Parcel 20)	6,711	LF	\$ 24.00	\$ 161,064.00
Manholes (5')	268	EA	\$ 4,000.00	\$ 1,072,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	268	EA	\$ 150.00	\$ 40,200.00
Camera Test Sewer	48,189	LF	\$ 1.00	\$ 48,189.00
TOTAL ONSITE SEWERLINES				\$ 2,765,575.00
TOTAL SEWER				\$ 2,872,625.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	50,689	LF	\$ 0.50	\$ 25,344.50
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	2,500	LF	\$ 1.00	\$ 2,500.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	2,500	LF	\$ 0.50	\$ 1,250.00
TOTAL MISCELLANEOUS CLEANUP				\$ 29,094.50
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00

Table B.4

ZANJERO TRAILS
 Olive Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,901,719.50	\$ 29,017.20
TOTAL ONE YEAR WARRANTY COSTS				\$ 29,017.20
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,901,719.50	\$ 118,825.41
TOTAL SALES TAX				\$ 118,825.41
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,444,662.29	\$ 344,466.23
TOTAL CONTINGENCY				\$ 344,466.23
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,789,128.52

Table B.4

ZANJERO TRAILS
Northern Avenue and Beardsley Canal
Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 4,000.00	\$ 4,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 2,000.00	\$ 2,000.00
Liberty	1	LS	\$ 20,000.00	\$ 20,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 27,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,027,912.00	\$ 70,976.92
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 74,831.92
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,052,381.00	\$ 71,833.34
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,342	LF	\$ 4.75	\$ 25,374.50
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,027,912.00	\$ 50,697.80
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,342	LF	\$ 0.60	\$ 3,205.20
TOTAL SURVEYING				<u>\$ 4,205.20</u>
TOTAL CONSULTANT SERVICES				\$ 152,110.84
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,027,912.00	\$ 40,558.24
TOTAL CONSTRUCTION TESTING				\$ 40,558.24
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Northern Avenue and Beardsley Canal
Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Beardsley Cana				
8" SDR 35 Sewerline (15' Avg Depth)	5,342	LF	\$ 35.00	\$ 186,970.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,342	LF	\$ 1.00	\$ 5,342.00
TOTAL SEWERLINE EXTENSION				\$ 250,912.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Parcel 33)	2,945	LF	\$ 24.00	\$ 70,680.00
8" SDR 35 PVC (Parcel 34)	24,625	LF	\$ 24.00	\$ 591,000.00
Manholes (5')	154	EA	\$ 4,000.00	\$ 616,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	154	EA	\$ 150.00	\$ 23,100.00
Camera Test Sewer	27,570	LF	\$ 1.00	\$ 27,570.00
TOTAL ONSITE SEWERLINES				\$ 1,777,000.00
TOTAL SEWER				\$ 2,027,912.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	32,912	LF	\$ 0.50	\$ 16,456.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,342	LF	\$ 1.00	\$ 5,342.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,342	LF	\$ 0.50	\$ 2,671.00
TOTAL MISCELLANEOUS CLEANUP				\$ 24,469.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8	1%	OF	\$ 2,052,381.00	\$ 20,523.81

Table B.4

ZANJERO TRAILS
 Northern Avenue and Beardsley Canal
 Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
TOTAL ONE YEAR WARRANTY COSTS				\$ 20,523.81
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,052,381.00	\$ 84,045.00
TOTAL SALES TAX				\$ 84,045.00
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 2,456,950.81	\$ 245,695.08
TOTAL CONTINGENCY				\$ 245,695.08
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 2,702,645.89



APPENDIX C
HYDRAULIC CALCULATIONS

Table C.1: Manhole Loading

Project: Zanjero Trails

Prepared By: Zach Hilgart, P.E.



Manhole	Parcel	Percentage	Average Daily Flow (gpd)	Equivalent Population	Peaking Factor	Peak Flow (gpd)
MH-20	16	100%	129,250	1,654	2.24	289,082
Total (Cumulative)			129,250	1,654	2.24	289,082
MH-19	17	100%	1,720	22	3.62	6,226
	18	100%	8,150	104	3.62	29,503
	19	100%	48,750	624	2.56	124,800
	20	100%	32,250	413	2.74	88,365
	21	100%	22,375	286	3.14	70,258
Total (Cumulative)			242,495	3,104	2.08	504,888
MH-18	22	100%	5,000	64	3.62	18,100
	23	100%	46,000	589	2.64	121,440
	24	50%	41,875	536	2.64	110,550
	25	50%	34,000	435	2.74	93,160
Total (Cumulative)			369,370	4,728	1.99	735,234
MH-17	24	50%	41,875	536	2.64	110,550
	25	50%	34,000	435	2.74	93,160
	26	100%	35,750	458	2.74	97,955
Total (Cumulative)			480,995	6,157	1.94	931,908
MH-16	27	50%	61,250	784	2.50	153,125
	28	50%	18,875	242	3.14	59,268
Total (Cumulative)			561,120	7,182	1.91	1,070,598
MH-15	27	50%	61,250	784	2.50	153,125
	28	50%	18,875	242	3.14	59,268
Total (Cumulative)			641,245	8,208	1.88	1,207,626
MH-14	29	100%	7,100	91	3.62	25,702
	30	100%	1,740	22	3.62	6,299
	31	50%	62,375	798	2.50	155,938
	32	75%	24,188	310	2.90	70,144
Total (Cumulative)			736,648	9,429	1.86	1,368,960
MH-13	31	50%	62,375	798	2.50	155,938
	32	25%	8,063	103	3.62	29,186
Total (Cumulative)			807,085	10,331	1.84	1,489,027
MH-12	36	100%	28,250	362	2.90	81,925
Total (Cumulative)			835,335	10,692	1.84	1,536,365
MH-10	37B	100%	14,500	186	3.62	52,490
Total (Cumulative)			849,835	10,878	1.84	1,560,615
MH-8	37A	100%	22,750	291	3.14	71,435
Total (Cumulative)			872,585	11,169	1.83	1,598,600
MH-5	43	100%	24,500	314	2.90	71,050
Total (Cumulative)			897,085	11,483	1.83	1,639,422
MH-3	44	100%	23,750	304	2.90	68,875
Total (Cumulative)			920,835	11,787	1.82	1,678,916
MH-1	45	100%	19,913	255	3.14	62,525
Total (Cumulative)			940,748	12,042	1.82	1,711,969
MH-21	35A	100%	29,000	371	2.90	84,100
	35B	100%	28,750	368	2.90	83,375
	38	100%	1,362	17	3.62	4,930
	39	100%	8,530	109	3.62	30,879
	40	77.5%	23,250	298	3.14	73,005
	41	100%	41,760	535	2.64	110,246
	42	100%	4,280	55	3.62	15,494
Total (Cumulative)			1,077,680	13,794	1.80	1,937,922

Table C.1: Manhole Loading

Project: Zanjero Trails

Prepared By: Zach Hilgart, P.E.



Manhole	Parcel	Percentage	Average Daily Flow (gpd)	Equivalent Population	Peaking Factor	Peak Flow (gpd)
MH-22	40	22.5%	6,750	86	3.62	24,435
Total (Cumulative)			1,084,430	13,881	1.80	1,949,003
MH-23	33	100%	18,000	230	3.14	56,520
	34	100%	121,000	1,549	2.25	272,752
Total			1,223,430	15,660	1.78	2,176,134

FlexTable: Conduit Table
 14-0502_ZT Perryville Rd_No Fut No
 Shea_AAC.stsw

Active Scenario: Average Daily Flow

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Slope (ft/ft)	Manning's n	Start Node	Invert (Start) (ft)	Cover (Start) (ft)	Stop Node	Invert (Stop) (ft)	Cover (Stop) (ft)	Flow (gpd)	Depth (Normal) / Rise (%)	Flow / Capacity (Design) (%)	Velocity (Maximum Calculated) (ft/s)	Capacity (Excess Design) (gpd)	Capacity (Full Flow) (gpd)
CO-1	18.0	101	0.0012	0.013	MH-1	1,120.08	12.81	OF-1	1,119.96	13.29	940,747	44.1	44.1	1.94	1,193,069	2,340,025
CO-2	18.0	576	0.0011	0.013	MH-2	1,120.84	15.19	MH-1	1,120.18	12.71	920,835	44.0	43.9	1.90	1,174,666	2,298,006
CO-3	15.0	166	0.0116	0.013	MH-3	1,123.01	13.88	MH-2	1,121.09	15.19	920,835	30.7	22.5	4.45	3,173,409	4,489,904
CO-4	15.0	737	0.0036	0.013	MH-5	1,125.79	14.15	MH-3	1,123.11	13.78	897,085	41.3	39.1	2.91	1,398,592	2,517,527
CO-6	15.0	600	0.0035	0.013	MH-6	1,127.99	14.07	MH-5	1,125.89	14.05	872,585	41.1	38.7	2.84	1,379,637	2,469,873
CO-7	15.0	334	0.0035	0.013	MH-7	1,129.26	13.89	MH-6	1,128.09	13.97	872,585	41.1	38.7	2.85	1,380,600	2,470,929
CO-8	15.0	334	0.0035	0.013	MH-8	1,130.53	13.90	MH-7	1,129.36	13.79	872,585	41.1	38.7	2.85	1,380,600	2,470,929
CO-9	15.0	581	0.0035	0.013	MH-9	1,132.66	14.17	MH-8	1,130.63	13.80	849,835	40.5	37.8	2.82	1,400,448	2,467,746
CO-10	15.0	284	0.0035	0.013	MH-10	1,133.76	14.24	MH-9	1,132.76	14.07	849,835	40.4	37.6	2.83	1,409,174	2,477,316
CO-11	15.0	430	0.0033	0.013	MH-11	1,135.28	13.47	MH-10	1,133.86	14.14	835,335	40.7	38.2	2.75	1,352,361	2,399,112
CO-12	15.0	117	0.0040	0.013	MH-12	1,135.85	12.90	MH-11	1,135.38	13.37	835,335	38.6	34.6	2.96	1,577,531	2,646,041
CO-13	15.0	1,000	0.0033	0.013	MH-13	1,139.28	11.47	MH-12	1,135.95	12.80	807,085	39.9	36.7	2.74	1,389,759	2,409,143
CO-14	15.0	2,500	0.0057	0.013	MH-14	1,153.52	9.23	MH-13	1,139.38	11.37	736,648	33.0	25.7	3.23	2,126,422	3,139,751
CO-15	15.0	2,824	0.0041	0.013	MH-15	1,165.21	15.54	MH-14	1,153.62	9.13	641,245	33.4	26.3	2.77	1,797,613	2,674,545
CO-16	12.0	2,500	0.0054	0.013	MH-16	1,179.08	17.92	MH-15	1,165.46	15.54	561,120	39.6	36.2	3.00	988,656	1,699,544
CO-17	12.0	2,739	0.0058	0.013	MH-17	1,195.09	21.91	MH-16	1,179.18	17.82	480,995	35.8	30.1	2.95	1,119,261	1,754,902
CO-18	10.0	2,500	0.0102	0.013	MH-18	1,220.64	14.53	MH-17	1,195.26	21.91	369,370	34.7	28.4	3.40	931,627	1,426,723
CO-19	10.0	2,842	0.0068	0.013	MH-19	1,240.02	11.15	MH-18	1,220.74	14.43	242,495	30.9	22.8	2.61	821,016	1,166,287
CO-20	8.0	2,500	0.0059	0.013	MH-20	1,255.05	11.28	MH-19	1,240.19	11.14	129,250	31.5	23.5	2.12	419,802	602,111
CO-21	10.0	1,152	0.0059	0.013	MH-21	1,127.50	9.67	OF-1	1,120.68	13.24	282,682	34.8	28.5	2.59	710,815	1,089,506
CO-22	8.0	1,095	0.0036	0.013	MH-22	1,131.59	13.74	MH-21	1,127.67	9.66	145,750	38.3	34.2	1.83	280,348	467,276
CO-23	8.0	465	0.0033	0.013	MH-23	1,133.23	16.10	MH-22	1,131.69	13.64	139,000	38.2	33.9	1.76	270,834	449,439
CO-24	8.0	2,729	0.0045	0.013	MH-24	1,145.71	13.62	MH-23	1,133.43	15.90	139,000	35.2	29.1	1.96	338,717	523,883

FlexTable: Manhole Table
 14-0502_ZT Perryville Rd_No
 Fut No Shea_AAC.stsw

Active Scenario: Average Daily
 Flow

Current Time: 0.000 hours

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Depth (Structure) (ft)	Flow (System Sanitary) (gpd)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
MH-1	1,134.39	1,120.08	14.31	940,747	1,120.71	1,120.71
MH-2	1,137.53	1,120.84	16.69	920,835	1,121.50	1,121.50
MH-3	1,138.14	1,123.01	15.13	920,835	1,123.48	1,123.48
MH-5	1,141.19	1,125.79	15.40	897,085	1,126.31	1,126.31
MH-6	1,143.31	1,127.99	15.32	872,585	1,128.50	1,128.50
MH-7	1,144.40	1,129.26	15.14	872,585	1,129.77	1,129.77
MH-8	1,145.68	1,130.53	15.15	872,585	1,131.04	1,131.04
MH-9	1,148.08	1,132.66	15.42	849,835	1,133.17	1,133.17
MH-10	1,149.25	1,133.76	15.49	849,835	1,134.26	1,134.26
MH-11	1,150.00	1,135.28	14.72	835,335	1,135.79	1,135.79
MH-12	1,150.00	1,135.85	14.15	835,335	1,136.33	1,136.33
MH-13	1,152.00	1,139.28	12.72	807,085	1,139.78	1,139.78
MH-14	1,164.00	1,153.52	10.48	736,648	1,153.94	1,153.94
MH-15	1,182.00	1,165.21	16.79	641,245	1,165.63	1,165.63
MH-16	1,198.00	1,179.08	18.92	561,120	1,179.48	1,179.48
MH-17	1,218.00	1,195.09	22.91	480,995	1,195.45	1,195.45
MH-18	1,236.00	1,220.64	15.36	369,370	1,220.97	1,220.97
MH-19	1,252.00	1,240.02	11.98	242,495	1,240.29	1,240.29
MH-20	1,267.00	1,255.05	11.95	129,250	1,255.26	1,255.26
MH-21	1,138.00	1,127.50	10.50	282,682	1,127.79	1,127.79
MH-22	1,146.00	1,131.59	14.41	145,750	1,131.85	1,131.85
MH-23	1,150.00	1,133.23	16.77	139,000	1,133.48	1,133.48
MH-24	1,160.00	1,145.71	14.29	139,000	1,145.94	1,145.94

FlexTable: Outfall Table
14-0502_ZT Perryville Rd_No
Fut No Shea_AAC.stsw

Active Scenario: Average Daily
Flow

Current Time: 0.000 hours

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (gpd)
OF-1	1,134.75	1,119.76	1,223,430

FlexTable: Conduit Table
 14-0502_ZT Perryville Rd_No Fut No
 Shea_AAC.stsw

Active Scenario: Peak Flow (AAC)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Slope (ft/ft)	Manning's n	Start Node	Invert (Start) (ft)	Cover (Start) (ft)	Stop Node	Invert (Stop) (ft)	Cover (Stop) (ft)	Flow (gpd)	Depth (Normal) / Rise (%)	Flow / Capacity (Design) (%)	Velocity (Maximum Calculated) (ft/s)	Capacity (Excess Design) (gpd)	Capacity (Full Flow) (gpd)
CO-1	18.0	101	0.0012	0.013	MH-1	1,120.08	12.81	OF-1	1,119.96	13.29	1,716,201	63.6	80.4	2.24	417,615	2,340,025
CO-2	18.0	576	0.0011	0.013	MH-2	1,120.84	15.19	MH-1	1,120.18	12.71	1,682,832	63.5	80.3	2.20	412,669	2,298,006
CO-3	15.0	166	0.0116	0.013	MH-3	1,123.01	13.88	MH-2	1,121.09	15.19	1,682,832	42.4	41.1	5.26	2,411,412	4,489,904
CO-4	15.0	737	0.0036	0.013	MH-5	1,125.79	14.15	MH-3	1,123.11	13.78	1,642,864	58.9	71.6	3.38	652,813	2,517,527
CO-6	15.0	600	0.0035	0.013	MH-6	1,127.99	14.07	MH-5	1,125.89	14.05	1,601,443	58.6	71.1	3.31	650,779	2,469,873
CO-7	15.0	334	0.0035	0.013	MH-7	1,129.26	13.89	MH-6	1,128.09	13.97	1,601,443	58.6	71.1	3.31	651,742	2,470,929
CO-8	15.0	334	0.0035	0.013	MH-8	1,130.53	13.90	MH-7	1,129.36	13.79	1,601,443	58.6	71.1	3.31	651,742	2,470,929
CO-9	15.0	581	0.0035	0.013	MH-9	1,132.66	14.17	MH-8	1,130.63	13.80	1,562,808	57.8	69.4	3.29	687,475	2,467,746
CO-10	15.0	284	0.0035	0.013	MH-10	1,133.76	14.24	MH-9	1,132.76	14.07	1,562,808	57.6	69.2	3.30	696,201	2,477,316
CO-11	15.0	430	0.0033	0.013	MH-11	1,135.28	13.47	MH-10	1,133.86	14.14	1,538,096	58.2	70.3	3.21	649,601	2,399,112
CO-12	15.0	117	0.0040	0.013	MH-12	1,135.85	12.90	MH-11	1,135.38	13.37	1,538,096	54.7	63.7	3.46	874,770	2,646,041
CO-13	15.0	1,000	0.0033	0.013	MH-13	1,139.28	11.47	MH-12	1,135.95	12.80	1,489,756	56.9	67.8	3.20	707,089	2,409,143
CO-14	15.0	2,500	0.0057	0.013	MH-14	1,153.52	9.23	MH-13	1,139.38	11.37	1,371,209	46.2	47.9	3.83	1,491,860	3,139,751
CO-15	15.0	2,824	0.0041	0.013	MH-15	1,165.21	15.54	MH-14	1,153.62	9.13	1,209,286	47.2	49.6	3.29	1,229,572	2,674,545
CO-16	12.0	2,500	0.0054	0.013	MH-16	1,179.08	17.92	MH-15	1,165.46	15.54	1,069,693	57.5	69.0	3.54	480,083	1,699,544
CO-17	12.0	2,739	0.0058	0.013	MH-17	1,195.09	21.91	MH-16	1,179.18	17.82	931,623	51.8	58.2	3.51	668,634	1,754,902
CO-18	10.0	2,500	0.0102	0.013	MH-18	1,220.64	14.53	MH-17	1,195.26	21.91	735,372	50.9	56.5	4.08	565,625	1,426,723
CO-19	10.0	2,842	0.0068	0.013	MH-19	1,240.02	11.15	MH-18	1,220.74	14.43	505,302	46.0	47.5	3.19	558,209	1,166,287
CO-20	8.0	2,500	0.0059	0.013	MH-20	1,255.05	11.28	MH-19	1,240.19	11.14	289,311	48.8	52.7	2.64	259,740	602,111
CO-21	10.0	1,152	0.0059	0.013	MH-21	1,127.50	9.67	OF-1	1,120.68	13.24	580,318	51.9	58.4	3.14	413,179	1,089,506
CO-22	8.0	1,095	0.0036	0.013	MH-22	1,131.59	13.74	MH-21	1,127.67	9.66	321,935	61.0	75.6	2.23	104,163	467,276
CO-23	8.0	465	0.0033	0.013	MH-23	1,133.23	16.10	MH-22	1,131.69	13.64	308,707	60.9	75.3	2.15	101,127	449,439
CO-24	8.0	2,729	0.0045	0.013	MH-24	1,145.71	13.62	MH-23	1,133.43	15.90	308,707	55.2	64.6	2.42	169,011	523,883

Active Scenario: Peak Flow
(AAC)

FlexTable: Manhole Table
14-0502_ZT Perryville Rd_No
Fut No Shea_AAC.stsw

Current Time: 0.000 hours

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Depth (Structure) (ft)	Flow (System Sanitary) (gpd)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
MH-1	1,134.39	1,120.08	14.31	1,716,201	1,120.94	1,120.94
MH-2	1,137.53	1,120.84	16.69	1,682,832	1,121.79	1,121.79
MH-3	1,138.14	1,123.01	15.13	1,682,832	1,123.66	1,123.66
MH-5	1,141.19	1,125.79	15.40	1,642,864	1,126.53	1,126.53
MH-6	1,143.31	1,127.99	15.32	1,601,443	1,128.72	1,128.72
MH-7	1,144.40	1,129.26	15.14	1,601,443	1,129.99	1,129.99
MH-8	1,145.68	1,130.53	15.15	1,601,443	1,131.26	1,131.26
MH-9	1,148.08	1,132.66	15.42	1,562,808	1,133.38	1,133.38
MH-10	1,149.25	1,133.76	15.49	1,562,808	1,134.48	1,134.48
MH-11	1,150.00	1,135.28	14.72	1,538,096	1,136.01	1,136.01
MH-12	1,150.00	1,135.85	14.15	1,538,096	1,136.53	1,136.53
MH-13	1,152.00	1,139.28	12.72	1,489,756	1,139.99	1,139.99
MH-14	1,164.00	1,153.52	10.48	1,371,209	1,154.10	1,154.10
MH-15	1,182.00	1,165.21	16.79	1,209,286	1,165.80	1,165.80
MH-16	1,198.00	1,179.08	18.92	1,069,693	1,179.66	1,179.66
MH-17	1,218.00	1,195.09	22.91	931,623	1,195.61	1,195.61
MH-18	1,236.00	1,220.64	15.36	735,372	1,221.12	1,221.12
MH-19	1,252.00	1,240.02	11.98	505,302	1,240.41	1,240.41
MH-20	1,267.00	1,255.05	11.95	289,311	1,255.38	1,255.38
MH-21	1,138.00	1,127.50	10.50	580,318	1,127.93	1,127.93
MH-22	1,146.00	1,131.59	14.41	321,935	1,132.00	1,132.00
MH-23	1,150.00	1,133.23	16.77	308,707	1,133.64	1,133.64
MH-24	1,160.00	1,145.71	14.29	308,707	1,146.08	1,146.08

FlexTable: Outfall Table
14-0502_ZT Perryville Rd_No
Fut No Shea_AAC.stsw

Active Scenario: Peak Flow
(AAC)

Current Time: 0.000 hours

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (gpd)
OF-1	1,134.75	1,119.76	2,176,134



APPENDIX D

**PHASE 1 APPROVED PRELIMINARY PLAT
AND WASTEWATER REPORT**

PRELIMINARY WASTEWATER REPORT
FOR
ZANJERO TRAILS – PHASE 1
MARICOPA COUNTY, ARIZONA

Prepared For:
MARICOPA WATER DISTRICT
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Prepared By:
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5th Submittal: May 2009
4th Submittal: April 2009
3rd Submittal: January 2009
2nd Submittal: March 2008
1st Submittal: March 2005
CMX Project No. 6714.02

Litchfield Park Service Co
Approved By: MLH
Date: 5-19-09

PRELIMINARY WASTEWATER REPORT
FOR
ZANJERO TRAILS - PHASE 1

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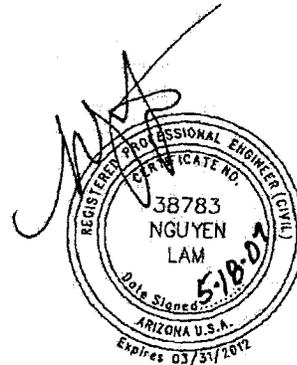
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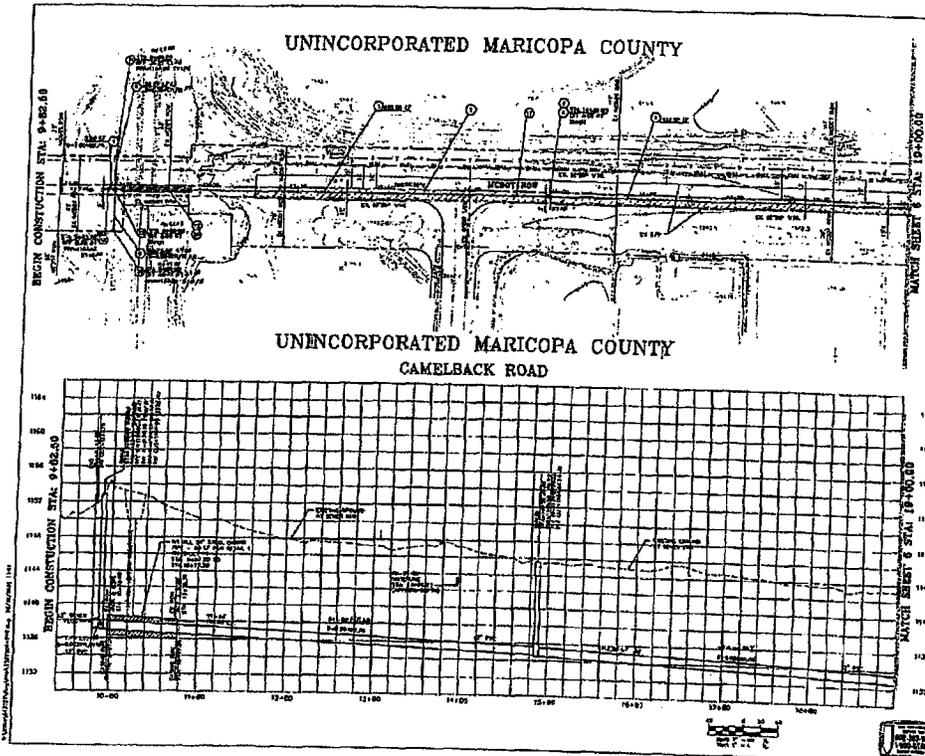
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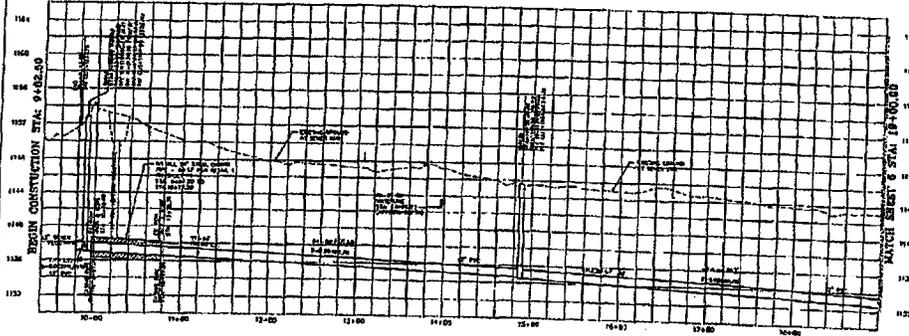


APPENDIX E
LPSCO Regional Sanitary Sewer
As-built plans

UNINCORPORATED MARICOPA COUNTY



UNINCORPORATED MARICOPA COUNTY
CAMELBACK ROAD



NOTICE TO CONTRACTOR

FORM NO. 1002

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE ACCURACY OF ALL DATA AND INFORMATION FURNISHED BY THE OWNER AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.

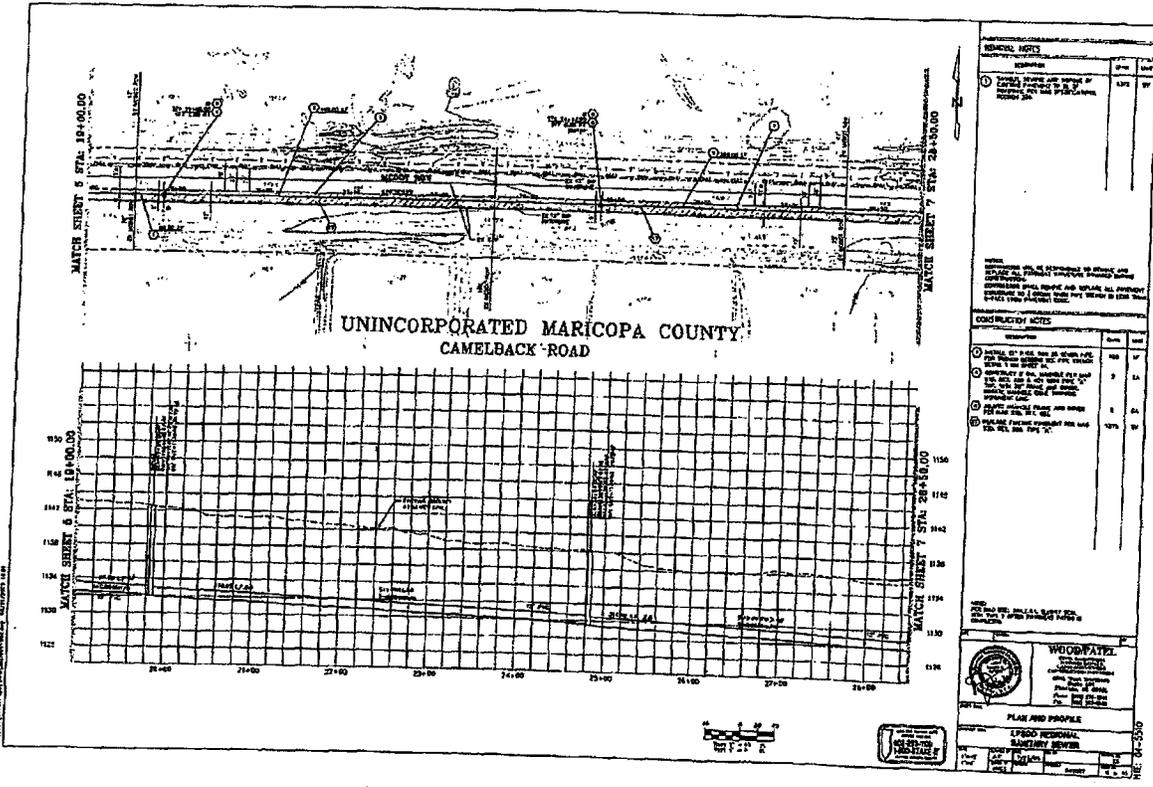
CONSTRUCTION NOTES

NO.	DESCRIPTION	DATE	BY
1	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
2	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
3	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
4	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
5	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
6	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
7	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
8	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
9	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.
10	REVISION OF THE PLAN AND PROFILE TO SHOW THE PROPOSED ROAD GRADE AND TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPLICABLE AGENCIES AND AUTHORITIES.	11/15/11	W.P.

WOODPATL
WOODPATL & ASSOCIATES
11111 N. 19TH AVENUE, SUITE 100
DENVER, CO 80202
TEL: 303.751.1111
WWW.WOODPATL.COM

PLAN AND PROFILE

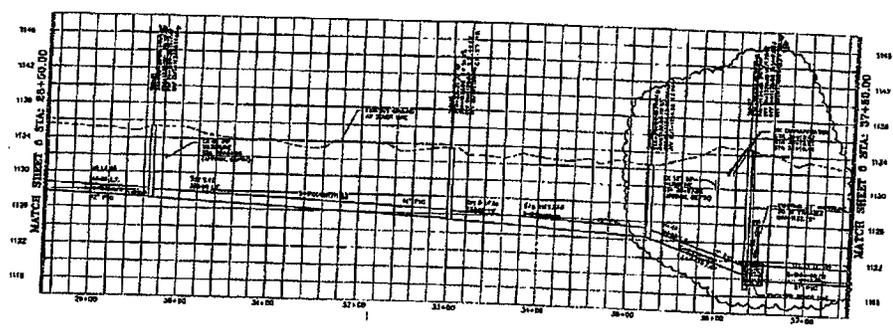
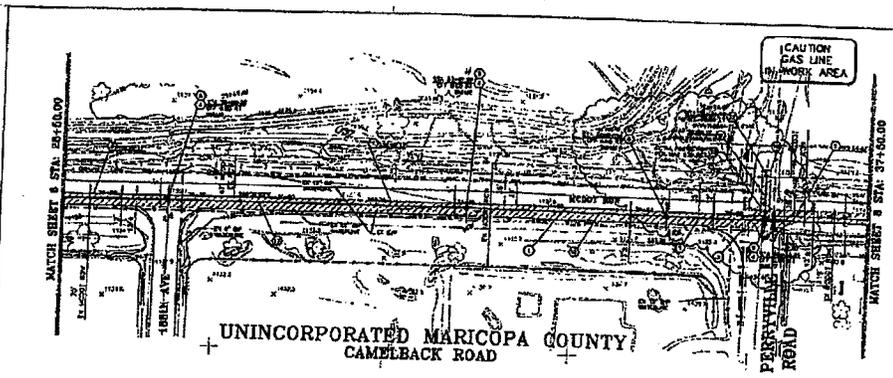
PROJECT: RESIDENTIAL SANITARY SEWER
SHEET NO. 1002
DATE: 11/15/11
SCALE: AS SHOWN



WOODWATER
 ENGINEERING
 1000 W. WOODWATER AVENUE
 PHOENIX, ARIZONA 85028
 PHONE: 352-1111
 FAX: 352-1112

PLAN AND PROFILE
 15000 RESIDENTIAL
 SANITARY SEWER
 DATE: 11/11/00
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]





CAUTION GAS LINE IN WORK AREA

UNINCORPORATED MARICOPA COUNTY CAMELBACK ROAD

CONSTRUCTION NOTES

1. VERIFY EXISTING AND PROPOSED UTILITY LOCATIONS AND DEPTHS BY FIELD SURVEY AND RECORD THE RESULTS ON THE CONSTRUCTION RECORD DRAWING.
2. PROTECT ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN.
3. MAINTAIN PROPER DRAINAGE AND EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION.
4. MAINTAIN PROPER ACCESS TO ADJACENT PROPERTIES AND PUBLIC UTILITIES.
5. MAINTAIN PROPER SAFETY MEASURES AND TRAFFIC CONTROL THROUGHOUT CONSTRUCTION.
6. MAINTAIN PROPER RECORDS OF ALL CONSTRUCTION ACTIVITIES.
7. MAINTAIN PROPER COMMUNICATIONS WITH ALL STAKEHOLDERS.
8. MAINTAIN PROPER RECORDS OF ALL CONSTRUCTION ACTIVITIES.
9. MAINTAIN PROPER COMMUNICATIONS WITH ALL STAKEHOLDERS.

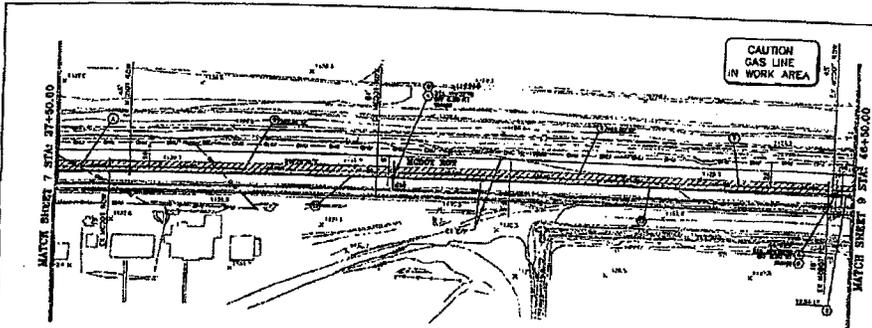
CONSTRUCTION NOTES

NO.	DESCRIPTION	DATE	BY
1	REVISION OF PLAN AND PROFILE	11-02-06	WOODPATEL

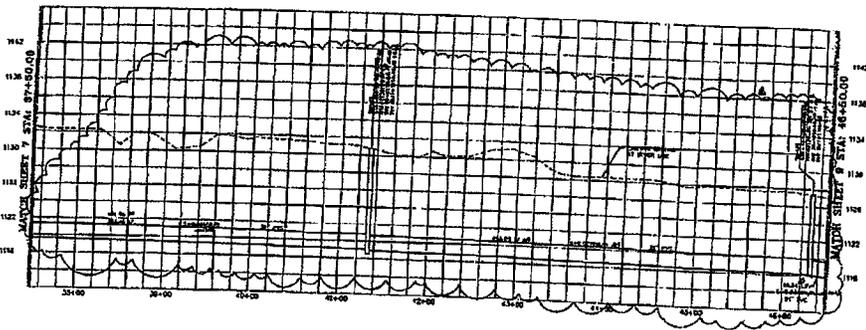
WOODPATEL
 CIVIL ENGINEER
 LICENSE NO. 12345
 STATE OF ARIZONA

PLAN AND PROFILE
 LINDA M. WOODPATEL
 LINDA M. WOODPATEL
 LINDA M. WOODPATEL

REVISION 11-02-06



CITY OF GOODYEAR
CAMELBACK ROAD



REVISIONS

NO.	DESCRIPTION	DATE	BY
1	Added notes and revised plan view to show gas line location.	10/15/00	JK

CONSTRUCTION NOTES

NO.	DESCRIPTION	DATE	BY
1	Remove all existing utility lines within the proposed right-of-way.	10/15/00	JK
2	Install 12" diameter gas line with 12" depth cover.	10/15/00	JK
3	Install 12" diameter water line with 12" depth cover.	10/15/00	JK
4	Install 12" diameter sewer line with 12" depth cover.	10/15/00	JK

CONSTRUCTION SHALL BE ACCORDING TO ALL CITY ORDINANCES AND SPECIFICATIONS. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE CITY ENGINEER. THE OWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.

WOODPATROL

Professional Engineer
No. 12345
State of Arizona

PLAN AND PROFILE

PROJECT: UPGRADE CAMELBACK ROAD
DATE: 10/15/00
SCALE: 1" = 40'



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EXHIBIT 5

ESTIMATED TOTAL CONSTRUCTION COSTS AND
PLANT COST PROJECTIONS

Table B.4

ZANJERO TRAILS
Camelback Road and Perryville Road
Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 15,000.00	\$ 15,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 7,500.00	\$ 7,500.00
Liberty	1	LS	\$ 75,000.00	\$ 75,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 99,000.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 3,412,835.00	\$ 119,449.23
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 123,304.23
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 3,450,127.00	\$ 120,754.45
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,260	LF	\$ 4.75	\$ 24,985.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 3,412,835.00	\$ 85,320.88
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,260	LF	\$ 0.60	\$ 3,156.00
TOTAL SURVEYING				\$ 4,156.00
TOTAL CONSULTANT SERVICES				\$ 235,216.32
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 3,412,835.00	\$ 68,256.70
TOTAL CONSTRUCTION TESTING				\$ 68,256.70

Table B.4

ZANJERO TRAILS
Camelback Road and Perryville Road
Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY	\$ 10.00	\$ 200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY	\$ 35.00	\$ 700.00
Traffic Control Allowance	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
15" SDR 35 Sewerline (14' Avg Depth)	4,583	LF	\$ 50.00	\$ 229,150.00
18" F-679 Sewerline (12' Avg Depth)	677	LF	\$ 50.00	\$ 33,850.00
Manholes (5')	13	EA	\$ 4,000.00	\$ 52,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA	\$ 12,000.00	\$ 12,000.00
Air Test Manholes	13	EA	\$ 150.00	\$ 1,950.00
Camera Test Sewer	5,260	LF	\$ 1.00	\$ 5,260.00
TOTAL SEWERLINE EXTENSION				\$ 334,710.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,640	LF	\$ 24.00	\$ 63,360.00
8" SDR 35 PVC (Parcel 35A)	5,541	LF	\$ 24.00	\$ 132,984.00
8" SDR 35 PVC (Parcel 35B)	5,657	LF	\$ 24.00	\$ 135,768.00
8" SDR 35 PVC (Parcel 36)	4,891	LF	\$ 24.00	\$ 117,384.00
8" SDR 35 PVC (Parcel 37A)	5,657	LF	\$ 24.00	\$ 135,768.00
8" SDR 35 PVC (Parcel 37B)	2,589	LF	\$ 24.00	\$ 62,136.00
8" SDR 35 PVC (Parcel 38)	681	LF	\$ 24.00	\$ 16,344.00
8" SDR 35 PVC (Parcel 39)	2,232	LF	\$ 24.00	\$ 53,568.00
8" SDR 35 PVC (Parcel 40)	5,909	LF	\$ 24.00	\$ 141,816.00
8" SDR 35 PVC (Parcel 41)	5,221	LF	\$ 24.00	\$ 125,304.00
8" SDR 35 PVC (Parcel 42)	767	LF	\$ 24.00	\$ 18,408.00
8" SDR 35 PVC (Parcel 43)	4,575	LF	\$ 24.00	\$ 109,800.00
8" SDR 35 PVC (Parcel 44)	3,518	LF	\$ 24.00	\$ 84,432.00
8" SDR 35 PVC (Parcel 45)	3,266	LF	\$ 24.00	\$ 78,384.00
Manholes (5')	296	EA	\$ 4,000.00	\$ 1,184,000.00
Sewer Stubout	7	EA	\$ 300.00	\$ 2,100.00
Connect to Existing	13	EA	\$ 500.00	\$ 6,500.00
4" Services	1,067	EA	\$ 475.00	\$ 506,825.00
Air Test Manholes	296	EA	\$ 150.00	\$ 44,400.00
Camera Test Sewer	53,144	LF	\$ 1.00	\$ 53,144.00
TOTAL ONSITE SEWERLINES				\$ 3,072,425.00
TOTAL SEWER				\$ 3,407,135.00

Table B.4

ZANJERO TRAILS
 Camelback Road and Perryville Road
 Maricopa County, Arizona
PHASE 1 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	58,404	LF	\$ 0.50	\$ 29,202.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,260	LF	\$ 1.00	\$ 5,260.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,260	LF	\$ 0.50	\$ 2,630.00
TOTAL MISCELLANEOUS CLEANUP				\$ 37,092.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 3,450,127.00	\$ 34,501.27
TOTAL ONE YEAR WARRANTY COSTS				\$ 34,501.27
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 3,450,127.00	\$ 141,282.70
TOTAL SALES TAX				\$ 141,282.70
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 4,156,688.22	\$ 415,668.82
TOTAL CONTINGENCY				\$ 415,668.82
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 4,572,357.04

Table B.4

ZANJERO TRAILS
Bethany Home Road and Perryville Road
Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,691,274.00	\$ 94,194.59
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 98,049.59
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,723,168.00	\$ 95,310.88
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,324	LF	\$ 4.75	\$ 25,289.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,691,274.00	\$ 67,281.85
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,324	LF	\$ 0.60	\$ 3,194.40
TOTAL SURVEYING				\$ 4,194.40
TOTAL CONSULTANT SERVICES				\$ 192,076.13
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,691,274.00	\$ 53,825.48
TOTAL CONSTRUCTION TESTING				\$ 53,825.48
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Bethany Home Road and Perryville Road
Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
15" SDR 35 Sewerline (14' Avg Depth)	5,324	LF	\$ 50.00	\$ 266,200.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA	\$ 12,000.00	\$ 12,000.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,324	LF	\$ 1.00	\$ 5,324.00
TOTAL SEWERLINE EXTENSION				\$ 342,124.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,850	LF	\$ 24.00	\$ 68,400.00
8" SDR 35 PVC (Parcel 31)	25,862	LF	\$ 24.00	\$ 620,688.00
8" SDR 35 PVC (Parcel 32)	13,780	LF	\$ 24.00	\$ 330,720.00
Manholes (5')	237	EA	\$ 4,000.00	\$ 948,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	628	EA	\$ 475.00	\$ 298,300.00
Air Test Manholes	237	EA	\$ 150.00	\$ 35,550.00
Camera Test Sewer	42,492	LF	\$ 1.00	\$ 42,492.00
TOTAL ONSITE SEWERLINES				\$ 2,349,150.00
TOTAL SEWER				\$ 2,691,274.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	47,816	LF	\$ 0.50	\$ 23,908.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,324	LF	\$ 1.00	\$ 5,324.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,324	LF	\$ 0.50	\$ 2,662.00
TOTAL MISCELLANEOUS CLEANUP				\$ 31,894.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00

Table B.4

ZANJERO TRAILS
 Bethany Home Road and Perryville Road
 Maricopa County, Arizona
PHASE 2 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,723,168.00	\$ 27,231.68
TOTAL ONE YEAR WARRANTY COSTS				\$ 27,231.68
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,723,168.00	\$ 111,513.73
TOTAL SALES TAX				\$ 111,513.73
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,251,364.61	\$ 325,136.46
TOTAL CONTINGENCY				\$ 325,136.46
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,576,501.07

Table B.4

ZANJERO TRAILS
Glendale Avenue and Perryville Road
Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,778,939.00	\$ 97,262.87
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 101,117.87
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,811,718.50	\$ 98,410.15
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,239	LF	\$ 4.75	\$ 24,885.25
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,778,939.00	\$ 69,473.48
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,239	LF	\$ 0.60	\$ 3,143.40
TOTAL SURVEYING				\$ 4,143.40
TOTAL CONSULTANT SERVICES				\$ 196,912.27
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,778,939.00	\$ 55,578.78
TOTAL CONSTRUCTION TESTING				\$ 55,578.78

Table B.4

ZANJERO TRAILS
Glendale Avenue and Perryville Road
Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY	\$ 10.00	\$ 200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY	\$ 35.00	\$ 700.00
Traffic Control Allowance	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
12" SDR 35 Sewerline (20' Avg Depth)	5,239	LF	\$ 50.00	\$ 261,950.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	1	EA	\$ 12,000.00	\$ 12,000.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,239	LF	\$ 1.00	\$ 5,239.00
TOTAL SEWERLINE EXTENSION				\$ 337,789.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,800	LF	\$ 24.00	\$ 67,200.00
8" SDR 35 PVC (Parcel 27)	25,207	LF	\$ 24.00	\$ 604,968.00
8" SDR 35 PVC (Parcel 28)	16,196	LF	\$ 24.00	\$ 388,704.00
Manholes (5')	246	EA	\$ 4,000.00	\$ 984,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	641	EA	\$ 475.00	\$ 304,475.00
Air Test Manholes	246	EA	\$ 150.00	\$ 36,900.00
Camera Test Sewer	44,203	LF	\$ 1.00	\$ 44,203.00
TOTAL ONSITE SEWERLINES				\$ 2,435,450.00
TOTAL SEWER				\$ 2,773,239.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	49,442	LF	\$ 0.50	\$ 24,721.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,239	LF	\$ 1.00	\$ 5,239.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,239	LF	\$ 0.50	\$ 2,619.50
TOTAL MISCELLANEOUS CLEANUP				\$ 32,579.50

Table B.4

ZANJERO TRAILS
 Glendale Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 3 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,811,718.50	\$ 28,117.19
TOTAL ONE YEAR WARRANTY COSTS				\$ 28,117.19
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,811,718.50	\$ 115,139.87
TOTAL SALES TAX				\$ 115,139.87
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,354,084.48	\$ 335,408.45
TOTAL CONTINGENCY				\$ 335,408.45
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,689,492.92

Table B.4

ZANJERO TRAILS
Northern Avenue and Perryville Road
Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 3,339,298.00	\$ 116,875.43
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 120,730.43
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 3,376,877.00	\$ 118,190.70
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,342	LF	\$ 4.75	\$ 25,374.50
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 3,339,298.00	\$ 83,482.45
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,342	LF	\$ 0.60	\$ 3,205.20
TOTAL SURVEYING				\$ 4,205.20
TOTAL CONSULTANT SERVICES				\$ 231,252.85
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 3,339,298.00	\$ 66,785.96
TOTAL CONSTRUCTION TESTING				\$ 66,785.96

Table B.4

ZANJERO TRAILS
Northern Avenue and Perryville Road
Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
5.00 MISCELLANEOUS REMOVALS				
5.10 SAWCUT AND REMOVE AC	20	SY	\$ 10.00	\$ 200.00
TOTAL MISCELLANEOUS REMOVALS				\$ 200.00
6.00 GRADING AND PAVING				
6.10 PAVING				
5" AC on 7" ABC (ARTERIAL)	20	SY	\$ 35.00	\$ 700.00
Traffic Control Allowance	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL GRADING AND PAVING				\$ 5,700.00
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
10" SDR 35 Sewerline (18' Avg Depth)	5,342	LF	\$ 43.00	\$ 229,706.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Jack and Bore Sewerline w/ Steel Casing (40')	2	EA	\$ 12,000.00	\$ 24,000.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,342	LF	\$ 1.00	\$ 5,342.00
TOTAL SEWERLINE EXTENSION				\$ 317,648.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	3,250	LF	\$ 24.00	\$ 78,000.00
8" SDR 35 PVC (Parcel 23)	6,656	LF	\$ 24.00	\$ 159,744.00
8" SDR 35 PVC (Parcel 24)	21,951	LF	\$ 24.00	\$ 526,824.00
8" SDR 35 PVC (Parcel 25)	14,110	LF	\$ 24.00	\$ 338,640.00
8" SDR 35 PVC (Parcel 26)	7,423	LF	\$ 24.00	\$ 178,152.00
Manholes (5')	297	EA	\$ 4,000.00	\$ 1,188,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	297	EA	\$ 150.00	\$ 44,550.00
Camera Test Sewer	53,390	LF	\$ 1.00	\$ 53,390.00
TOTAL ONSITE SEWERLINES				\$ 3,015,950.00
TOTAL SEWER				\$ 3,333,598.00

Table B.4

ZANJERO TRAILS
 Northern Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 4 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	58,732	LF	\$ 0.50	\$ 29,366.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,342	LF	\$ 1.00	\$ 5,342.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,342	LF	\$ 0.50	\$ 2,671.00
TOTAL MISCELLANEOUS CLEANUP				\$ 37,379.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 3,376,877.00	\$ 33,768.77
TOTAL ONE YEAR WARRANTY COSTS				\$ 33,768.77
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 3,376,877.00	\$ 138,283.11
TOTAL SALES TAX				\$ 138,283.11
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 4,013,198.12	\$ 401,319.81
TOTAL CONTINGENCY				\$ 401,319.81
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 4,414,517.93

Table B.4

ZANJERO TRAILS
 Olive Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 6,000.00	\$ 6,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 3,000.00	\$ 3,000.00
Liberty	1	LS	\$ 30,000.00	\$ 30,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 40,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,872,625.00	\$ 100,541.88
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 104,396.88
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,901,719.50	\$ 101,560.18
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	2,500	LF	\$ 4.75	\$ 11,875.00
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,872,625.00	\$ 71,815.63
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	2,500	LF	\$ 0.60	\$ 1,500.00
TOTAL SURVEYING				\$ 2,500.00
TOTAL CONSULTANT SERVICES				\$ 187,750.81
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,872,625.00	\$ 57,452.50
TOTAL CONSTRUCTION TESTING				\$ 57,452.50
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Olive Avenue and Perryville Road
Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Perryville Road)				
8" SDR 35 Sewerline (12' Avg Depth)	2,500	LF	\$ 30.00	\$ 75,000.00
Manholes (5')	7	EA	\$ 4,000.00	\$ 28,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Air Test Manholes	7	EA	\$ 150.00	\$ 1,050.00
Camera Test Sewer	2,500	LF	\$ 1.00	\$ 2,500.00
TOTAL SEWERLINE EXTENSION				\$ 107,050.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Collector Road)	2,300	LF	\$ 24.00	\$ 55,200.00
8" SDR 35 PVC (Parcel 16)	26,024	LF	\$ 24.00	\$ 624,576.00
8" SDR 35 PVC (Parcel 17)	877	LF	\$ 24.00	\$ 21,048.00
8" SDR 35 PVC (Parcel 18)	2,145	LF	\$ 24.00	\$ 51,480.00
8" SDR 35 PVC (Parcel 19)	10,132	LF	\$ 24.00	\$ 243,168.00
8" SDR 35 PVC (Parcel 20)	6,711	LF	\$ 24.00	\$ 161,064.00
Manholes (5')	268	EA	\$ 4,000.00	\$ 1,072,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	268	EA	\$ 150.00	\$ 40,200.00
Camera Test Sewer	48,189	LF	\$ 1.00	\$ 48,189.00
TOTAL ONSITE SEWERLINES				\$ 2,765,575.00
TOTAL SEWER				\$ 2,872,625.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	50,689	LF	\$ 0.50	\$ 25,344.50
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	2,500	LF	\$ 1.00	\$ 2,500.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	2,500	LF	\$ 0.50	\$ 1,250.00
TOTAL MISCELLANEOUS CLEANUP				\$ 29,094.50
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00

Table B.4

ZANJERO TRAILS
 Olive Avenue and Perryville Road
 Maricopa County, Arizona
PHASE 5 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,901,719.50	\$ 29,017.20
TOTAL ONE YEAR WARRANTY COSTS				\$ 29,017.20
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,901,719.50	\$ 118,825.41
TOTAL SALES TAX				\$ 118,825.41
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 3,444,662.29	\$ 344,466.23
TOTAL CONTINGENCY				\$ 344,466.23
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 3,789,128.52

Table B.4

ZANJERO TRAILS
Northern Avenue and Beardsley Canal
Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
1.00 PLAN REVIEW AND PROCESSING FEES				
1.10 FINAL ENGINEERING REVIEW FEES				
MCESD	1	LS	\$ 4,000.00	\$ 4,000.00
MCDOT	1	LS	\$ 1,500.00	\$ 1,500.00
MWD	1	LS	\$ 2,000.00	\$ 2,000.00
Liberty	1	LS	\$ 20,000.00	\$ 20,000.00
TOTAL PLAN REVIEW AND PROCESSING FEES				\$ 27,500.00
2.00 PERMIT FEES				
2.10 MUNICIPALITY PERMIT FEES				
Municipality Permits (Items 6-7)	3.5%	OF	\$ 2,027,912.00	\$ 70,976.92
2.20 COUNTY HEALTH DEPT. FEES (Air Qual.)				
Dust Control Permit (Sewerline Extension Only)	1	LS	\$ 3,855.00	\$ 3,855.00
TOTAL PERMIT FEES				\$ 74,831.92
3.00 CONSULTANT SERVICES				
3.10 CONSTRUCTION MANAGEMENT				
Construction Management (Items 5-8)	3.5%	OF	\$ 2,052,381.00	\$ 71,833.34
3.20 ENGINEERING				
Engineering Design (Sewerline Extension Only)	5,342	LF	\$ 4.75	\$ 25,374.50
3.30 CONSTRUCTION STAKING				
Offsite Construction Staking (Items 6-7)	2.5%	OF	\$ 2,027,912.00	\$ 50,697.80
3.40 SURVEYING				
Legal Descriptions	1	LS	\$ 1,000.00	\$ 1,000.00
Topographic Survey (Sewerline Extension Only)	5,342	LF	\$ 0.60	\$ 3,205.20
TOTAL SURVEYING				\$ 4,205.20
TOTAL CONSULTANT SERVICES				\$ 152,110.84
4.00 CONSTRUCTION TESTING				
4.10 SOIL /COMPACTION TESTING				
Offsite Testing (Items 6-7, exclusive of onsite sewerlines)	2.0%	OF	\$ 2,027,912.00	\$ 40,558.24
TOTAL CONSTRUCTION TESTING				\$ 40,558.24
5.00 MISCELLANEOUS REMOVALS				

Table B.4

ZANJERO TRAILS
Northern Avenue and Beardsley Canal
Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
6.00 GRADING AND PAVING				
7.00 SEWER				
7.10 SEWERLINE EXTENSION (Beardsley Cana)				
8" SDR 35 Sewerline (15' Avg Depth)	5,342	LF	\$ 35.00	\$ 188,970.00
Manholes (5')	14	EA	\$ 4,000.00	\$ 56,000.00
Connect to Existing	1	EA	\$ 500.00	\$ 500.00
Air Test Manholes	14	EA	\$ 150.00	\$ 2,100.00
Camera Test Sewer	5,342	LF	\$ 1.00	\$ 5,342.00
TOTAL SEWERLINE EXTENSION				\$ 250,912.00
7.10 ONSITE SEWERLINES (Parcels and Collector Roads)				
8" SDR 35 PVC (Parcel 33)	2,945	LF	\$ 24.00	\$ 70,680.00
8" SDR 35 PVC (Parcel 34)	24,625	LF	\$ 24.00	\$ 591,000.00
Manholes (5')	154	EA	\$ 4,000.00	\$ 616,000.00
Sewer Stubout	5	EA	\$ 300.00	\$ 1,500.00
Connect to Existing	7	EA	\$ 500.00	\$ 3,500.00
4" Services	934	EA	\$ 475.00	\$ 443,650.00
Air Test Manholes	154	EA	\$ 150.00	\$ 23,100.00
Camera Test Sewer	27,570	LF	\$ 1.00	\$ 27,570.00
TOTAL ONSITE SEWERLINES				\$ 1,777,000.00
TOTAL SEWER				\$ 2,027,912.00
8.00 MISCELLANEOUS CLEANUP				
8.10 HYDRO-VAC SEWER	32,912	LF	\$ 0.50	\$ 16,456.00
8.20 SUPPLEMENTAL DUST CONTROL (Sewerline Extension Only)	5,342	LF	\$ 1.00	\$ 5,342.00
8.30 CLEAN UP FOR MUNICIPALITY FINAL WALK (Sewerline Extension Only)	5,342	LF	\$ 0.50	\$ 2,671.00
TOTAL MISCELLANEOUS CLEANUP				\$ 24,469.00
9.00 PRINTING / REIMBURSABLES				
9.10 PRINTING / REIMBURSABLES (Sewerline Extension Only)	1	LS	\$ 5,000.00	\$ 5,000.00
TOTAL PRINTING / REIMBURSABLES				\$ 5,000.00
10.00 ONE YEAR WARRANTY COSTS				
10.10 ONE YEAR WARRANTY COSTS (Items 5-8)	1%	OF	\$ 2,052,381.00	\$ 20,523.81

Table B.4

ZANJERO TRAILS
Northern Avenue and Beardsley Canal
Maricopa County, Arizona
PHASE 6 SEWER IMPROVEMENTS



Prepared Date: November 3, 2014

ESTIMATE OF ANTICIPATED DEVELOPMENT COSTS

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL ITEM COST
TOTAL ONE YEAR WARRANTY COSTS				\$ 20,523.81
11.00 SALES TAX				
11.10 SALES TAX (Items 5-8)	4.095%	OF	\$ 2,052,381.00	\$ 84,045.00
TOTAL SALES TAX				\$ 84,045.00
12.00 CONTINGENCY				
12.10 CONTINGENCY (Items 1-11)	10%	OF	\$ 2,456,950.81	\$ 245,695.08
TOTAL CONTINGENCY				\$ 245,695.08
TOTAL ANTICIPATED DEVELOPMENT COSTS				\$ 2,702,645.89

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EXHIBIT 6

GENERAL STATEMENT OF FINANCIAL CONDITION

Litchfield Park Service Company (Sewer)

WASTEWATER UTILITY BALANCE SHEET

Acct No.	ASSETS	BALANCE AT BEGINNING OF TEST YEAR	BALANCE AT END OF YEAR
	CURRENT AND ACCRUED ASSETS		
131	Cash	-\$11,584	\$1,882,694
132	Special Deposits	\$2,083,201	
135	Temporary Cash Investments		
141	Customer Accounts Receivable	\$1,538,629	
146	Notes/Receivables from Associated Companies	\$6,120,635	
151	Plant Material and Supplies		
162	Prepayments	\$30,500	
174	Miscellaneous Current and Accrued Assets	\$284,962	
	TOTAL CURRENT AND ACCRUED ASSETS	\$10,046,344	\$1,882,694
	FIXED ASSETS		
101	Utility Plant in Service	\$76,282,231	\$77,858,634
103	Property Held for Future Use		
105	Construction Work in Progress	\$357,041	\$1,793,339
108	Accumulated Depreciation - Utility Plant	\$16,405,407	-\$17,802,627
121	Non-Utility Property		
122	Accumulated Depreciation - Non Utility		
	TOTAL FIXED ASSETS	\$60,233,865	\$61,849,346
	TOTAL ASSETS	\$70,280,209	\$63,732,040

NOTE: Total Assets on this page should equal Total Liabilities and Capital on the following page. The total value of assets for LPSCO Water plus LPSCO Sewer equals the total value of liabilities and equity for LPSCO Water plus LPSCO Sewer. The values reported here are the result of an accounting system conversion that does not currently allocate percentages of certain accounts to the water division and to the sewer division.

Litchfield Park Service Company (Sewer)

WASTEWATER UTILITY BALANCE SHEET (CONTINUED)

Acct No.	LIABILITIES	BALANCE AT BEGINNING OF TEST YEAR	BALANCE AT END OF YEAR
	CURRENT LIABILITIES		
231	Accounts Payable		
232	Notes Payable (Current Portion)	\$150,400	
234	Notes/Accounts Payable to Associated Companies		
235	Customer Deposits		
236	Accrued Taxes	\$34,644	
237	Accrued Interest	\$77,628	
241	Miscellaneous Current and Accrued Liabilities	\$44,665	\$1,082,059
	TOTAL CURRENT LIABILITIES	\$307,337	\$1,082,059
	LONG-TERM DEBT (Over 12 Months)		
224	Long-Term Notes and Bonds	\$4,453,218	
	DEFERRED CREDITS		
252	Advances in Aid of Construction	\$12,110,401	\$6,160,061
253	Other Deferred Credits		\$1,893,783
255	Accumulated Deferred Investment Tax Credits		
271	Contributions in Aid of Construction	\$35,077,436	\$4,791,275
272	Less: Amortization of Contributions	\$5,957,420	\$10,220
281	Accumulated Deferred Income Tax	\$2,395,960	
	TOTAL DEFERRED CREDITS	\$43,626,377	\$12,834,900
	TOTAL LIABILITIES	\$48,386,932	\$13,916,959
	CAPITAL ACCOUNTS		
201	Common Stock Issued	\$33,626	\$33,626
211	Other Paid in Capital	\$13,728,278	\$13,728,278
215	Retained Earnings	\$8,131,373	\$9,868,101
218	Proprietary Capital (Sole Props and Partnerships)		
	TOTAL CAPITAL	\$21,893,277	\$23,630,005
	TOTAL LIABILITIES AND CAPITAL	\$70,280,209	\$37,546,964

Litchfield Park Service Company (Sewer)

**WASTEWATER UTILITY COMPARATIVE STATEMENT OF INCOME
AND EXPENSE**

Acct. No.	OPERATING REVENUES	PRIOR YEAR	CURRENT YEAR
521	Flat Rate Revenues	\$8,624,304	\$11,008,894
522	Measured Revenues	\$861,147	
536	Other Wastewater Revenues	\$374,767	\$3,365
	TOTAL REVENUES	\$9,860,219	\$11,012,259
	OPERATING EXPENSES		
701	Salaries and Wages	\$1,201,594	\$209,525
710	Purchased Wastewater Treatment	\$39,395	\$26,008
711	Sludge Removal Expense	\$246,971	\$251,738
715	Purchased Power	\$628,493	\$629,688
716	Fuel for Power Production		\$3,114
718	Chemicals	\$295,100	\$359,790
720	Materials and Supplies	\$119,214	\$74,361
731	Contractual Services – Professional	-\$40,983	\$2,291,460
735	Contractual Services – Testing	\$36,144	\$33,337
736	Contractual Services – Other	\$2,439,628	\$1,265,238
740	Rents	\$2,472	\$5,696
750	Transportation Expense	\$18,856	\$16,827
755	Insurance Expense	\$84,335	\$48,329
765	Regulatory Commission Expense		
775	Miscellaneous Expense	\$122,361	\$217,820
403	Depreciation Expense	\$1,648,570	\$1,487,913
408	Taxes Other Than Income		
408.11	Property Taxes	\$752,647	\$856,251
409	Income Taxes		
	TOTAL OPERATING EXPENSES	\$7,594,797	\$7,777,094
	OTHER INCOME/EXPENSE		
419	Interest and Dividend Income	\$24,550	
420	AFUDC Income	\$15,996	\$12,367
421	Non-Utility Income		
426	Miscellaneous Non-Utility Expenses		
427	Interest Expense	\$339,090	(\$12,001)
	TOTAL OTHER INCOME/EXPENSE	-\$298,544	\$366
	NET INCOME/(LOSS)	\$1,966,878	\$3,235,532

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EXHIBIT 7

LIBERTY'S SCHEDULE OF RATES AND CHARGES

Applies to all WASTEWATER service areas
PART THREE
STATEMENT OF CHARGES FOR WASTEWATER SERVICE

I. RATES

In Decision No. 74437, dated April 18, 2014, the Commission authorized the following rates and charges to become effective May 1, 2014:

A. Monthly Usage Charge

<i>Meter Size</i>	Minimum Charge Per Month
Residential Service	\$40.35
Low Income Residential Service	34.30
Multiple Unit Housing – Monthly Per Unit	37.46
Small Commercial Service – Monthly	68.24
Regular Domestic – Monthly Service Charge	38.20
Restaurants, Motels,* Grocery Store, Dry Cleaning Etab. – Monthly Service Charge	38.20
Wigwam Resort Monthly Rate – Per Room	37.46
Wigwam Resort Main Hotel Facilities – Per Month	1,483.47
Elementary Schools	1,008.75
Middle & High Schools	1,186.77
Community College	1,839.50
Effluent Sales Charge Per 1,000 gallons	**

*Motels without restaurants charges Multi-Unit Housing – Monthly Unit rate

**Market Rate – Maximum effluent rate shall not exceed \$430 per acre foot based on a potable water rate of \$1.32 per thousand gallons.

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Greg Sorenson, President - Arizona
 Liberty Utilities (Litchfield Park Water & Sewer) Corp.
 12725 W. Indian School Road, Suite D-101
 Avondale, AZ 85392

Applies to all WASTEWATER service areas
PART THREE
STATEMENT OF CHARGES FOR WASTEWATER SERVICE

B. Commodity Charge

(per 1,000 gallons of water)	
Regular Domestic	\$3.33
Restaurants, Motels, Grocery Store, Dry Cleaning Estab.	4.45

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PART THREE
STATEMENT OF CHARGES FOR WASTEWATER SERVICE

C. Miscellaneous Service Charges

<u>Service</u>	<u>Charge</u>
Establishment	\$20.00
Re-Establishment (within 12 months)	(a)
Reconnection	\$20.00
NSF Check	25.00
Deferred Payment (per month)	1.50%
After Hours Service Calls*	\$40.00
Deposit	(b)
Deposit Interest	6.00%
Late Charge	(c)
Service Lateral Connection Charge - All Sizes	(d)
Main Extension Tariff	(e)

(a) Number of full months off the system times the minimum charge, per A.A.C. R14-2-603(D).

(b) Per Rule R14-2-603(B). Residential - two times the average monthly bill. Non-residential - two and one half times the average monthly bill.

(c) Greater of \$5.00 or 1.50% of unpaid balance.

(d) At cost. Customer/Developer shall install or cause to be installed all Service Laterals as a non-refundable contributions in aid of construction.

(e) Per A.A.C. R14-2606(b). All Main Extensions shall be completed at cost and shall be treated as non-refundable contribution-in-aid of construction.

*For After Hours Service Calls for work performed on the customer's property after hours, at customer's request. In addition to the charge for an utility service provided.

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LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.

Sheet No. 20

DOCKET NO. SW-01421A-13-0047 ET AL.

Cancelling Sheet No. ____

Applies to all WASTEWATER service areas
PART THREE
STATEMENT OF CHARGES FOR WASTEWATER SERVICE

II. TAXES AND ASSESSMENTS

In addition to all other rates and charges authorized herein, the Company shall collect from its customers all applicable sales, transaction, privilege, regulatory or other taxes and assessments as may apply now or in the future, per Rule R14-2-608(D)(5).

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Applies to all WASTEWATER service areas
PART THREE
STATEMENT OF CHARGES FOR WASTEWATER SERVICE

III. PERMITTED COSTS

- A. Costs shall be verified by invoice.
- B. For services that are provided by the Company at cost, costs shall include labor, materials, other charges incurred, and overhead. However, prior to any such service being provided, the estimated cost of such service will be provided by the Company to the customer. After review of the cost estimate, the customer will pay the amount of the estimated cost to the Company.
- C. In the event that the actual cost is less than the estimated cost, the Company will refund the excess to the customer within 30 days after completion of the provision of the service or after Company's receipt of invoices, timesheets or other related documents, whichever is later.
- D. In the event the actual cost is more than the estimated cost, the Company will bill the customer for the amount due within 30 days after completion of the invoices, timesheets or other related documents, whichever is later. The amount so billed will be due and payable 30 days after the invoice date.
- E. At the customer's request, the Company shall make available to the customer all invoices, timesheets or related documents that support the cost for providing such service.
- F. Permitted costs shall include any Federal, State or local taxes that are or may be payable by the Company as a result of any tariff or contract for wastewater facilities under which the Customer advances or contributes funds or facilities to the Company.

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Applies to all WASTEWATER service areas
PART FOUR

STATEMENT OF TERMS AND CONDITIONS FOR WASTEWATER SERVICE

I. CUSTOMER DISCHARGE TO SYSTEM

A. Service Subject to Regulation

The Company provides wastewater service using treatment and collection facilities that are regulated by numerous county, state and federal Statutes and Regulations. Those Regulations include limitations as to domestic strength wastewater and the type of wastewater that may be discharged into the system by any person directly or indirectly connected to the plant.

B. Waste Limitations

The Company has established the permissible limits of concentration as domestic strength wastewater and will limit concentration for various specific substances, materials, waters, or wastes that can be accepted in the sewer system, and to specify those substances, materials, waters, or wastes that are prohibited from entering the sewer system. Each permissible limit so established shall be placed on file in the business office of the Company, with a copy filed with the Commission. No person shall discharge, or cause to be discharged, any new sources of inflow including, but not limited to, storm water, surface water, groundwater, roof runoffs, subsurface drainage, cooling water, or polluted industrial process waters into the sanitary sewer. The Company will require an affidavit from all commercial and industrial customers, and their professional engineer, stating that the wastewater discharged to the system does not exceed domestic strength.

C. Inspection and Right of Entry

Every facility that is involved directly or indirectly with the discharge of wastewater to the Treatment Plant may be inspected by the Company as it deems necessary. These facilities shall include but not be limited to sewer, sewage pumping plants; all processes; devices and connection sewer, and all similar sewerage facilities. Inspections may be made to determine that such facilities are maintained and operated properly and are adequate to meet the provisions of these rules. Inspections may include the collection of samples. Authorized personnel of the Company shall be provided immediate access to all of the above facilities or to other facilities directly or indirectly connected to the Treatment Plant at all reasonable times including those occasioned by emergency conditions. Any permanent or temporary obstruction to easy access to the user's facility to be inspected shall promptly be removed by the facility user or owner at

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Avondale, AZ 85392

Applies to all WASTEWATER service areas

PART FOUR

STATEMENT OF TERMS AND CONDITIONS FOR WASTEWATER SERVICE

the written or verbal request of the Company and shall not be replaced. No person shall interfere with, delay, resist or refuse entrance to an authorized Company representative attempting to inspect any facility involved directly or indirectly with a discharge of wastewater to the Treatment Plant. Adequate identification shall be provided by the Company for all inspectors and other authorized personnel and these persons shall identify themselves when entering any property for inspection purposes or when inspecting the work of any contractor.

All transient motor homes, travel trailers and other units containing holding tanks must arrive at the Company's service area in an empty condition. Inspection will be required of said units prior to their being allowed to hookup to the wastewater system.

D. Termination of Water Service for Violation of Wastewater Rules and Regulations

The Company is authorized to discontinue water service to any person connected to both its water and sewer systems who violates the Company's wastewater terms and conditions as set forth in this PART FOUR or in any way creates a public health hazard or the likelihood of such a public health hazard. This termination authority does not apply to non-payment for water or wastewater services.

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Applies to all WASTEWATER service areas
PART FOUR

STATEMENT OF TERMS AND CONDITIONS FOR WASTEWATER SERVICE

II. RULES AND REGULATIONS

The Company has adopted the Rules and Regulations established by the Commission as the basis for its operating procedures. A.A.C. R14-2-601 through A.A.C. R14-2-609 will be controlling of Company procedures, unless specifically approved tariffs or Commission Order(s) provide otherwise.

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Avondale, AZ 85392

Applies to all WATER and WASTEWATER service areas
PART FIVE

ALTERNATE RATES FOR WATER AND WASTEWATER (ARWW)
DOMESTIC SERVICE - SINGLE FAMILY ACCOMMODATION

APPLICABILITY

Applicable to residential water and wastewater service for domestic use rendered to low-income households where the customer meets all the program qualifications and special conditions of this rate schedule.

TERRITORY

Within all customer service areas served by Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Utilities").

RATES

Thirty percent (30%) discount applied to the regular filed tariff.

PROGRAM QUALIFICATIONS

1. The Liberty Utilities bill must be in your name and the address must be your primary residence or you must be a tenant receiving water service by a sub-metered system.
2. You may not be claimed as a dependent on another person's tax return.
3. You must reapply each time you move residences.
4. You must renew your application once every two (2) years, or sooner, if requested.
5. You must recertify each year by submitting a declaration attesting to your continuing eligibility, and provide one of the following items as proof of eligibility: 1) copy of tax return from prior year; or 2) copy of W2 form from prior year; or 3) copy of welfare / food stamp cards.
6. You must notify Liberty Utilities within thirty (30) days if you become ineligible for ARWW.
7. Your total gross annual income of all persons living in your household cannot exceed the income levels below:

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12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392

Applies to all WATER and WASTEWATER service areas
PART FIVE
ALTERNATE RATES FOR WATER AND WASTEWATER (ARWW)
DOMESTIC SERVICE – SINGLE FAMILY ACCOMMODATION

Effective January 1, 2014

<u>No. of Person in Household</u>	<u>Total Gross Annual Income</u>
1	\$17,505
2	\$23,595
3	\$29,685
4	\$35,775
5	\$41,865
6	\$47,955

For each additional person residing in the household, add \$6,090

For the purpose of the program the "gross household income" means all money and non cash benefits, available for living expenses, from all sources, both taxable and non taxable, before deductions for all people who live in your home. This includes, but is not limited to:

Wages or salaries	Social Security, SSI, SSP	Rental or royalty income
Interest or dividends from:	Scholarships, grants, or other aid	Profit from self-employment
Savings account, stocks or bonds	used for living expenses	(IRS form Schedule C, Line 29)
Unemployment benefits	Disability payments	Worker's Compensation
TANF (AFDC)	Food Stamps	Child Support
Pensions	Insurance settlements	Spousal Support
Gifts		

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 Liberty Utilities (Litchfield Park Water & Sewer) Corp.
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 Avondale, AZ 85392

Applies to all WATER and WASTEWATER service areas
PART FIVE
ALTERNATE RATES FOR WATER AND WASTEWATER (ARWW)
DOMESTIC SERVICE – SINGLE FAMILY ACCOMMODATION

SPECIAL CONDITIONS

1. **Application:** An application on a form authorized by the Commission is required for each request for service under this schedule. A customer must reapply every two (2) years.
2. **Recertification:** A customer enrolled in the ARWW program must, each year, recertify by submitting a declaration attesting to continuing eligibility, and provide one of the following items as proof of eligibility: 1) copy of tax return from prior year; or 2) copy of W2 form from prior year; or 3) copy of welfare / food stamp cards.
3. **Commencement of Rate:** Eligible customers whose applications have been approved shall be billed on this schedule commencing with the next regularly scheduled billing period that follows receipt of application by Liberty Utilities.
4. **Verification:** Information provided by the applicant is subject to verification by Liberty Utilities. Refusal or failure of a customer to provide documentation of eligibility acceptable to Liberty Utilities, upon request by Liberty Utilities, shall result in removal from this rate schedule.
5. **Notice from Customer:** It is the customer's responsibility to notify Liberty Utilities if there is a change of eligibility status.
6. **Rebilling:** Customers may be re-billed retroactively for periods of ineligibility under the applicable rate schedule.
7. **Master-metered:** A reduction will be calculated in the bill of master-metered customers, who have sub-metered tenants that meet the income eligibility criteria, so an equivalent discount (30%) can be passed through to eligible customer(s).
8. **Participation Cap:** The ARWW program is limited to 5,000 water division customers and 5,000 wastewater division customers. Applications will be reviewed and approved on a first come, first served basis. Applicants will be placed on a waiting list if the participation cap has been met.

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Liberty Utilities (Litchfield Park Water & Sewer) Corp.
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Avondale, AZ 85392

**Application for
Alternate Rates for Water and Wastewater (ARWW)**

To qualify for Liberty Utilities ARWW please check (✓) all that apply:

- I am a Liberty Utilities residential customer and the Liberty Utilities account is in my name.
- I am a sub-metered tenant within the Liberty Utilities service area.
- My household income is at or below the income level in the listing below.

Household Size	Total Gross Annual Income From All Sources
1	\$17,505
2	\$23,595
3	\$29,685
4	\$35,775
5	\$41,865
6	\$47,955

For each additional person residing in the household, add \$4,020.

The definition of "gross household income" (before taxes) is all money and non cash benefits available for living expenses from all sources, both taxable and non taxable, before deductions, including expenses, for all people who live in your home. This includes, but is not limited to the following (please check (✓) all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Wages, salaries or profit from self-employment | <input type="checkbox"/> Social Security, SSI or SSP |
| <input type="checkbox"/> Disability and/or Workers' Compensation payments | <input type="checkbox"/> Food Stamps |
| <input type="checkbox"/> Insurance and/or legal settlements | <input type="checkbox"/> TANF (AFDC) |
| <input type="checkbox"/> Pensions | <input type="checkbox"/> Veterans Affairs benefits |
| <input type="checkbox"/> Spousal and/or child support | <input type="checkbox"/> Unemployment benefits |
| <input type="checkbox"/> Scholarships, grants, or other aid used for living | <input type="checkbox"/> Rental and/or royalty income |
| <input type="checkbox"/> Interest/dividends from savings, stocks, bonds, or retirement accounts | <input type="checkbox"/> Cash, gifts and/or other income |

Please print the following information. Incomplete information will delay your discount. The name used to apply for the discount must be the same as the name on the Liberty Utilities statement.

PLEASE PRINT LIBERTY											
Liberty Utilities Account Number (As shown on statement)											
Total No. of persons living in household:			Household's Total Gross Annual Income:				Contact Phone Number				
Name as shown on Liberty Utilities statement											
Liberty Utilities Service Address											
City			State			Zip Code					

Please attach one of the items listed as proof of income for eligibility verification: Copy of tax return from prior year, or copy of W2 from prior year, or copy of welfare / food stamp cards.

By signing below, I certify under penalty of perjury that this information is true and correct under the laws of the State of Arizona. I will provide proof of income and I will notify Liberty Utilities of any changes that affect my eligibility. I understand that if I receive the discount without meeting the qualifications for it, I may be required to pay back the discount I received.

Customer Signature _____

Date _____

Note: An Application for ARWW must be submitted every two years. A Declaration of Eligibility must be submitted annually for verification. Please allow 30-45 days for processing.

Office Use Only: Date Verified _____ Verified By _____ Expires _____

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Avondale, AZ 85392

**Declaration of Eligibility
Alternate Rates for Water and Wastewater (ARWW)**

To recertify enrollment in the ARWW Program please fill out the following attesting to continuing eligibility:

PLEASE PRINT LEGIBLY												
Name as shown on Liberty Utilities statement												
Liberty Utilities Account Number (As shown on statement)												
Liberty Utilities Service Address												
City				State				Zip Code				
Contact Phone Number						Work Phone Number						

I,

Your Name (Please Print)

Last submitted an Application for Alternative Rates (ARWW)
on

(dd/mm/yyyy)

and hereby confirm my eligibility for the year ending

(dd/mm/yyyy)

Please attach one of the items listed below as proof of income for eligibility verification:

Copy of tax return from prior year,
or copy of W2 form from prior year,
or copy of welfare / food stamp cards.

By signing below, I certify under penalty of perjury that this information is true and correct under the laws of the State of Arizona. I will provide proof of income and I will notify Liberty Utilities of any changes that affect my eligibility. I understand that if I receive the discount without meeting the qualifications for it, I may be required to pay back the discount I received.

Customer Signature

Date

Note: An Application for ARWW must be submitted every two years. A Declaration of Eligibility must be submitted annually for verification.

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Liberty Utilities (Litchfield Park Water & Sewer) Corp.
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Avondale, AZ 85392

**Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Alternate Rates for Water and Wastewater (ARWW)**

Applicability

Applicable to residential water and wastewater service for domestic use rendered to low-income households where the customer meets all the Program Qualifications and Special Conditions of this rate schedule.

Territory

Within all customer service areas served by Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Discount

Thirty percent (30%) discount applied to the regular filed tariff. The discount will be applied to the customer's total bill before any adjustments and application of any other taxes, credit, penalties or fees.

Program Qualifications

- The Liberty Utilities account must be in your name and the address must be your primary residence in our service area or you must be a tenant receiving water service by a sub-metered system.
- You may not be claimed as a dependent on another person's tax return.
- You must reapply each time you move residences.
- You must renew your application once every two (2) years or sooner if requested.
- You must recertify each year by submitting a declaration attesting to your continuing eligibility, and provide one of the following items as proof of eligibility: 1) copy of tax return from prior year, or 2) copy of W2 form from prior year, or 3) copy of welfare/food stamp cards.
- You must notify Liberty Utilities within thirty (30) days if you become ineligible for ARWW.
- Your total gross annual income of all persons living in your household cannot exceed the income levels provided on the application.

Special Conditions

- You must fill out and sign the ARWW Application completely. Incomplete information will delay your discount. You must reapply every two (2) years.
- You must recertify your enrollment in the ARWW annually by submitting a Declaration of Eligibility and providing one of the following items as proof of eligibility: 1) copy of tax return from prior year, or 2) copy of W2 form from prior year, or 3) copy of welfare/food stamp cards.
- Customers shall be billed on this schedule commencing with the next regularly scheduled billing period that follows the receipt and approval of the application by Liberty Utilities.
- Documentation of your gross annual income must be provided to Liberty Utilities for verification of eligibility for ARWW. Refusal or failure to provide documentation of acceptable eligibility to Liberty Utilities shall result in removal from this rate schedule.
- It is the customer's responsibility to notify Liberty Utilities if there is a change in eligibility status.
- You may be re-billed for any periods of ineligibility under the applicable rate schedule.
- Master-metered customers who have sub-metered tenants will receive a reduction in the billing. Sub-metered tenants must qualify and meet the income eligibility criteria so an equivalent discount (30%) can be passed through to eligible customer(s).
- The ARWW program is limited to 5,000 water division customers and 5,000 wastewater division customers.

How to Submit Completed ARWW Application and/or Declaration of Eligibility

Mail, Fax or Email your ARWW Application and Declaration of Eligibility to:
Liberty Utilities (Litchfield Park Water & Sewer) Corp.
12725 W. Indian School Rd. Ste. D101
Avondale, AZ 85392
Fax: 623-935-1020
Email: customerserviceavondale@libertywater.com

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PART SIX
HOOK-UP FEE TARIFF

WASTEWATER HOOK-UP FEE

I. Purpose and Applicability

The purpose of the off-site facilities hook-up fees payable to Liberty Utilities (Litchfield Park Water & Sewer) Corp. – Wastewater Division (the “Company”) pursuant to this tariff is to equitably apportion the costs of constructing additional off-site facilities to provide wastewater treatment and disposal facilities among all new service laterals. These charges are applicable to all new service laterals undertaken via Collection Main Extension Agreements, or requests for service not requiring a Collection Main Extension Agreement, entered into after the effective date of this tariff. The charges are one-time charges and are payable as a condition to Company’s establishment of service, as more particularly provided below.

II. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-601 of the Arizona Corporation Commission’s (“Commission”) rules and regulations governing sewer utilities shall apply interpreting this tariff schedule.

“Applicant” means any party entering into an agreement with Company for the installation of wastewater facilities to serve new service laterals, and may include Developers and/or Builders of new residential subdivisions, and industrial or commercial properties.

“Company” means Liberty Utilities (Litchfield Park Water & Service) Corp. – Wastewater Division.

“Collection Main Extension Agreement” means an agreement whereby an Applicant, Developer and/or Builder agrees to advance the costs of the installation of wastewater facilities necessary to serve new service laterals, or install wastewater facilities to serve new service laterals and transfer ownership of such wastewater facilities to the Company, which agreement does not require the approval of the Commission pursuant to A.A.C. R-14-2-606, and shall have the same meaning as “Wastewater Facilities Agreement.”

“Off-site Facilities” means the wastewater treatment plant, sludge disposal facilities, effluent disposal facilities and related appurtenances necessary for proper operation, including engineering and design costs. Offsite facilities may also include lift stations, force mains, transportation mains and related appurtenances necessary for proper operation if these facilities are not for the exclusive use of the applicant and benefit the entire wastewater system.

“Service Lateral” means and includes all service laterals for single-family residential, commercial, industrial or other uses.

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III. Wastewater Hook-up Fee

For each new residential service lateral, the Company shall collect a Hook-Up Fee of \$1,800 based on the Equivalent Residential Unit ("ERU") of 320 gallons per day. Commercial and industrial applicants shall pay based on the total ERUs of their development calculated by dividing the estimated total daily wastewater capacity usage needed for service using standard engineering standards and criteria by the ERU factor of 320 gallons per day. For "Active Adult" communities with demonstrated age-restricted zoning and/or CCRs providing for age-restricted living, the Hook-Up Fee shall be \$1,070, based on an ERU factor of 190 gallons per day.

IV. Terms and Conditions

(A) Assessment of One Time Off-Site Facilities Hook-up Fee: The off-site facilities hook-up fee may be assessed only once per parcel, service lateral, or lot within a subdivision (similar to a service lateral installation charge).

(B) Use of Off-Site Facilities Hook-up Fee: Off-site facilities hook-up fees may only be used to pay for capital items of Off-site Facilities, or for repayment of loans obtained to fund the cost of installation of off-site facilities. Off-site hook-up fees shall not be used to cover repairs, maintenance, or operational costs. The Company shall record amounts collected under the tariff as CIAC; however, such amounts shall not be deducted from rate base until such amounts have been expended for plant.

(C) Time of Payment:

(1) In the event that the person or entity that will be constructing improvements ("Applicant", "Developer" or "Builder") is otherwise required to enter into a Collection Main Extension Agreement, payment of the fees required hereunder shall be made by the Applicant, Developer or Builder within 15 days of execution of a Main Extension Agreement.

(2) In the event that the Applicant, Developer or Builder for service is not required to enter into a Collection Main Extension Agreement, the Hook-Up Fee charges hereunder shall be due and payable at the time wastewater service is requested for the property.

(D) Off-Site Facilities Construction by Developer: Company and Applicant, Developer, or Builder may agree to construction of off-site facilities necessary to serve a particular development by Applicant, Developer or Builder, which facilities are then conveyed to Company. In that event, Company shall credit the total cost of such off-site facilities as an offset to off-site hook-up fees due under this Tariff. If the total cost of the off-site facilities constructed by Applicant, Developer or Builder and conveyed to Company is less than the applicable off-site hook-up fees under this Tariff, Applicant, Developer or Builder shall pay the remaining amount of off-site hook-up fees owed hereunder. If the total cost of the off-site facilities contributed by Applicant, Developer or Builder and conveyed to Company is more than the applicable off-site hook-up fees under this Tariff, Developer or Builder shall be refunded the difference upon acceptance of the off-site facilities by the Company.

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- (E) Failure to Pay Charges: Delinquent Payments: The Company will not be obligated to make an advance commitment to provide or actually provide wastewater service to any Developer, Builder or other applicant for service in the event that the Developer, Builder or other applicant for service has not paid in full all charges hereunder. Under no circumstances will the Company connect service or otherwise allow service to be established if the entire amount of any payment has not been paid.
- (F) Large Subdivision and/or Development Projects: In the event that the Applicant, Developer or Builder is engaged in the development of a residential subdivision and/or development containing more than 150 lots, the Company may, in its reasonable discretion, agree to payment of off-site hook-up fees in installments. Such installments may be based on the residential subdivision and/or development's phasing, and should attempt to equitably apportion the payment of charges hereunder based on the Applicant's, Developer's or Builder's construction schedule and water service requirements. In the alternative, the Applicant, Developer, or Builder shall post an irrevocable letter of credit in favor of the Company in a commercially reasonable form, which may be drawn by the Company consistent with the actual or planned construction and hook up schedule for the subdivision and/or development.
- (G) Off-Site Hook-Up Fees Non-refundable: The amounts collected by the Company pursuant to the off-site facilities hook-up fee tariff shall be non-refundable contributions in aid of construction.
- (H) Use of Off-Site Hook-Up Fees Received: All funds collected by the Company as off-site facilities hook-up fees shall be deposited into a separate account and bear interest and shall be used solely for the purposes of paying for the costs of installation of off-site facilities, including repayment of loans obtained for the installation of off-site facilities.
- (I) Off-Site Facilities Hook-up Fee in Addition to On-site Facilities: The off-site facilities hook-up fee shall be in addition to any costs associated with the construction of on-site facilities under a Collection Main Extension Agreement.
- (J) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site facilities hook-up fees, or if the off-site facilities hook-up fee has been terminated by order of the Arizona Corporation Commission, any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary.
- (K) Status Reporting Requirements to the Commission: The Company shall submit a calendar year Off-Site Facilities Hook-Up Fee status report each January to Docket Control for the prior twelve (12) month period, beginning January 2015, until the hook-up fee tariff is no longer in effect. This status report shall contain a list of all customers that have paid the hook-up fee tariff, the amount each has paid, the physical location/address of the property in respect of which such fee was paid, the amount of money spent from the account, the amount of interest earned on the funds within the tariff account, and an itemization of all facilities that have been installed using the tariff funds during the 12 month period.

Issued: April 30, 2014

ISSUED BY:

Effective: May 1, 2014

Greg Sorenson, President - Arizona
Liberty Utilities (Litchfield Park Water & Sewer) Corp.
12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392

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EXHIBIT 8

**ESTIMATED ANNUAL OPERATING REVENUE
AND EXPENSES – FIRST FIVE YEARS**

Litchfield Park Service Company - Wastewater Division dba Liberty Utilities
 Zanjero Trails CC&N Extension
 Projected Incremental Balance Sheets
 For the Years Ended

Exhibit 1
 Schedule 1

Line No.	Beginning of Year	Label	1st year Changes				Year 3	Year 4	Year 5
			1	2	3	4			
1		Assets							
2		Utility Plant	4,707,357	4,977,357	5,292,357	9,259,458	9,806,668		
3		Accumulated Depreciation	(49,099)	(154,046)	(273,618)	(446,595)	(678,782)		
4		Cash	8,734	43,548	110,079	213,898	386,751		
5		Total Assets	\$ 4,666,993	\$ 4,866,859	\$ 5,128,818	\$ 9,026,762	\$ 9,494,627		
6		Equity and Liabilities							
7		Equity							
8		Common Stock, Net of	-	-	-	-	-	-	
9		Retained Earnings	-	-	-	-	-	-	
10		Total Equity	\$ 8,734	\$ 43,548	\$ 110,079	\$ 213,898	\$ 386,751		
11		Liabilities & Deferred Credits							
12		Advances in Aid of Construction	-	-	-	-	-	-	
13		Contributions in Aid of Construction	-	-	-	-	-	-	
14		Construction	-	-	-	-	-	-	
15		Less: Amortization	4,707,357	4,977,357	5,292,357	9,259,458	9,806,668		
16		Customer Deposits	(49,099)	(154,046)	(273,618)	(446,595)	(678,782)		
17		Long-Term Debt	-	-	-	-	-	-	
18		Total Liabilities and Deferred Credits	\$ 4,658,258	\$ 4,823,311	\$ 5,018,739	\$ 8,812,863	\$ 9,127,876		
19		Total Equity & Liab.	\$ 4,666,993	\$ 4,866,859	\$ 5,128,818	\$ 9,026,762	\$ 9,494,627		

- (a) Plant Additions (See Schedule 1a)
- (b) Depreciation Computations (See Schedule 1a)
- (c) Change in cash (See Schedule 3)
- (d) Common Stock issuance and or repurchase. (See Schedule 1b)
- (e) Profit or loss from operations (See Schedule 2)
- (f) Advances in Aid of Construction (See Schedule 1c)
- (g) Contributions in Aid of Construction (See Schedule 1a)
- (h) Amortization of Contributions in Aid of Construction, if applicable (See Schedule 1e)
- (i) Security deposits (2 lines average bill)

Litchfield Park Service Company - Wastewater Division dba Liberty Utilities
Zanjero Trails CC&N Extension
Projected Incremental Revenues and Expenses
For the 12 Months Ended

Exhibit
Schedule 2

Line No.		1	2	3	4	5
1	Total estimated Revenues	\$ 20,693	\$ 79,773	\$ 163,444	\$ 282,645	\$ 442,762
2	Variable Expenses					
3	Pumping Power:		5,616	11,700	19,938	30,964
4	Purchased Water	1,404	270	563	959	1,489
5	Sludge Removal	68	2,268	4,725	8,052	12,505
6	Chemicals	567	3,132	6,525	11,119	17,269
7	Testing	73	292	608	1,035	1,608
8	Materials & Supplies (a)(b)	169	698	1,477	2,616	4,151
9	Billing, Postage, Operations, Insurance (a)(b)	5,472	22,622	47,907	84,836	134,616
10						
11						
12						
13						
14	Total Variable Expenses	\$ 8,535	\$ 34,888	\$ 73,604	\$ 128,555	\$ 202,601
15	Other Expenses					
16	Depreciation net of Amortization of CIAC					
17	Legal & Accounting	\$ 500	510	520	531	541
18	Miscellaneous (d)(b)	300	306	312	318	325
19	Income Taxes	2,071	8,254	20,747	46,272	81,762
20	Property Taxes (e)	553	1,080	2,351	4,685	7,920
21						
22						
23	Total Other Expense	\$ 3,424	\$ 10,149	\$ 23,931	\$ 51,806	\$ 90,548
24						
25						
26	Total Operating Expenses	\$ 11,959	\$ 45,047	\$ 97,435	\$ 180,361	\$ 293,149
27	Operating Income (loss)	\$ 8,734	\$ 34,726	\$ 66,008	\$ 102,283	\$ 149,613
28	Less:					
29	Interest (Expense) Income on Work. Cap. (c)		87	523	1,536	3,240
30	Interest Expense Long-term Debt (c)					
31	Net Income	\$ 8,734	\$ 34,813	\$ 66,531	\$ 103,820	\$ 152,852
32						
33						
34	(e) Per customer per month					
35	(b) Annual Inflation of:					
36	(c) If Applicable					
37	(d) Miscellaneous Expenses of \$25 per month					
38	(e) ADOR Property Tax Calculation					
39						
40						
41						
42						

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EXHIBIT 9

WRITTEN REQUEST FOR SERVICE



July 1, 2015

Mr. Steve Carlson
Manager of Development Services
Liberty Utilities
12725 W. Indian School Rd., Suite D 101
Avondale, AZ 85392

Re: Request for Sewer Service – Zanjero Trails

Dear Mr. Carlson:

Now that we have successfully negotiated a Master Utility Agreement between MWD and Liberty Utilities, we are formally requesting service to our Zanjero Trails project in accordance with that MUA.

We look forward to working together as you make your submittal for a CC&N to the Arizona Corporation Commission to expand your service area so that Zanjero Trails can be provided sewer service through a publically regulated utility.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Glen Vortherms', with a long horizontal flourish extending to the right.

Glen Vortherms
General Manager

c: Sheryl Sweeney

MARICOPA WATER DISTRICT

P.O. Box 900, Waddell, AZ 85355-0900

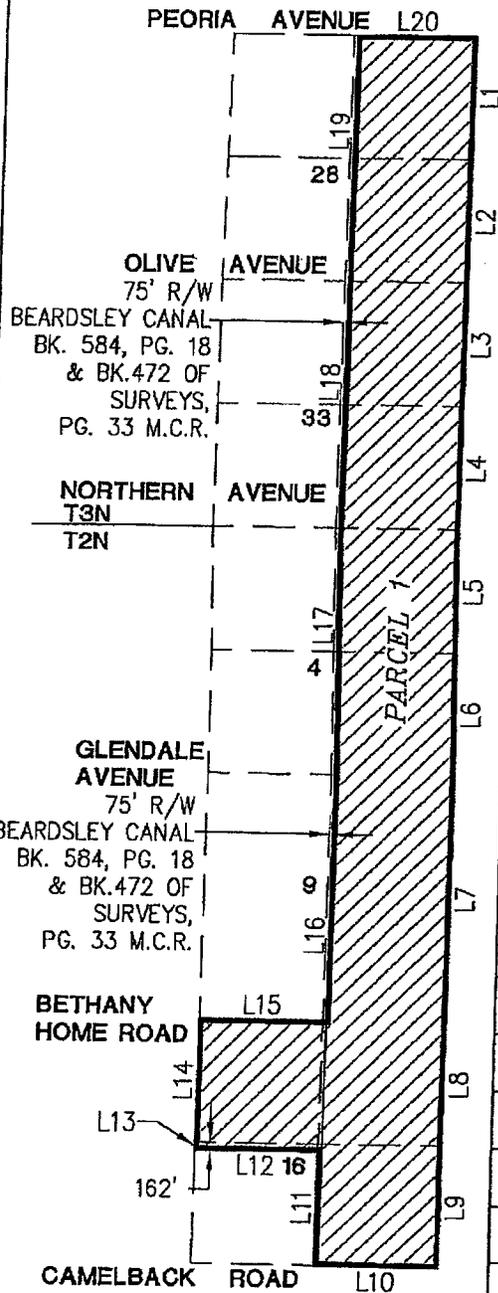
◆ (623) 546-8266 ◆

FAX (623) 584-2536

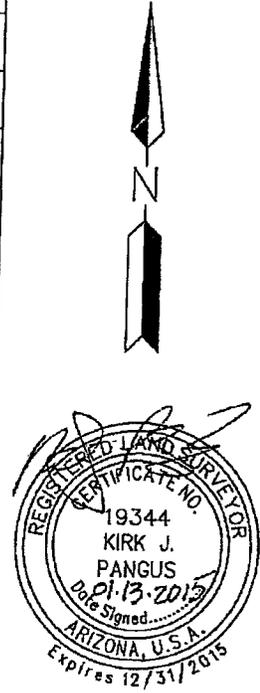
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EXHIBIT 10

MAPS OF EXISTING SERVICE AREA AND EXTENSION AREA

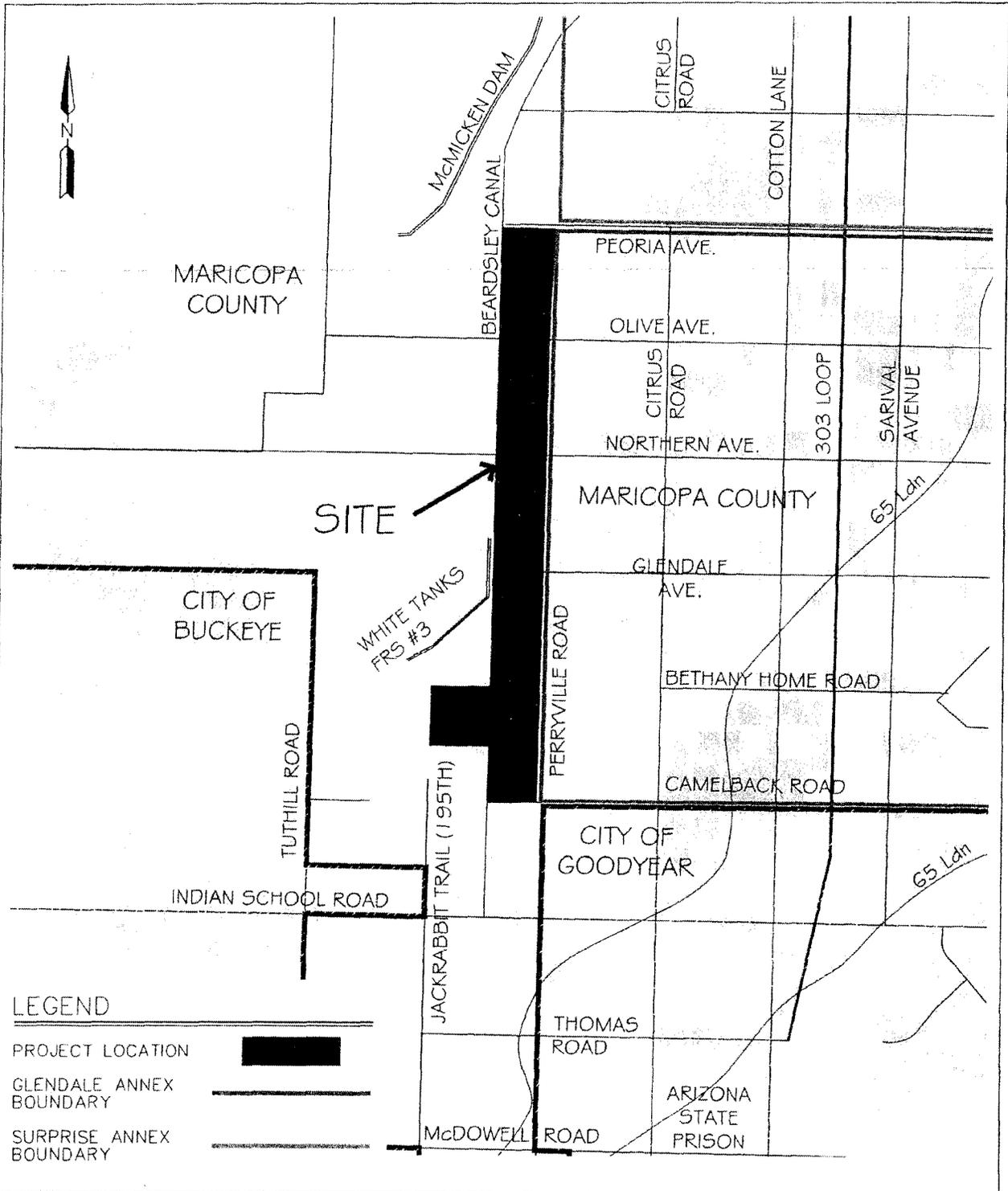


LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S00°20'19"W	2638.46'
L2	S00°21'13"W	2635.60'
L3	S00°22'08"W	2640.72'
L4	S00°21'40"W	2639.95'
L5	S00°33'38"E	2640.27'
L6	S00°33'48"E	2630.48'
L7	S00°23'42"W	5273.14'
L8	S00°24'28"W	2637.84'
L9	S00°24'32"W	2637.33'
L10	N89°36'46"W	2637.49'
L11	N00°30'54"E	2464.95'
L12	N89°51'17"W	2654.20'
L13	N00°23'25"E	162.00'
L14	N00°30'12"E	2635.21'
L15	S89°50'46"E	2730.09'
L16	N00°27'02"E	5268.31'
L17	N00°44'08"W	5280.79'
L18	N00°21'39"E	5282.64'
L19	N00°20'37"E	5276.35'
L20	S89°42'03"E	2564.43'

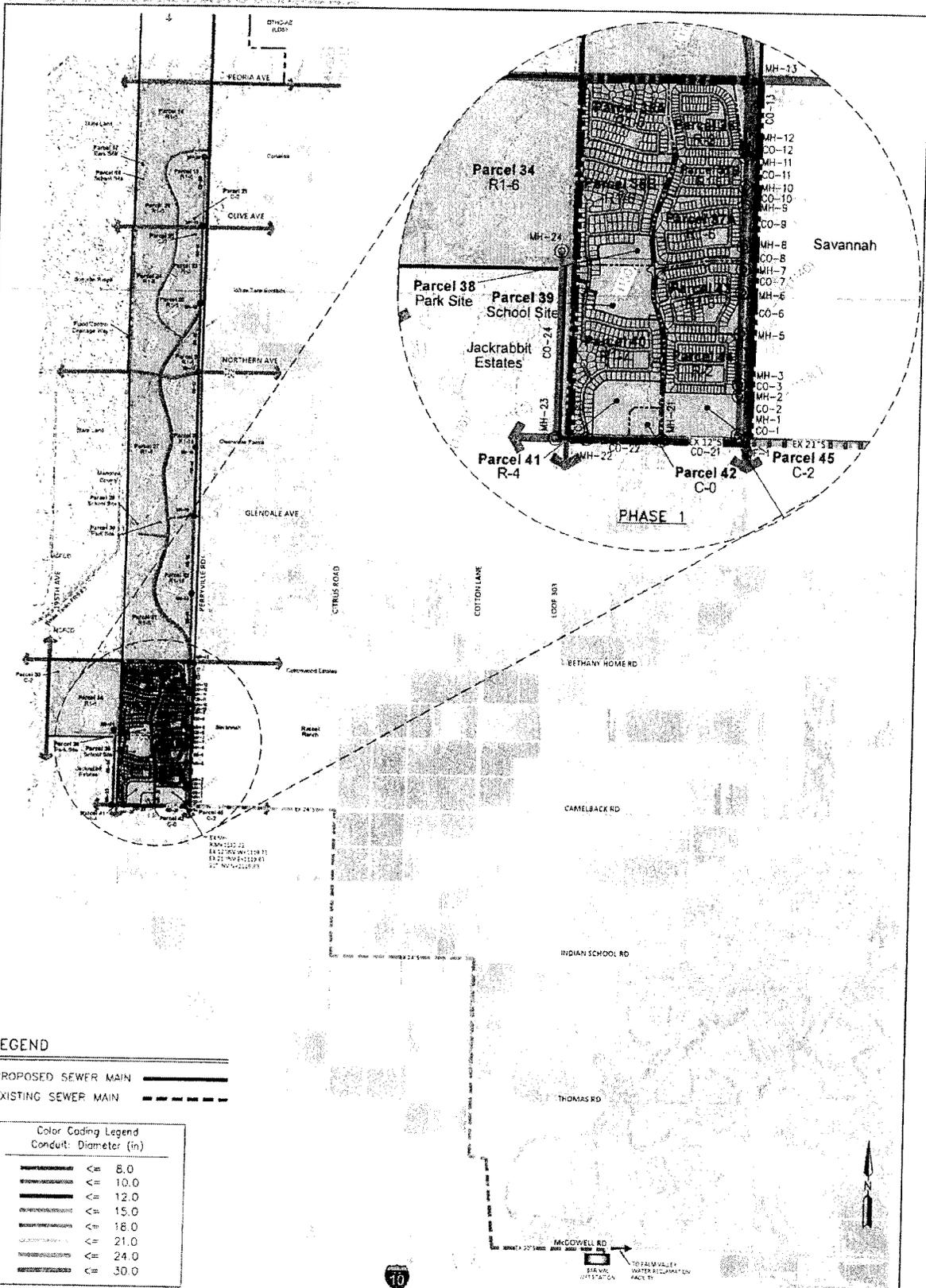


PROJ.NO.: 1078	ZANJERO TRAILS LIBERTY CC&N EXPANSION PEORIA, ARIZONA	 HILGARTWILSON 2141 E. HIGHLAND AVE., STE. 250 PHOENIX, AZ 85016 P: 602.490.0535 / F: 602.368.2436
DATE: JAN 2015		
SCALE: 1" = 3500'	EXHIBIT 'B'	
DRAWN BY: DSP		
CHECKED BY: KJP		

U:\1000\1078\SURVEY\DOCS\1078 Liberty CC&N Expansion Exhibit-revised.dwg 1/13/2015 1:11 PM



PROJ.NO.:	1003	ZANJERO TRAILS	 HILGARTWILSON
DATE:	APRIL 2014		
SCALE:	NTS	MARICOPA COUNTY, ARIZONA	2141 E. HIGHLAND AVE., STE. 250
DRAWN BY:	HW	FIG 1: VICINITY MAP	PHOENIX, AZ 85016
CHECKED BY:	HW		P: 602.490.0535 / F: 602.368.2436



LEGEND

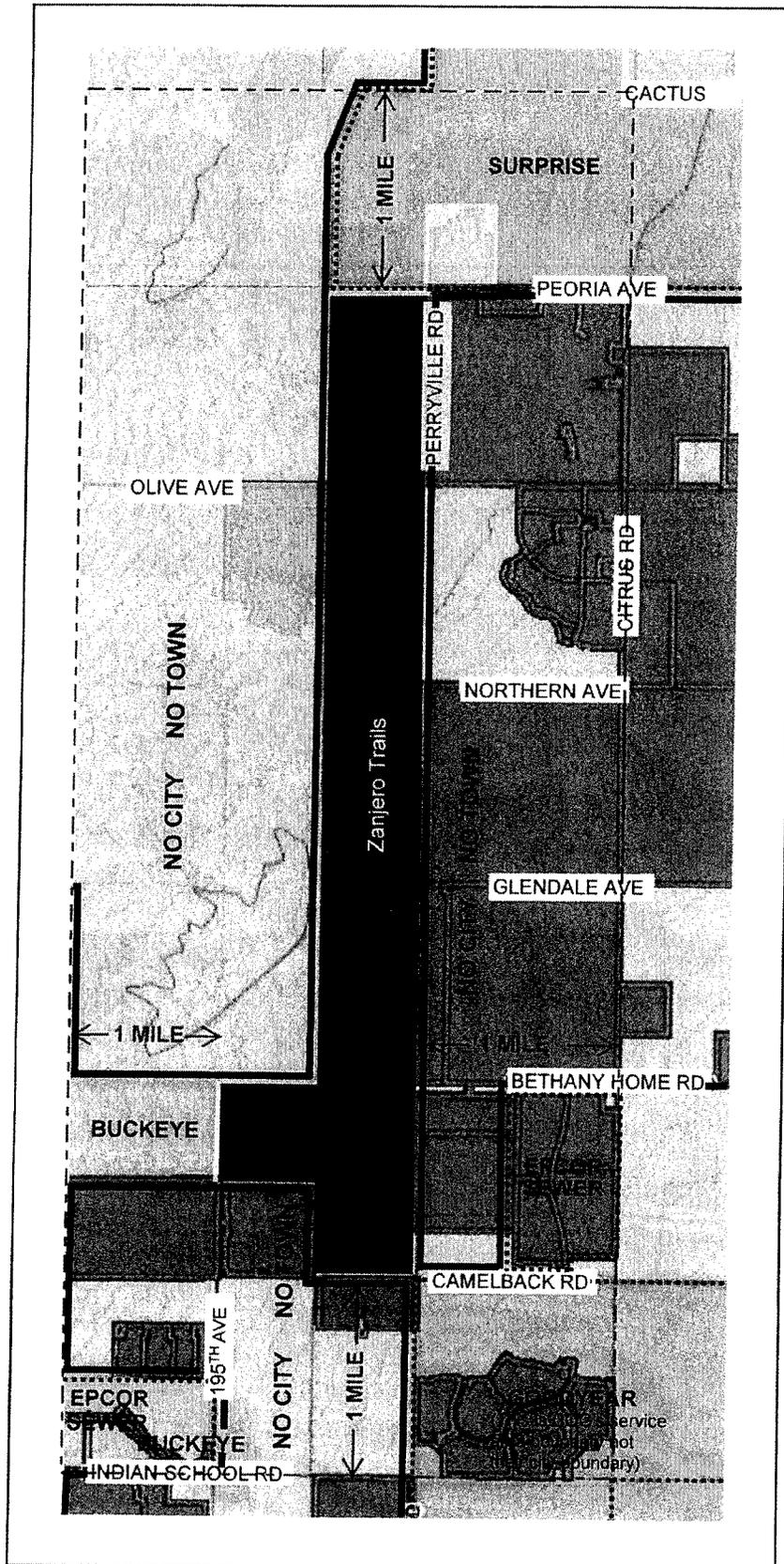
PROPOSED SEWER MAIN ————
 EXISTING SEWER MAIN - - - - -

Color Coding Legend	
Conduit: Diameter (in)	
[Line Style]	<= 6.0
[Line Style]	<= 10.0
[Line Style]	<= 12.0
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[Line Style]	<= 18.0
[Line Style]	<= 21.0
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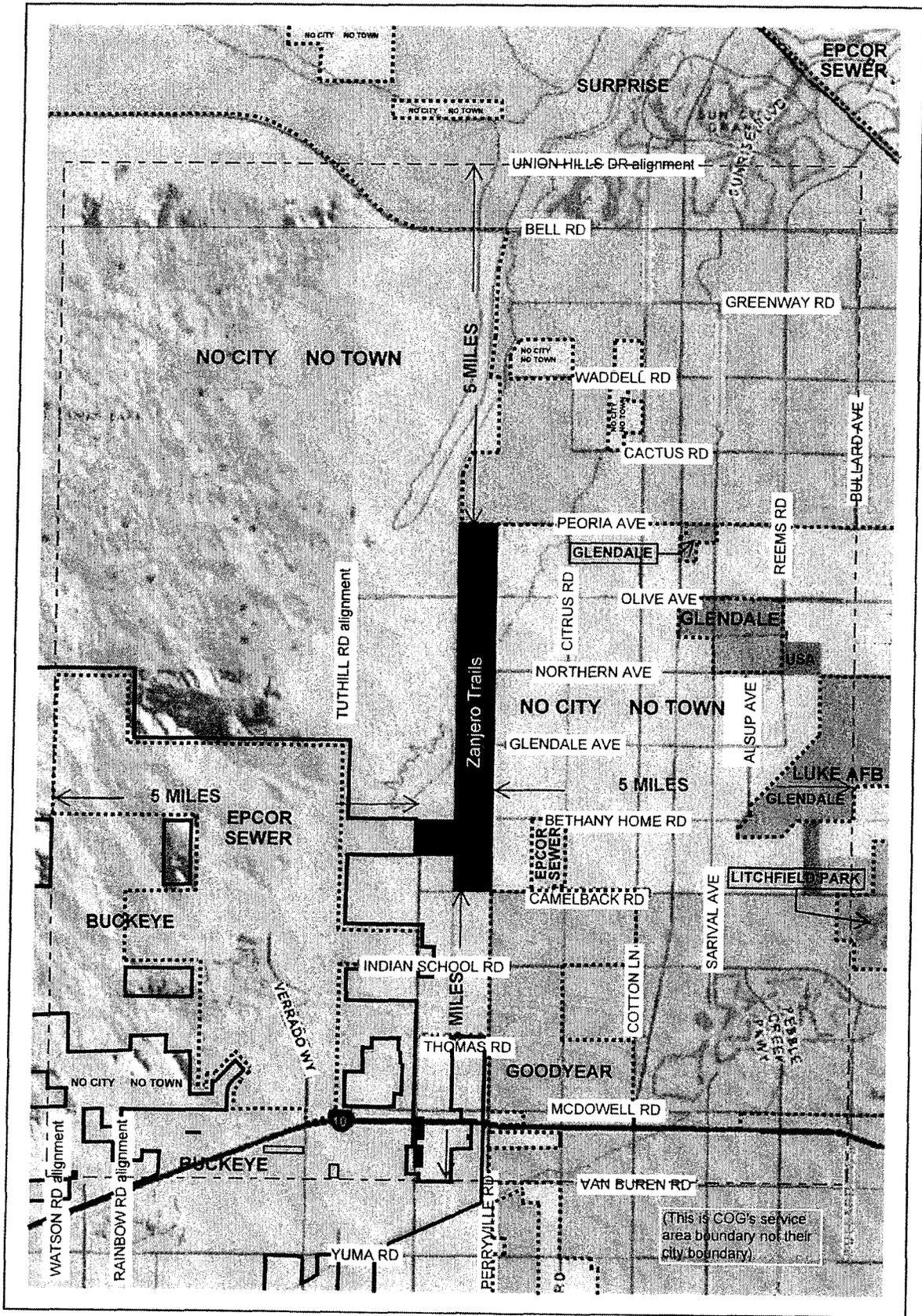
	ZANJERO TRAILS PERRYVILLE ROAD MARICOPA COUNTY, ARIZONA	 HILGART WILSON <small>2143 E MIDLAND AVE. STE. 250 W. BUCKEYE, AZ 85204 PHONE: 480-607-8074</small>
	FIG 3: WASTEWATER EXHIBIT	

Liberty Utilities (Litchfield Park Water & Sewer) Corp.

CC&N extension and nearby municipalities/private sewer providers within 1 mile



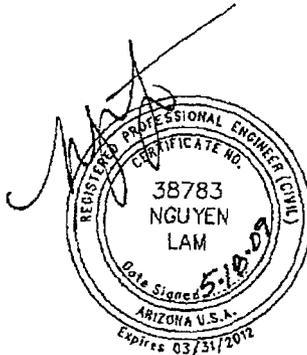
Liberty Utilities (Litchfield Park Water & Sewer) Corp.
 CC&N extension and nearby municipalities/private sewer providers within 5 miles



PRELIMINARY WASTEWATER REPORT
FOR
ZANJERO TRAILS - PHASE 1
MARICOPA COUNTY, ARIZONA

Prepared For:
MARICOPA WATER DISTRICT
PO Box 900
Waddell, AZ 85355
Phone: 623.546.8266
Fax: 623.584.2536

Prepared By:
CMX
7740 North 16th Street, Suite 100
Phoenix, AZ 85020
Phone: 602.567.1900
Fax: 602.567.1901



5th Submittal: May 2009
4th Submittal: April 2009
3rd Submittal: January 2009
2nd Submittal: March 2008
1st Submittal: March 2005
CMX Project No. 6714.02

Litchfield Park Service Co
Approved By: MLH
Date: 5-19-09

PRELIMINARY WASTEWATER REPORT
FOR
ZANJERO TRAILS - PHASE 1

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EXHIBIT 11

**FORM OF NOTICE TO BE SENT TO MUNICIPALITIES
WITHIN 5 MILES OF EXTENSION AREA**



Liberty Utilities™

Notice Required Pursuant to R14-2-602.B.4
Request for Extension of Certificate of Convenience and Necessity
Filed by Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Pursuant to A.A.C. R14-2-602.B.4, Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty") hereby provides notice that Liberty has filed an application with the Arizona Corporation Commission to extend Liberty's Certificate of Convenience and Necessity (CC&N) to provide wastewater utility service to the CC&N Extension Area set forth below. The requested Extension Area is located within five miles of your municipality's corporate limits. The specific notice requirements are as follows:

Applicant Name, Mailing Address and Telephone Number

Liberty Utilities (Litchfield Park Water & Sewer) Corp.
12725 W. Indian School Road, Suite D-101
Avondale, AZ 85392
623-935-9367

Date Application was Filed

The CC&N Extension Application was filed on _____, 2015.

Type of Service to be Provided

Wastewater Service

A Description of Requested Service Extension Area

Zanjero Trails is an approximately 1,740 acre property generally bound by Camelback Road on the south, Peoria Avenue on the north, Perryville Road on the east and the Beardsley Canal on the west. The Zanjero Trails property lies within Sections 4, 9 and 16 of Township 2 North, Range 2 West and in Sections 28 and 33 of Township 3 North, Range 2 West of the Gila and Salt River Meridian (the "Property").

Commission Docket Number

ACC Docket No. SW-01428A-15-_____

Instructions on How to Obtain a Copy of Application

The application is available for inspection during regular business hours at the offices of the Commission in Phoenix at 1200 West Washington Street, and at Liberty Utilities, 12725 W. Indian School Road, Suite D-101, Avondale, AZ 85392. In addition, Liberty will provide a printed copy or electronic copy of the application upon request.

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EXHIBIT 12

ESTIMATED NUMBER OF CUSTOMERS – FIRST FIVE YEARS

Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Zanjero Trails Project
Customer Projections (5 year)

Year	2015	2016	2017	2018	2019	2020
Annual New Customers						
Residential (EDU's)	-	75	150	175	200	225
Apartments (EDU'S)	-	-	-	-	83	84
Commercial (EDU's)	-	-	-	-	-	40
Office (EDU's)	-	-	-	-	17	-
School Site (EDU's)	-	-	-	-	-	39
Annual Total (EDU'S)	-	75	150	175	300	388
Cumulative Customers per year						
Residential (EDU's)	-	75	225	400	600	825
Apartments (EDU'S)	-	-	-	-	83	167
Commercial (EDU's)	-	-	-	-	-	40
Office (EDU's)	-	-	-	-	17	-
School Site (EDU's)	-	-	-	-	-	39
Cumulative Total (EDU's)	-	75	225	400	700	1,071

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EXHIBIT 13

ADEQ AQUIFER PROTECTION PERMIT

STATE OF ARIZONA
AQUIFER PROTECTION PERMIT NO. P-100310
PLACE ID 815, LTF 53068

1.0 AUTHORIZATION

In compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Articles 1, 2 and 3, Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 1 and 2, A.A.C. Title 18, Chapter 11, Article 4 and amendments thereto, and the conditions set forth in this permit, Litchfield Park Service Company is hereby authorized to operate Palm Valley Water Reclamation Facility, located in Goodyear, Arizona, in Maricopa County, over groundwater of the Phoenix Active Management Area, in Township 2 N, Range 1 W, Section 33, SE¼, SW¼, SW¼, of the Gila and Salt River Baseline and Meridian.

This permit becomes effective on the date of the Water Quality Division Director's signature and shall be valid for the life of the facility (operational, closure, and post-closure periods) unless suspended or revoked pursuant to A.A.C. R18-9-A213. The permittee shall construct, operate and maintain the permitted facilities:

1. Following all the conditions of this permit including the design and operational information documented or referenced below, and
2. Such that Aquifer Water Quality Standards (AWQS) are not violated at the applicable point(s) of compliance (POC) set forth below or if an AWQS for a pollutant has been exceeded in an aquifer at the time of permit issuance, that no additional degradation of the aquifer relative to that pollutant and as determined at the applicable POC occurs as a result of the discharge from the facility.

1.1 PERMITTEE INFORMATION

Facility Name: Palm Valley Water Reclamation Facility
Facility Address: 14222 West McDowell Road
Goodyear, Arizona 85338
County: Maricopa

Permittee: Litchfield Park Service Company
Permittee Address: 12725 W Indian School Rd, Suite D101
Avondale, AZ 85392

Facility Contact: Matthew Garlick
Emergency Phone No.: (623) 935-9367

Latitude/Longitude: 33° 27' 55" N / 112° 21' 55" W
Legal Description: Township 2 N, Range 1 W, Section 33, SE¼, SW¼, SW¼ of the Gila and Salt River Baseline and Meridian

1.2 AUTHORIZING SIGNATURE



Michael A. Fulton, Director
Water Quality Division
Arizona Department of Environmental Quality

Signed this 13th day of April, 2012

2.0 SPECIFIC CONDITIONS [A.R.S. §§ 49-203(4), 49-241(A)]**2.1 Facility / Site Description [A.R.S. § 49-243(K)(8)]**

Litchfield Park Service Company (LPSCO) is authorized to operate Palm Valley Water Reclamation Facility (WRF), 5.1 million-gallons per day (mgd) facility. The treatment process consists of two (2) bar screens, a vortex grit removal unit, an influent pump station, an influent equalization basin, three (3) sequential batch reactor (SBR) basins, a surge tank, four (4) cloth media disk filters, three (3) ultraviolet (UV) disinfection units, three (3) sludge holding tanks, two (2) centrifuges and two (2) rotary drum thickeners. The WRF is designed and constructed according to plans approved by ADEQ.

Effluent shall be reused for any allowable use under a valid reclaimed water permit (A.A.C. R18-9, Article 7), discharged to the Roosevelt Irrigation District (RID) canal under a valid AZPDES permit, or used for on-site process water applications (such as equipment cleaning). Discharges to the RID canal are exempt from APP requirements pursuant to A.R.S. § 49-250(B)(6) and (16). The Palm Valley WRF reclaimed water distribution system may also be connected to the reclaimed water distribution system for the City of Goodyear 157th Avenue WRF (APP No. P-101324), after the APP for the City of Goodyear 157th Avenue WRF has been amended to allow the connection (as per Section 3.0, Compliance Schedule). Once the reclaimed water distribution systems for the two facilities have been connected, reclaimed water from each of the facilities may be delivered to either facility's reclaimed water customers. Sludge shall be dewatered onsite by centrifuges and/or rotary drum thickeners. The dewatered sludge, including screenings, grit, and scum, shall be hauled off-site for management and disposal in accordance with state and federal regulations.

4.1 mgd Facility

The existing 4.1 mgd WRF includes two (2) bar screens, three (3) SBR basins, three (3) cloth media disc filters, and two (2) UV disinfection units. Discharge monitoring for this stage of operation shall be conducted as per Section 4.2, Table IA-1. Upon completion of construction of the 5.1 mgd expansion, monitoring under Table IA-1 shall be discontinued as per Section 3.0, Compliance Schedule.

5.1 mgd Expansion

The 5.1 mgd WRF shall include two (2) bar screens, three (3) SBR basins, four (4) cloth media disc filters, and three (3) UV disinfection units. In addition, two (2) of the three (3) existing SBR basins shall be retrofitted with new floating decanters and jet aeration systems, in order to expand the capacity of the facility without constructing additional SBR basins. Discharge monitoring for this stage of operation shall be conducted as per Section 4.2, Table IA-2.

Amendment Description

The purpose of this amendment is to increase the capacity of the WRF from 4.1 mgd to 5.1 mgd by adding a disc filter unit and a UV disinfection unit to the existing plant, to retrofit two (2) of the three (3) existing SBRs with new equipment to expand the capacity of the plant, and to allow connection between the Palm Valley WRF reclaimed water distribution system and the City of Goodyear 157th Avenue WRF reclaimed water distribution system.

The depth to groundwater is approximately 120 feet below land surface, and the direction of groundwater flow is toward the west-northwest.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

The site includes the following permitted discharging facility:

Palm Valley Water Reclamation Facility	33° 21' 55" N	112° 21' 55" W
--	---------------	----------------

Annual Registration Fee [A.R.S. § 49-242 and A.A.C. R18-14-104]

The Annual Registration Fee for this permit is established by A.R.S. § 49-242 and is payable to ADEQ each year. The design flow is 5.1 mgd.

Financial Capability [A.R.S. § 49-243(N) and A.A.C. R18-9-A203]

The permittee has demonstrated financial capability under A.R.S. § 49-243(N) and A.A.C. R18-9-A203(C)(5). The permittee shall maintain financial capability throughout the life of the facility. Litchfield Park Service Company submitted a Letter of Credit in the amount of \$500,000.00 to ADEQ as a financial assurance mechanism.

2.2 Best Available Demonstrated Control Technology [A.R.S. § 49-243(B) and A.A.C. R18-9-A202(A)(5)]

The WRF shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(B)(6)(b).

2.2.1 Engineering Design

This expansion of the WRF was designed and shall be constructed as per the design report stamped, dated, and signed (sealed) on August 17, 2010, by Brian P. McBride, P.E. (Professional Engineer) with McBride Engineering Solutions, Inc., and subsequent sealed submittals that served as additions to the design report.

2.2.2 Site-specific Characteristics

Not applicable.

2.2.3 Pre-operational Requirements

The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion in a format approved by the Department per Compliance Schedule in Section 3.0. The Certificate shall be submitted to the Groundwater Section, and a copy shall be sent to the Water Quality Compliance Section.

2.2.4 Operational Requirements

1. The permittee shall maintain a copy of the up-to-date operations and maintenance manual at the WRF site at all times; the manual shall be available upon request during inspections by ADEQ personnel.
2. The pollution control structures shall be inspected for the items listed in Section 4.2, Table III - Facility Inspection (Operational Monitoring).
3. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and material(s) used shall be documented on the Self-Monitoring Report Form submitted quarterly to the ADEQ Water Quality Compliance Section.

2.2.5 Reclaimed Water Classification

[A.A.C. R18-9-703(C)(2)(a), A.A.C. R18-11-303 through 307]

The treatment facility is rated as producing reclaimed water meeting the Class A+ Reclaimed Water Quality Standards (A.A.C. R18-11, Article 3), which may be used for any allowable Class A, B, or C use under a valid reclaimed water permit (A.A.C. R18-9, Article 7).

2.2.6 Certified Area-wide Water Quality Management Plan Conformance
[A.A.C. R18-9-A201(B)(6)(a)]

Facility operations must conform to the approved Certified Area-wide Water Quality Management Plan according to the 208 consistency determination in place at the time of permit issuance.

2.3 Discharge Limitations [A.R.S. §§ 49-201(14), 49-243 and A.A.C. R18-9-A205(B)]

1. The permittee is authorized to operate the WRF with a maximum average monthly flow of 5.1 mgd.
2. The permittee shall notify all users that the materials authorized to be disposed of through the WRF are typical household sewage and pre-treated commercial wastewater and shall not include motor oil, gasoline, paints, varnishes, hazardous wastes, solvents, pesticides, fertilizers or other materials not generally associated with toilet flushing, food preparation, laundry facilities and personal hygiene.
3. The permittee shall operate and maintain all permitted facilities to prevent unauthorized discharges pursuant to A.R.S. § 49-201(12) resulting from failure or bypassing of applicable BACT pollutant control technologies including liner failure¹, uncontrollable leakage, overtopping (e.g., exceeding the maximum storage capacity, defined as a fluid level exceeding the crest elevation of a permitted impoundment), of basins, lagoons, impoundments or sludge drying beds, berm breaches, accidental spills, or other unauthorized discharges.
4. Specific discharge limitations are listed in Section 4.2, Tables IA-1, IA-2 and IB.

2.4 Points of Compliance (POCs) [A.R.S. § 49-244]

The POCs are established at the following designated locations:

Location	Latitude	Longitude
1 Theoretical POC located at the northwest corner of the WRF	33° 27' 56" N	112° 21' 54" W

Groundwater monitoring is not required at the point of compliance, except as a contingency action.

The Director may amend this permit to require the installation of a well and the initiation of groundwater monitoring at the POC, or to designate additional points of compliance, if information on groundwater gradients or groundwater usage indicates the need.

2.5 Monitoring Requirements [A.R.S. § 49-243(K)(1), A.A.C. R18-9-A206(A)]

All monitoring required in this permit shall continue for the duration of the permit, regardless of the status of the facility. All sampling, preservation and holding times shall be in accordance with currently accepted standards of professional practice. Trip blanks, equipment blanks and duplicate samples shall also be obtained, and Chain-of-Custody procedures shall be followed, in accordance with currently accepted standards of professional practice. The permittee shall develop a site-specific Quality Management Plan (QMP) which describes the sample collection and analysis procedures to ensure that the result of work

¹Liner failure in a single-lined impoundment is any condition that would result in leakage exceeding 550 gallons per day per acre.

performed under this permit will satisfy the data quality objectives of the permit. The permittee shall be responsible for the quality and accuracy of all data required by this permit. If a third party collects or analyzes samples on behalf of the permittee, the permittee shall obtain a copy of the third party site-specific QMP. The permittee shall consult with the most recent version of the ADEQ QMP and Title 40, PART 136, of the Environmental Protection Agency's Code of Federal Regulations (CFR) for guidance in this regard. Copies of laboratory analyses and Chain-of-Custody forms shall be maintained at the permitted facility. Upon request, these documents shall be made immediately available for review by ADEQ personnel.

2.5.1 Pre-operational Monitoring

Not applicable at the time of permit issuance.

2.5.2 Routine Discharge Monitoring

The permittee shall monitor the effluent on a routine basis according to Section 4.2, Table IA-1 or IA-2, as applicable. Representative samples of the effluent shall be collected downstream of the UV disinfection channel.

2.5.3 Reclaimed Water Monitoring

On a routine basis, the permittee shall monitor the reclaimed water parameters listed under Section 4.2, Table IB in addition to the routine discharge monitoring parameters listed in Section 4.2, Tables IA-1 and IA-2. Representative samples of the reclaimed water shall be collected downstream of the UV disinfection channel.

2.5.4 Facility / Operational Monitoring

Operational monitoring inspections shall be conducted according to Section 4.2, Table III.

1. If any damage of the pollution control structures is identified during inspection, proper repair procedures shall be performed. All repair procedures and materials used shall be documented on the SMRF submitted quarterly to the ADEQ Water Quality Compliance Section, Data Unit. If none of the conditions occur, the report shall say "no event" for a particular reporting period. If the facility is not in operation, the permittee shall indicate this on the SMRF.
2. The permittee shall submit data required in Section 4.2, Table III regardless of the operating status of the facility unless otherwise approved by the Department or allowed in this permit.

2.5.5 Groundwater Monitoring and Sampling Protocols

Not applicable.

2.5.6 Surface Water Monitoring and Sampling Protocols

Not applicable.

2.5.7 Analytical Methodology

All samples collected for compliance monitoring shall be analyzed using Arizona state-approved methods. If no state-approved method exists, then any appropriate EPA-approved method shall be used. Regardless of the method used, the detection limits must be sufficient to determine compliance with the regulatory limits of the parameters specified in this permit. Analyses shall be performed by a laboratory licensed by the Arizona Department of Health Services, Office of Laboratory Licensure and Certification. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods. A list of state-certified laboratories in Arizona can be obtained at the address below:

Arizona Department of Health Services
Office of Laboratory Licensure and Certification
250 North 17th Avenue
Phoenix, Arizona, 85007
Phone: (602) 364-0720

2.5.8. Installation and Maintenance of Monitoring Equipment

Monitoring equipment required by this permit shall be installed and maintained so that representative samples required by the permit can be collected. If new groundwater wells are determined to be necessary, the construction details shall be submitted to the ADEQ Groundwater Section for approval prior to installation, and the permit shall be amended to include any new monitoring points.

2.6 Contingency Plan Requirements [A.R.S. § 49-243(K)(3), (K)(7) and A.A.C. R18-9-A204 and R18-9-A205]

2.6.1 General Contingency Plan Requirements

At least one copy of this permit and the approved contingency and emergency response plan(s) submitted in the application shall be maintained at the location where day-to-day decisions regarding the operation of the facility are made. The permittee shall be aware of and follow the contingency and emergency plans.

Any AL exceedance, violation of a DL, AQL, or other permit condition shall be reported to ADEQ following the reporting requirements in Section 2.7.3.

Some contingency actions involve verification sampling. Verification sampling shall consist of the first follow-up sample collected from a location that previously indicated a violation or the exceedance of an AL. Collection and analysis of the verification sample shall use the same protocols and test methods to analyze for the pollutant or pollutants that exceeded an AL or violated an AQL. The permittee is subject to enforcement action for the failure to comply with any contingency actions in this permit. Where verification sampling is specified in this permit, it is the option of the permittee to perform such sampling. If verification sampling is not conducted within the timeframe allotted, ADEQ and the permittee shall presume the initial sampling result to be confirmed as if verification sampling had been conducted. The permittee is responsible for compliance with contingency plans relating to the exceedance of an AL or violation of a DL, AQL, or any other permit condition.

2.6.2 Exceeding of Alert Levels/Performance Levels

2.6.2.1 Exceeding of Performance Levels Set for Operational Conditions

1. If an operational performance level (PL) set in Section 4.2, Table III has been exceeded the permittee shall:
 - a. Notify the ADEQ Water Quality Compliance Section within five days of becoming aware of the exceedance.
 - b. Submit a written report within 30 days after becoming aware of the exceedance. The report shall document all of the following:
 - (1) A description of the exceedance and its cause;
 - (2) the period of the exceedance, including exact date(s) and time(s), if known, and the anticipated time period during which the exceedance is expected to continue;
 - (3) any action taken or planned to mitigate the effects of the exceedance or spill, or to eliminate or prevent recurrence of the exceedance or spill;

- (4) any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AQS; and
 - (5) any malfunction or failure of pollution control devices or other equipment or process.
2. The facility is no longer on alert status once the operational indicator no longer indicates that a PL is being exceeded. The permittee shall, however, complete all tasks necessary to return the facility to its pre-alert operating condition.

2.6.2.2 Exceeding of Alert Levels (ALs) Set for Discharge Monitoring

1. If an AL set in Section 4.2, Tables IA-1 and IA-2 has been exceeded, the permittee shall immediately investigate to determine the cause. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the exceedance;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and
 - c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the exceedance, the permittee shall sample individual waste streams composing the wastewater for the parameters in question, if necessary to identify the cause of the exceedance.
2. The permittee shall initiate actions identified in the approved contingency plan and specific contingency measures identified in Section 2.6 to resolve any problems identified by the investigation which may have led to an AL exceedance. To implement any other corrective action the permittee shall obtain prior approval from ADEQ according to Section 2.6.6.
3. Within 30 days of an AL exceedance, the permittee shall submit the laboratory results to the ADEQ Water Quality Compliance Section, Data Unit, along with a summary of the findings of the investigation, the cause of the exceedance, and actions taken to resolve the problem.
4. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions or other actions.

2.6.2.2.1 Exceeding Permit Flow Limit

1. If the AL for average monthly flow in Section 4.2, Tables IA-1 or IA-2 has been exceeded, the permittee shall submit an application for an APP amendment to expand the WRF or submit a report detailing the reasons that expansion is not necessary.
2. Acceptance of the report instead of an application for expansion requires ADEQ approval.

2.6.3 Discharge Limit Violation

1. If a DL set in Section 4.2, Tables IA-1, IA-2, or IB has been violated, the permittee shall immediately investigate to determine the cause of the violation. The investigation shall include the following:
 - a. Inspection, testing, and assessment of the current condition of all treatment or pollutant discharge control systems that may have contributed to the violation;
 - b. Review of recent process logs, reports, and other operational control information to identify any unusual occurrences; and

- c. If the investigation procedures indicated in (a) and (b) above fail to reveal the cause of the violation, the permittee shall sample individual waste streams composing the wastewater for the parameters in violation, if necessary to identify the cause of the violation.

The permittee also shall submit a report according to Section 2.7.3, which includes a summary of the findings of the investigation, the cause of the violation, and actions taken to resolve the problem. The permittee shall consider and ADEQ may require corrective action that may include control of the source of discharge, cleanup of affected soil, surface water or groundwater, and mitigation of the impact of pollutants on existing uses of the aquifer. Corrective actions shall either be specifically identified in this permit, included in an ADEQ-approved contingency plan, or separately approved according to Section 2.6.6.

2. Upon review of the submitted report, the Department may amend the permit to require additional monitoring, increased frequency of monitoring, amendments to permit conditions, or other actions.

2.6.4 Aquifer Quality Limit Violation

Not applicable - Groundwater monitoring is not required under this permit.

2.6.5 Emergency Response and Contingency Requirements for Unauthorized Discharges pursuant to A.R.S. § 49-201(12) and pursuant to A.R.S. § 49-241

2.6.5.1 Duty to Respond

The permittee shall act immediately to correct any condition resulting from a discharge pursuant to A.R.S. § 49-201(12) if that condition could pose an imminent and substantial endangerment to public health or the environment.

2.6.5.2 Discharge of Hazardous Substances or Toxic Pollutants

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of suspected hazardous substances (A.R.S. § 49-201(19)) or toxic pollutants (A.R.S. § 49-243(I)) on the facility site, the permittee shall promptly isolate the area and attempt to identify the discharged material. The permittee shall record information, including name, nature of exposure and follow-up medical treatment, if necessary, on persons who may have been exposed during the incident. The permittee shall notify the ADEQ Water Quality Compliance Section within 24 hours of discovering the discharge of hazardous material which (a) has the potential to cause an AWQS or AQL exceedance, or (b) could pose an endangerment to public health or the environment.

2.6.5.3 Discharge of Non-hazardous Materials

In the event of any unauthorized discharge pursuant to A.R.S. § 49-201(12) of non-hazardous materials from the facility, the permittee shall promptly attempt to cease the discharge and isolate the discharged material. Discharged material shall be removed and the site cleaned up as soon as possible. The permittee shall notify the ADEQ Water Quality Compliance Section within 24 hours of discovering the discharge of non-hazardous material which (a) has the potential to cause an AQL exceedance, or (b) could pose an endangerment to public health or the environment.

2.6.5.4 Reporting Requirements

The permittee shall submit a written report for any unauthorized discharges reported under Sections 2.6.5.2 and 2.6.5.3 to the ADEQ Water Quality Compliance Section within 30 days of the discharge or as required by subsequent ADEQ action. The report shall summarize the event, including any human exposure, and facility response activities and include all information specified in Section 2.7.3. If a notice is issued by ADEQ subsequent to the discharge notification, any additional information requested in the notice shall also be submitted within the time frame

specified in the notice. Upon review of the submitted report, ADEQ may require additional monitoring or corrective actions.

2.6.6 Corrective Actions

Specific contingency measures identified in Section 2.6 have already been approved by ADEQ and do not require written approval to implement.

With the exception of emergency response actions taken under Section 2.6.5, the permittee shall obtain written approval from the Groundwater Section prior to implementing a corrective action to accomplish any of the following goals in response to exceedances of an AL or violation of an AQL, DL, or other permit condition:

1. Control of the source of an unauthorized discharge;
2. Soil cleanup;
3. Cleanup of affected surface waters;
4. Cleanup of affected parts of the aquifer;
5. Mitigation to limit the impact of pollutants on existing uses of the aquifer.

Within 30 days of completion of any corrective action, the operator shall submit to the ADEQ Water Quality Compliance Section a written report describing the causes, impacts, and actions taken to resolve the problem.

2.7 Reporting and Recordkeeping Requirements [A.R.S. § 49-243(K)(2) and A.A.C. R18-9-A206(B) and R18-9-A207]

2.7.1 Self-monitoring Report Form

1. The permittee shall complete the SMRFs provided by ADEQ, and submit them to the Water Quality Compliance Section, Data Unit.
2. The permittee shall complete the SMRF to the extent that the information reported may be entered on the form. If no information is required during a reporting period, the permittee shall enter "not required" on the SMRF and submit the report to ADEQ. The permittee shall use the format devised by ADEQ.
3. The tables contained in Section 4.0 list the parameters to be monitored and the frequency for reporting results for compliance monitoring. Analytical methods shall be recorded on the SMRFs.
4. In addition to the SMRF, the information contained in A.A.C. R18-9-A206(B)(1) shall be included for exceeding an AL or violation of an AQL, DL, or any other permit condition being reported in the current reporting period.

2.7.2 Operation Inspection / Log Book Recordkeeping

A signed copy of this permit shall be maintained at all times at the location where day-to-day decisions regarding the operation of the facility are made. A log book (paper copies, forms, or electronic data) of the inspections and measurements required by this permit shall be maintained at the location where day-to-day decisions are made regarding the operation of the facility. The log book shall be retained for ten years from the date of each inspection, and upon request, the permit and the log book shall be made immediately available for review by ADEQ personnel. The information in the log book shall include, but not be limited to, the following information as applicable:

1. Name of inspector;
2. Date and shift inspection was conducted;
3. Condition of applicable facility components;
4. Any damage or malfunction; and the date and time any repairs were performed;
5. Documentation of sampling date and time; and
6. Any other information required by this permit to be entered in the log book.

Monitoring records for each measurement shall comply with A.A.C. R18-9-A205(B)(2).

2.7.3. Permit Violation and Alert Level Status Reporting

1. The permittee shall notify the Water Quality Compliance Section in writing (by mail or by fax - see Section 2.7.5) within five days (except as provided in Section 2.6.5) of becoming aware of a violation of any permit condition, discharge limitation, or of an AL exceedance.
2. The permittee shall submit a written report to the Water Quality Compliance Section within 30 days of becoming aware of the violation of any permit condition or discharge limitation. The report shall document all of the following:
 - a. Identification and description of the permit condition for which there has been a violation and a description of the cause;
 - b. The period of violation including exact date(s) and time(s), if known, and the anticipated time period during which the violation is expected to continue;
 - c. Any corrective action taken or planned to mitigate the effects of the violation, or to eliminate or prevent a recurrence of the violation;
 - d. Any monitoring activity or other information which indicates that any pollutants would be reasonably expected to cause a violation of an AWQS;
 - e. Proposed changes to the monitoring which include changes in constituents or increased frequency of monitoring; and
 - f. Description of any malfunction or failure of pollution control devices or other equipment or processes.

2.7.4. Operational, Other or Miscellaneous Reporting

The permittee shall complete the SMRF provided by the Department to reflect facility inspection requirements designated in Section 4.2, Table III and submit to the ADEQ Water Quality Compliance Section, Data Unit quarterly along with other reports required by this permit. Facility inspection reports shall be submitted no less frequently than quarterly, regardless of operational status.

If the treatment facility is classified for reclaimed water under this permit, the permittee shall submit the reclaimed water monitoring results as required in Section 4.2, Table IB and flow volumes to any of the following in accordance with A.A.C. R18-9-703(C)(2)(c):

1. Any reclaimed water agent who has contracted for delivery of reclaimed water from the permittee; and
2. Any end user who has not waived interest in receiving this information.

2.7.5 Reporting Location

All SMRFs shall be submitted to:

Arizona Department of Environmental Quality
Water Quality Compliance Section, Data Unit
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4681

All documents required by this permit to be submitted to the Water Quality Compliance Section shall be directed to the following address:

Arizona Department of Environmental Quality
Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4497
Fax (602) 771-4505

All documents required by this permit to be submitted to the Groundwater Section shall be directed to:

Arizona Department of Environmental Quality
Groundwater Section
Mail Code 5415B-3
1110 West Washington Street
Phoenix, Arizona 85007
Phone (602) 771-4428

2.7.6 Reporting Deadline

The following table lists the quarterly report due dates:

Reporting Period	Due Date
January-March	April 30
April-June	July 30
July-September	October 30
October-December	January 30

The following table lists the semi-annual and annual report due dates:

Reporting Period	Due Date
Semi-annual: January-June	July 30
Semi-annual: July-December	January 30
Annual: January-December	January 30

2.7.7 Changes to Facility Information in Section 1.0

The Groundwater Section and the Water Quality Compliance Section shall be notified within ten days of any change of facility information including Facility Name, Permittee Name, Mailing or Street Address, Facility Contact Person, or Emergency Telephone Number.

2.8 Temporary Cessation [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A209(A)]

The permittee shall give written notice to the Water Quality Compliance Section before ceasing operation of the facility for a period of 60 days or greater. The permittee shall take the following measures upon temporary cessation:

²A post-mark date no later than the due date is considered meeting the due date requirements under this Section.

1. If applicable, direct the wastewater flows from the facility to another state-approved wastewater treatment facility;
2. Correct the problem that caused the temporary cessation of the facility; and
3. Notify the ADEQ Water Quality Compliance Section with a monthly facility status report describing the activities conducted on the treatment facility to correct the problem.

At the time of notification the permittee shall submit for ADEQ approval a plan for maintenance of discharge control systems and for monitoring during the period of temporary cessation. Immediately following ADEQ approval, the permittee shall implement the approved plan. If necessary, ADEQ shall amend permit conditions to incorporate conditions to address temporary cessation. During the period of temporary cessation, the permittee shall provide written notice to the Water Quality Compliance Section of the operational status of the facility every three years. If the permittee intends to permanently cease operation of any facility, the permittee shall submit closure notification, as set forth in Section 2.9 below.

2.9 Closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9-A209(B)]

For a facility addressed under this permit, the permittee shall give written notice of closure to the Water Quality Compliance Section of the intent to cease operation without resuming activity for which the facility was designed or operated.

2.9.1 Closure Plan

Within 90 days following notification of closure, the permittee shall submit for approval to the Groundwater Section a closure plan which meets the requirements of A.R.S. § 49-252 and A.A.C. R18-9-A209(B)(3).

If the closure plan achieves clean-closure immediately, ADEQ shall issue a letter of approval to the permittee. If the closure plan contains a schedule for bringing the facility to a clean-closure configuration at a future date, ADEQ may incorporate any part of the schedule as an amendment to this permit.

2.9.2 Closure Completion

Upon completion of closure activities, the permittee shall give written notice to the Groundwater Section indicating that the approved closure plan has been implemented fully and providing supporting documentation to demonstrate that clean-closure has been achieved (soil sample results, verification sampling results, groundwater data, as applicable). If clean-closure has been achieved, ADEQ shall issue a letter of approval to the permittee at that time. If any of the following conditions apply, the permittee shall follow the terms of post-closure stated in this permit:

1. Clean-closure cannot be achieved at the time of closure notification or within one year thereafter under a diligent schedule of closure actions;
2. Further action is necessary to keep the facility in compliance with AWQS at the applicable POC;
3. Continued action is required to verify that the closure design has eliminated discharge to the extent intended;
4. Remediation or mitigation measures are necessary to achieve compliance with Title 49, Ch. 2; and
5. Further action is necessary to meet property use restrictions.

2.10 Post-closure [A.R.S. §§ 49-243(K)(6), 49-252 and A.A.C. R18-9 A209(C)]

Post-closure requirements shall be established based on a review of facility closure actions and will be subject to review and approval by the Groundwater Section.

In the event clean-closure cannot be achieved pursuant to A.R.S. § 49-252, the permittee shall submit for approval to the Groundwater Section a post-closure plan that addresses post-closure maintenance and monitoring actions at the facility. The post-closure plan shall meet all requirements of A.R.S. §§ 49-201(30)

and 49-252 and A.A.C. R18-9-A209(C). Upon approval of the post-closure plan, this permit shall be amended or a new permit shall be issued to incorporate all post-closure controls and monitoring activities of the post-closure plan.

2.10.1 Post-closure Plan

A specific post-closure plan may be required upon the review of the closure plan.

2.10.2 Post-closure Completion

Not required at the time of permit issuance.

3.0. COMPLIANCE SCHEDULE [A.R.S. § 49-243(K)(5) and A.A.C. R18-9-A208]

For each compliance schedule item listed below, the permittee shall submit the required information, including a cover letter that lists the compliance schedule items, to the Groundwater Section. A copy of the cover letter must also be submitted to the ADEQ Water Quality Compliance Section.

The permittee shall submit a signed, dated, and sealed Engineer's Certificate of Completion for the 5.1 mgd expansion in a format approved by the Department that confirms that the facility is constructed according to the Department-approved design report or plans and specifications, as applicable.	Within 90 days after completion of construction of the 5.1 mgd expansion.
The permittee may cease monitoring as per Section 4.2, Table IA-1, begin monitoring as per Section 4.2, Table IA-2, and notify the Water Quality Compliance Section, Data Unit, of the change in monitoring.	Within 30 days after submitting the Engineer's Certificate of Completion for the 5.1 mgd expansion.
The permittee shall notify ADEQ of commencement of discharge from the 5.1 mgd WRF.	Within 15 days after commencement of monitoring under Section 4.2, Table IA-2.
The permittee may apply for a permit amendment to reinove Section 4.2, Table IA-1.	After commencement of monitoring under Section 4.2, Table IA-2.
The permittee may connect the Palm Valley WRF reclaimed water distribution system to the City of Goodyear 157 th Avenue WRF reclaimed water distribution system.	After a permit amendment is issued to the City of Goodyear allowing the City of Goodyear 157 th Avenue WRF (APP No. P-101324) to connect its reclaimed water distribution system to the Palm Valley WRF reclaimed water distribution system.

4.0 TABLES OF MONITORING REQUIREMENTS

4.1 PRE-OPERATIONAL MONITORING (OR CONSTRUCTION REQUIREMENTS)

Not applicable.

4.0 TABLES OF MONITORING REQUIREMENTS

4.2 COMPLIANCE (or OPERATIONAL) MONITORING

TABLE IA-1
ROUTINE DISCHARGE MONITORING - 4.1 MGD³

Parameter	Monitoring Point / Location		Coordinates	Frequency	Alert Level
	Immediately downstream of the UV Channel		33° 27' 55" N 112° 21' 56" W		
Total Flow ⁴ : Daily	NE ⁵	NE	mgd ⁶	Everyday	Quarterly
Total Flow: Monthly Average ¹⁰	3.9	4.1	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	NE	4.1	mgd	Everyday	Quarterly
Reuse Flow: Monthly Average	NE	4.1	mgd	Monthly Calculation	Quarterly
<i>E. coli</i> : Single sample maximum	NE	15.0	CFU or MPN ¹¹	Daily	Quarterly
<i>E. coli</i> : four (4) of seven (7) samples in a week ¹²	NE	Non-detect ¹³	CFU or MPN	Daily	Quarterly
Total Nitrogen ¹⁴ : Five-sample rolling geometric mean	8.0	10.0	mg/l ¹⁵	Monthly ¹⁶	Quarterly

³Monitoring under Table IA-1 is no longer required after the commencement of monitoring under Table IA-2.

⁴AL = Alert Level

⁵DL = Discharge Limit

⁶Total flow is the total of flows to on-site process use, reclaimed water, discharge to the RID canal, and the City of Goodyear 157th Avenue WRF, and flow from the City of Goodyear 157th Avenue WRF.

⁷Flow shall be measured using a continuous recording flow meter which totals the flow daily.

⁸NE = Not Established = Monitoring is required but no limits are specified.

⁹mgd = million gallons per day

¹⁰Monthly average of daily flow values.

¹¹CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

¹²Week means a seven-day period starting on Sunday and ending on the following Saturday.

¹³If at least four (4) of seven (7) samples in a week are non-detect, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of seven (7) samples in a week have detections of *E. coli*, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

¹⁴Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

¹⁵mg/l = milligrams per liter

¹⁶A five-month geometric mean of the results of the five (5) most recent samples

TABLE IA-I
ROUTINE DISCHARGE MONITORING – 4.1 MGD (continued)

Sampling Point Number	Sampling Point Identification	Latitude	Longitude		
2	Flow meter at the connection to the City of Goodyear 157 th Avenue WRF reclaimed water distribution system, located 3,000 feet west of Palm Valley WRF at the intersection of McDowell Road and Bullard Avenue	33° 27' 51.48" N	112° 22' 31.08" W		
Parameter	AI	DI	Units	Sampling Frequency	Reporting Frequency
Flow from the Palm Valley WRF reclaimed water distribution system to the City of Goodyear 157 th Avenue WRF reclaimed water distribution system	NE	NE	mgd	Everyday	Quarterly
Flow from the City of Goodyear 157 th Avenue WRF reclaimed water distribution system to the Palm Valley WRF reclaimed water distribution system	NE	NE	mgd	Everyday	Quarterly

TABLE IA-1
 ROUTINE DISCHARGE MONITORING - 4.1 MGD (continued)

TABLE IA-1					
ROUTINE DISCHARGE MONITORING - 4.1 MGD (continued)					
	Immediately downstream of the U.V. Channel			33° 27' 55" N	112° 21' 56" W
Metals (total):					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

TABLE IA-1
 ROUTINE DISCHARGE MONITORING - 4.1 MGD (continued)

Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
o-Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4-Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2-Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

TABLE 1A-2
ROUTINE DISCHARGE MONITORING - 5.1 MGD¹⁷

	Location		Coordinates		
	Immediately downstream of the UV Channel		33° 27' 55" N 112° 21' 56" W		
Total Flow: Daily ¹⁸	NE ²²	NE	mgd	Everyday	Quarterly
Total Flow: Monthly Average ²⁴	4.9	5.1	mgd	Monthly Calculation	Quarterly
Reuse Flow: Daily	NE	5.1	mgd	Everyday	Quarterly
Reuse Flow: Monthly Average	NE	5.1	mgd	Monthly Calculation	Quarterly
<i>E. coli</i> : Single sample maximum	NE	15.0	CFU or MPN ²⁵	Daily	Quarterly
<i>E. coli</i> : four (4) of seven (7) samples in a week ²⁶	NE	Non-detect ²⁷	CFU or MPN	Daily	Quarterly
Total Nitrogen ²⁸ : Five-sample rolling geometric mean	8.0	10.0	mg/l ²⁹	Monthly ³⁰	Quarterly

¹⁷Monitoring under Table 1A-1 is no longer required upon commencement of monitoring under Table 1A-2. The permittee shall notify the Water Quality Compliance Section, Data Unit, of the change in monitoring as per Section 3.0, Compliance Schedule.

¹⁸AL = Alert Level

¹⁹DL = Discharge Limit

²⁰Total flow is the total of flows to on-site process use, reclaimed water, discharge to the RID canal, and the City of Goodyear 157th Avenue WRF, and flow from the City of Goodyear 157th Avenue WRF.

²¹Flow shall be measured using a continuous recording flow meter which totals the flow daily.

²²NE = Not Established = Monitoring is required but no limits are specified.

²³mgd = million gallons per day

²⁴Monthly average of daily flow values.

²⁵CFU = Colony Forming Units / 100 ml sample. MPN = Most Probable Number / 100 ml sample. For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

²⁶Week means a seven-day period starting on Sunday and ending on the following Saturday.

²⁷If at least four (4) of seven (7) samples in a week are non-detect, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of seven (7) samples in a week have detections of *E. coli*, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

²⁸Total Nitrogen = Nitrate as N + Nitrite as N + Total Kjeldahl Nitrogen

²⁹mg/l = milligrams per liter

³⁰A five-month geometric mean of the results of the five (5) most recent samples

TABLE IA-2
ROUTINE DISCHARGE MONITORING - 5.1 MGD (continued)

Sample Point	Location	Flow	Flow	Flow	Frequency	Frequency
2	Flow meter at the connection to the City of Goodyear 157 th Avenue WRF reclaimed water distribution system, located 3,000 feet west of Palm Valley WRF, at the intersection of McDowell Road and Bullard Avenue				33° 27' 51.48" N	112° 22' 31.08" W
Flow from the Palm Valley WRF reclaimed water distribution system to the City of Goodyear 157 th Avenue WRF reclaimed water distribution system	NE	NE	mgd	Everyday	Quarterly	
Flow from the City of Goodyear 157 th Avenue WRF reclaimed water distribution system to the Palm Valley WRF reclaimed water distribution system	NE	NE	mgd	Everyday	Quarterly	

TABLE IA-2
 ROUTINE DISCHARGE MONITORING - 5.1 MGD (continued)

Parameter	Standard	Limit	Unit	Frequency	Frequency
	Immediately downstream of the UV Channel			33° 27' 55" N	112° 21' 56" W
Metals (total):					
Antimony	0.0048	0.006	mg/l	Quarterly	Quarterly
Arsenic	0.04	0.05	mg/l	Quarterly	Quarterly
Barium	1.60	2.00	mg/l	Quarterly	Quarterly
Beryllium	0.0032	0.004	mg/l	Quarterly	Quarterly
Cadmium	0.004	0.005	mg/l	Quarterly	Quarterly
Chromium	0.08	0.1	mg/l	Quarterly	Quarterly
Cyanide (as free cyanide)	0.16	0.2	mg/l	Quarterly	Quarterly
Fluoride	3.2	4.0	mg/l	Quarterly	Quarterly
Lead	0.04	0.05	mg/l	Quarterly	Quarterly
Mercury	0.0016	0.002	mg/l	Quarterly	Quarterly
Nickel	0.08	0.1	mg/l	Quarterly	Quarterly
Selenium	0.04	0.05	mg/l	Quarterly	Quarterly
Thallium	0.0016	0.002	mg/l	Quarterly	Quarterly

TABLE IA-2
ROUTINE DISCHARGE MONITORING - 5.1 MGD (continued)

Volatile and Semi-Volatile Organic Compounds (VOCs and SVOCs)					
Benzene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Carbon tetrachloride	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2- ^{1,4-Dichloro} Dichlorobenzene	0.48	0.6	mg/l	Semi-Annually	Semi-Annually
para-Dichlorobenzene	0.06	0.075	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,1-Dichloroethylene	0.0056	0.007	mg/l	Semi-Annually	Semi-Annually
cis-1,2-Dichloroethylene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
trans-1,2-Dichloroethylene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Dichloromethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
1,2-Dichloropropane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Ethylbenzene	0.56	0.7	mg/l	Semi-Annually	Semi-Annually
Hexachlorobenzene	0.0008	0.001	mg/l	Semi-Annually	Semi-Annually
Hexachlorocyclopentadiene	0.04	0.05	mg/l	Semi-Annually	Semi-Annually
Monochlorobenzene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Styrene	0.08	0.1	mg/l	Semi-Annually	Semi-Annually
Tetrachloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Toluene	0.8	1.0	mg/l	Semi-Annually	Semi-Annually
1,1,1-Trichloroethane	0.16	0.2	mg/l	Semi-Annually	Semi-Annually
1,2,4-Trichlorobenzene	0.056	0.07	mg/l	Semi-Annually	Semi-Annually
1,1,2-Trichloroethane	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Trichloroethylene	0.004	0.005	mg/l	Semi-Annually	Semi-Annually
Vinyl Chloride	0.0016	0.002	mg/l	Semi-Annually	Semi-Annually
Xylenes (Total)	8.0	10.0	mg/l	Semi-Annually	Semi-Annually

TABLE IB
RECLAIMED-WATER MONITORING - CLASS A³¹

Parameter	Standard	Units	Frequency	Location
	Immediately downstream of the UV Channel			33° 27' 55" N 112° 21' 56" W
Total Nitrogen ³² : Five-sample rolling geometric mean	10.0	mg/l	Monthly	Quarterly
<i>E. coli</i> : Single-sample maximum	15.0	CFU or MPN ³³	Daily ³⁴	Quarterly
<i>E. coli</i> : Four (4) of last seven (7) samples	Non-detect ³⁵	CFU or MPN	Daily	Quarterly
Turbidity ³⁶ : Single reading	5.0	NTU ³⁷	Everyday ³⁸	Quarterly
Turbidity: 24-hour average	2.0	NTU	Everyday	Quarterly
Enteric Virus: Four (4) of last seven (7) samples	Non-detect	PFU ³⁹	Suspended/ Monthly ⁴⁰	Quarterly

³¹Reclaimed water monitoring under Table IB shall be performed in addition to routine discharge monitoring required under Section 4.2, Tables 1A-1 and 1A-2.

³²Nitrate N, plus Nitrite N, plus Total Kjeldahl Nitrogen (TKN)

³³CFU = Colony Forming Units per 100 ml; MPN = Most Probable Number per 100 ml. For CFU, a value of <1.0 shall be considered to be non-detect. For MPN, a value of <2.2 shall be considered to be non-detect.

³⁴For fecal coliform, "daily" sampling means every day in which a sample can practicably be obtained and delivered in sufficient time for proper analysis, provided that no less than four (4) samples in each seven-day period are obtained and analyzed.

³⁵If at least four (4) of the last seven (7) samples are non-detect, report "yes" in the appropriate space on the SMRF (indicating that the standard has been met). If at least four (4) of the last seven (7) samples have detections of fecal coliform, report "no" in the appropriate space on the SMRF (indicating that the standard has not been met).

³⁶Turbidimeter shall have a signal averaging time not exceeding 120 seconds. Occasional spikes due to back-flushing or instrument malfunction shall not be considered an exceedance. All exceedances must be explained and submitted to the Department with the corresponding quarterly SMRF.

³⁷NTU = Nephelometric Turbidity Units

³⁸For the single turbidity reading, "everyday" means the maximum reading during the 24-hour period.

³⁹Plaque Forming Units per 40 Liters. A value of <1:1 PFU/40 L shall be considered to be non-detect.

⁴⁰Enteric virus sampling shall resume only when the discharge limit for the 24-hour average for turbidity is exceeded for two (2) consecutive 24-hour monitoring periods. Monthly enteric virus monitoring shall continue until four (4) out of seven (7) consecutive sample results show no detection. During times when enteric virus sampling is suspended, enter "suspended" in the appropriate space on the SMRF.

TABLE II
GROUNDWATER MONITORING

Not applicable.

TABLE III
FACILITY INSPECTION (Operational Monitoring)

Pump Integrity	Good working condition	Weekly	Quarterly
Treatment Plant Components	Good working condition	Weekly	Quarterly

5.0 REFERENCES AND PERTINENT INFORMATION

The terms and conditions set forth in this permit have been developed based upon the information contained in the following, which are on file with the Department:

1. APP Application, dated: August 24, 2010
2. Final Engineering Report, dated: March 24, 2011
3. Public Notice, dated: January 26, 2012
4. Public Hearing, dated: Not applicable.
5. Responsiveness Summary, dated: Not applicable.

6.0 NOTIFICATION PROVISIONS

6.1 Annual Registration Fees

The permittee is notified of the obligation to pay an Annual Registration Fee to ADEQ. The Annual Registration Fee is based upon the amount of daily influent or discharge of pollutants in gallons-per-day (gpd) as established by A.R.S. § 49-242.

6.2 Duty to Comply [A.R.S. §§ 49-221 through 263]

The permittee is notified of the obligation to comply with all conditions of this permit and all applicable provisions of Title 49, Chapter 2, Articles 1, 2 and 3 of the Arizona Revised Statutes, Title 18, Chapter 9, Articles 1 through 4, and Title 18, Chapter 11, Article 4 of the Arizona Administrative Code. Any permit non-compliance constitutes a violation and is grounds for an enforcement action pursuant to Title 49, Chapter 2, Article 4, or permit amendment, suspension, or revocation.

6.3 Duty to Provide Information [A.R.S. §§ 49-243(K)(2) and 49-243(K)(8)]

The permittee shall furnish to the Director, or an authorized representative, within a time specified, any information which the Director may request to determine whether cause exists for amending or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

6.4 Compliance with Aquifer Water Quality Standards [A.R.S. §§ 49-243(B)(2) and 49-243(B)(3)]

The permittee shall not cause or contribute to a violation of an AWQS at the applicable POC for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.

6.5 Technical and Financial Capability [A.R.S. §§ 49-243(K)(8) and 49-243(N) and A.A.C. R18-9-A202(B) and R18-9-A203(E) and (F)]

The permittee shall have and maintain the technical and financial capability necessary to fully carry out the terms and conditions of this permit. Any bond, insurance policy, trust fund, or other financial assurance mechanism provided as a demonstration of financial capability in the permit application, pursuant to A.A.C. R18-9-A203(D), shall be in effect prior to any discharge authorized by this permit and shall remain in effect for the duration of the permit.

6.6 Reporting of Bankruptcy or Environmental Enforcement [A.A.C. R18-9-A207(C)]

The permittee shall notify the Director within five days after the occurrence of any one of the following:

1. The filing of bankruptcy by the permittee; or
2. The entry of any order or judgment not issued by the Director against the permittee for the enforcement of any environmental protection statute or rule.

6.7 Monitoring and Records [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A206]

The permittee shall conduct any monitoring activity necessary to assure compliance with this permit, with the applicable water quality standards established pursuant to A.R.S. §§ 49-221 and 49-223 and §§ 49-241 through 49-252.

6.8. Inspection and Entry [A.R.S. §§ 41-1009, 49-203(B), and 49-243(K)(8)]

In accordance with A.R.S. §§ 41-1009 and 49-203(B), the permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter and inspect the facility as reasonably necessary to ensure compliance with Title 49, Chapter 2, Article 3, of the Arizona Revised Statutes, and Title 18, Chapter 9, Articles 1 through 4 of the Arizona Administrative Code and the terms and conditions of this permit.

6.9. Duty to Modify [A.R.S. § 49-243(K)(8) and A.A.C. R18-9-A211]

The permittee shall apply for and receive a written amendment before deviating from any of the designs or operational practices authorized by this permit.

6.10. Permit Action: Amendment, Transfer, Suspension, and Revocation
[A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

This permit may be amended, transferred, suspended, or revoked for cause, under the rules of the Department. The permittee shall notify the Groundwater Section in writing within 15 days after any change in the owner or operator of the facility. The notification shall state the permit number, the name of the facility, the date of property transfer, and the name, address, and phone number where the new owner or operator can be reached. The operator shall advise the new owner or operators of the terms of this permit and the need for permit transfer in accordance with the rules.

7.0. ADDITIONAL PERMIT CONDITIONS

7.1. Other Information [A.R.S. § 49-243(K)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit the correct facts or information.

7.2. Severability [A.R.S. §§ 49-201, 49-241 through 251, A.A.C. R18-9-A211, R18-9-A212 and R18-9-A213]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. The filing of a request by the permittee for a permit action does not stay or suspend the effectiveness of any existing permit condition.

7.3. Permit Transfer

This permit may not be transferred to any other person except after notice to and approval of the transfer by the Department. No transfer shall be approved until the applicant complies with all transfer requirements as specified in A.A.C. R18-9-A212(B) and (C).

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EXHIBIT 14

APPLICANT'S WASTEWATER USE DATA SHEET

COMPANY NAME Liberty Utilities
Litchfield Park Service Company

WASTEWATER FLOWS

MONTH/YEAR (Most Recent 12 Months)	NUMBER OF SERVICES	TOTAL MONTHLY SEWAGE FLOW	SEWAGE FLOW ON PEAK DAY
June 2014	20,697	100,052,000	3,802,000
July 2014	20,803	100,551,000	3,678,000
August 2014	20,821	101,418,000	3,568,000
September 2014	20,921	102,587,000	4,396,000
October 2014	20,933	104,662,000	3,751,000
November 2014	20,944	107,529,000	4,115,000
December 2014	21,132	109,009,000	4,025,000
January 2015	21,132	109,904,000	4,252,000
February 2015	21,132	102,172,000	4,208,000
March 2015	21,132	120,750,000	4,378,000
April 2015	21,132*	119,297,000	4,356,000
May 2015	21,132*	114,928,000	4,196,000

* Note: The number of sewer services was not available as of June 25, 2015 for April and May 2015. The number of sewer services shown for both months is for March 2015.

**PROVIDE THE FOLLOWING INFORMATION AS APPLICABLE
PER WASTEWATER SYSTEM**

Method of Effluent Disposal (leach field, surface water discharge, reuse, injection wells, groundwater recharge, evaporation ponds, etc.)	Reuse, surface discharge
Groundwater Permit Number	N/A
ADEQ Aquifer Protection Permit Number	P100310
ADEQ Reuse Permit Number	R105272, R105472, R105221, R23573, R23618, R23577, R105644, R105706, R105669, R103615
EPA NPDES Permit Number	AZ0025712

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EXHIBIT 15

NOTARIZED SIGNATURE ON BEHALF OF APPLICANT

ORIGINAL

RECEIVED

2015 OCT -5 P 4:45

AZ CORP COMMISSION
DOCKET CONTROL

1 SHAPIRO LAW FIRM, P.C.
Jay L. Shapiro (No. 014650)
2 1819 E. Morten Avenue, Suite 280
Phoenix, Arizona 85020
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4 Liberty Utilities
5 Todd C. Wiley (No. 015358)
12725 W. Indian School Road, Suite D-101
6 Avondale, AZ 85392
7 Telephone: (623) 240-2087
Todd.Wiley@LibertyUtilities.com

8 Attorneys for Liberty Utilities (Litchfield Park Water & Sewer) Corp.

9
10 **BEFORE THE ARIZONA CORPORATION COMMISSION**

11
12 IN THE MATTER OF THE APPLICATION
OF LIBERTY UTILITIES (LITCHFIELD
13 PARK WATER & SEWER) CORP. FOR
APPROVAL OF AN EXTENSION OF A
14 CERTIFICATE OF CONVENIENCE AND
NECESSITY TO PROVIDE WASTEWATER
15 UTILITY SERVICE IN MARICOPA
COUNTY, ARIZONA.

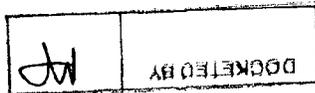
DOCKET NO: SW-01428A-15-0259

**NOTICE OF FILING RESPONSE TO
INSUFFICIENCY LETTER DATED
AUGUST 7, 2015**

16
17 Liberty Utilities (Litchfield Park Water & Sewer) Corp. hereby submits its
18 response to the Insufficiency Letter dated August 7, 2015. See **Exhibit A.**

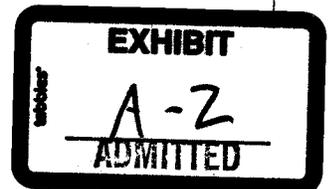
19 RESPECTFULLY SUBMITTED this 5th day of October, 2015.

20 SHAPIRO LAW FIRM, P.C.

21
22  DOCKETED BY
JW
OCT 5 2015

23 By: 
Jay L. Shapiro
1819 E. Morten Avenue, Suite 280
Phoenix, Arizona 85020

24
25 DOCKETED
Arizona Corporation Commission

26
 EXHIBIT
A-2
ADMITTED

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and

LIBERTY UTILITIES

Todd C. Wiley
Assistant General Counsel
12725 W. Indian School Road, Suite D-101
Avondale, Arizona 85392

Attorneys for Liberty Utilities (Litchfield Park
Water & Sewer) Corp.

ORIGINAL and thirteen (13) copies
of the foregoing filed
this 5th day of October, 2015, with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing hand-delivered
this 5th day of October, 2015, to:

Sasha Paternoster, ALJ
Hearing Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing emailed & hand-delivered
this 5th day of October, 2015, to:

Robin Mitchell
Legal Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007
rmitchell@azcc.gov

1 **COPY** of the foregoing emailed & mailed
2 this 5th day of October, 2015, to:

3 Michele Van Quathem
4 Ryley Carlock & Applewhite
5 One North Central Avenue, Suite 1200
6 Phoenix, AZ 85004
7 mvq@rcalaw.com

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By: Courtney Bink

Exhibit A

**LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSE TO CCN INSUFFICIENCY LETTER DATED AUGUST 7, 2015**

October 5, 2015

Respondent: Steve Carlson
Title: Manager Development Services
Company: Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Address: 12725 W. Indian School Road, Suite D101, Avondale, AZ 85392
Company Response Number: Deficiency Item No. 1

Q. Please provide a complete description of the facilities proposed to be constructed, including a preliminary engineering report with specifications in sufficient detail to describe each sewer system and principal components of each sewer system (e.g., collection mains, trunk lines, lift stations, treatment plants, effluent disposal areas, etc.) to allow verification of the estimated costs provided under subsection (B)(5)(p) and verification that the requirements of the Commission and the Arizona Department of Environmental Quality can be met. Please note that the Exhibit 4 (Master Wastewater Plan), Appendix D (Preliminary Wastewater Report) of the Company's Application is not complete. Appendix D of the Master Wastewater Plan should have Phase 1 wastewater report. The Company only submitted the report cover and the table of contents. The wastewater report was omitted.

RESPONSE: Attached as Exhibit 4 to Liberty Utilities (Litchfield Park Water & Sewer) Corp.'s ("Company" or "Liberty LP") Application for Extension of Certificate of Convenience and Necessity is the Master Wastewater Plan for Zanjero Trails dated November 2014 ("Master Plan"). That Master Wastewater Plan was prepared by Hilgart Wilson engineers for Maricopa Water District ("MWD"). The Extension Area sought in the Company's CC&N extension here is the entire Zanjero Trails development as set forth in the Company's application.

Page 8 of the Master Plan contains costs estimates for each phase of Zanjero Trails. Specifically, Table 4 on page 8 of the Master Plan (titled "Table 4: Cost Estimate Summary") shows the total anticipated costs of wastewater facilities for each phase of Zanjero Trails by anticipated construction year, along with totals of the incurred costs for

the facilities after each phase of the development. As developed by Hilgart Wilson engineers, that "cost estimate uses current market pricing and accounts for hard construction costs for the sewer lines only." Master Plan at 8. Table 5 of the Master Plan also includes anticipated construction costs every five years of Zanjero Trails. Master Plan at 8, Table 5.

Table B.4 of the Master Plan is an 18 page document detailing anticipated improvement costs for wastewater facilities for each phase of Zanjero Trails. Table B.4 of the Master Plan was separately attached as Exhibit 5 to the Company's CC&N application here. Table B.4 of the Master Plan shows anticipated on-site lines by parcel with lineal footage, number of manholes, number of services, etc., as well as estimated costs for the Perryville Road sewer line extension. Table B.4 also details costs for plan review and processing fees, permit fees, consultant services (including construction management, engineering, construction staking and surveying), construction testing (soil/compaction), warranty costs, sales tax and other cost items. Table B.4 of the Master Plan details estimated costs for each phase of Zanjero Trails. Specifically, pages 1-3 of Table B.4 details the costs for Phase 1 of Zanjero Trails. As set forth in Table B.4, the total estimated costs for Phase 1 of Zanjero Trails is \$4,572,357.04. That number is set forth on page 8 of the Master plan within Table 4: Cost Estimate Summary. The Phase 2 costs are detailed on pages 4-6 of Table B.4 (totaling \$3,576,501.07); the Phase 3 costs are detailed on pages 7-9 of Table B.4 (totaling \$3,689,492.92); the Phase 4 costs are detailed on pages 10-12 of Table B.4 (totaling \$4,414,517.93); the Phase 5 costs are detailed on pages 13-15 of Table B.4 (totaling \$3,789,128.52); and the Phase 6 costs are detailed on pages 16-18 of Table B.4 (totaling \$2,702,645.89). Again, each of those totals are included on page 8, Table 4 of the Master Plan. Boiled down, the Master Plan contains detailed line item amounts for all costs of wastewater facilities for the entire Zanjero Trails development as estimated by Hilgart Wilson engineers.

In addition to those detailed cost estimates, Appendix A to the Master Plan contains a Vicinity Map, Land Use Plan, and Wastewater Exhibit for Phase 1 of Zanjero Trails. Further, Appendix A contains a map of the Phasing Plan for Zanjero Trails.

On these issues, the Master Plan, as stamped by Hilgart Wilson engineers, provides sufficient detail to describe the proposed wastewater facilities and sewer systems for each phase of Zanjero Trails, and details the principal components of each phase of Zanjero Trails, including collection mains, trunk lines, lift stations, treatment plants, effluent disposal areas, and other components of the wastewater facilities as appropriate for the Zanjero Trails development. The Master Plan and tables noted above are stamped by Hilgart Wilson and allow verification of the estimated costs under Commission rules and verification that the requirements of the Commission and the Arizona Department of Environmental Quality can be met.

In its insufficiency letter, Staff states that “Exhibit 4 (Master Wastewater Plan), Appendix D (Preliminary Wastewater Report) of the Company’s Application is not complete. Appendix D of the Master Wastewater Plan should have Phase 1 wastewater report. The Company only submitted the report cover and the table of contents. The wastewater report was omitted.” As noted above, the Master Plan includes a detailed plan for development and construction of Phase 1 of Zanjero Trails. In its application, the Company did not cite the 2009 Preliminary Wastewater Report for Zanjero Trails relating to the development plans and construction costs for Phase 1. That information is included within the Master Plan.

On these issues, page 1 of the Master Plan, §1.2 states: “A master wastewater report was prepared as part of the preliminary plat process for Phase 1. Cover sheets of the approved preliminary plat and associated wastewater report are included in Appendix D for reference.” Master Plan at 1, §1.2. In turn, the Master Plan utilized this report as one of three design criteria resources for Peak Hour Flow in Table 1 on page 3 of the Master Plan. As noted on page 2 of the Master Plan, “Table 1 summarizes the design criteria used for this report...1. A Preliminary Wastewater Report was prepared by HILGARTWILSON for Phase 1 of Zanjero Trails (between Camelback Road and Bethany Home Road) and approved by Liberty Utilities on May 19, 2009. The report was designed in accordance with the design criteria established in the White Tank Mountain Regional Sewer Solution Conceptual Plan (Regional Plan) prepared by United Engineering Group (UEG) dated July 14, 2004.” Master Plan at 2, ¶1. Page 2 of the Master Plan lists the superscript numbers referenced in Table 1 on page 3 of the Master Plan.

As set forth in the Master Plan, for Peak Hour Flow, Hilgart Wilson reviewed the 2009 Preliminary Wastewater Report (cover sheets shown in Appendix D), the Arizona Administrative Code R18-9-E301, and a previous study for Zanjero Trails using Epcor’s Loop 303 Wastewater Master Plan. Table 1 on page 3 of the Master Plan references the Arizona Administrative Code as the main resource for Peak Hour Flow. As stated in the Master Plan, the Preliminary Report attached as Appendix D was intended to be shown as cover sheets only and was not utilized within the Master Plan for anything but as additional resource to calculate Peak Hour Flow, of which the Master Plan primarily utilized the Arizona Administrative Code. That Preliminary Report is not a substantive basis for any deficiency finding in this docket.

**LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSE TO CCN INSUFFICIENCY LETTER DATED AUGUST 7, 2015**

October 5, 2015

Respondent: Steve Carlson
Title: Manager Development Services
Company: Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Address: 12725 W. Indian School Road, Suite D101, Avondale, AZ 85392

Company Response Number: Deficiency Item No. 2

Q. Please provide documentation establishing the applicant's financial condition including at least the applicant's current assets and liabilities, an income statement, the applicants estimated revenue and expenses for the first five years following approval of the application, and the estimated value of the applicant's utility plant in service for the first five years following approval of the application. Please note that Exhibit 6 (The General Statement of Financial Condition) of the application contains numerous errors in the balance sheet, including accounts receivable, long term notes, Contribution in Aid of Construction and the Income Statement involving wages, professional services and interest income. Five year projections of plant do not match the projections of cost.

RESPONSE: With this response, the Company has attached a corrected Wastewater Utility Balance Sheet and Income Statement for the period ending December 31, 2014. That corrected Wastewater Utility Balance Sheet and Income Statement should replace Exhibit 6 in the Company's application.

Exhibit 8 (Estimated Annual Operating Revenue and Expenses – First Five Years) to the Company's application incorporates the capital cost forecast set forth in Table 4 on page 8 of the Master Plan and Table B.4 of the Master Plan, with an additional modification that estimates additional Contributions In Aid of Construction from Offsite Hook-up Fees for Zanjero Trails. The following reconciliation explains and details the five year projections for capital costs and CIAC:

Year 1

Costs from Developer	\$4,572,357	Cumulative Developer Costs	\$4,572,357
Est. CIAC from HUFs	\$ 135,000	Cumulative CIAC from HUFs	\$ 135,000
Total Utility Plant Yr 1	\$4,707,357	Cumulative Utility Plant	\$4,707,357

Year 2

Costs from Developer	\$ 0	Cumulative Developer Costs	\$4,572,357
Est. CIAC from HUFs	\$ 270,000	Cumulative CIAC from HUFs	\$ 405,000
Total Utility Plant Yr 2	\$ 270,000	Cumulative Utility Plant	\$4,977,357

Year 3

Costs from Developer	\$ 0	Cumulative Developer Costs	\$4,572,357
Est. CIAC from HUFs	\$ 315,000	Cumulative CIAC from HUFs	\$ 720,000
Total Utility Plant Yr 3	\$ 315,000	Cumulative Utility Plant	\$5,292,357

Year 4

Costs from Developer	\$3,576,501	Cumulative Developer Costs	\$8,148,858
Est. CIAC from HUFs	\$ 390,600	Cumulative CIAC from HUFs	\$1,110,600
Total Utility Plant Yr 4	\$3,957,501	Cumulative Utility Plant	\$9,259,458

Year 5

Costs from Developer	\$ 0	Cumulative Developer Costs	\$8,148,858
Est. CIAC from HUFs	\$ 547,200	Cumulative CIAC from HUFs	\$1,657,800
Total Utility Plant Yr 5	\$ 547,200	Cumulative Utility Plant	\$9,806,658

This reconciliation shows developer costs in years 1 and 4 based on construction cost estimates shown on Table 4 and 5 of the Master Plan for Phases 1 and 2 of Zanjero Trails. This reconciliation also ties to both the Exhibit 8 Balance Sheets attached to the Company's application and the Master Plan.

COMPANY NAME

Litchfield Park Service Company (Water)

BALANCE SHEET

Acct. No.	ASSETS	Balance at Beginning of Year	Balance at End of Year
	CURRENT AND ACCRUED ASSETS		
131	Cash		\$ 82,826
132	Special Deposits	\$ 1,776,142	\$ 3,489,028
135	Temporary Cash Investments		
141	Customer Accounts Receivable	\$ 1,735,050	\$ 1,789,513
146	Notes/Receivables from Associated Companies	\$ 6,901,993	\$ 7,737,342
151	Plant Material and Supplies		
162	Prepayments	\$ 34,394	\$ 141,701
174	Miscellaneous Current and Accrued Assets	\$ 734,405	\$ 497,242
	TOTAL CURRENT AND ACCRUED ASSETS	\$ 11,181,984	\$ 13,737,652
	FIXED ASSETS		
101	Utility Plant in Service	\$ 92,334,095	\$ 96,491,867
103	Property Held for Future Use		\$ 6,000
105	Construction Work in Progress	268,385	2,066,351
108	Accumulated Depreciation - Utility Plant	23,018,924	24,654,951
121	Non-Utility Property		
122	Accumulated Depreciation - Non Utility		
	TOTAL FIXED ASSETS	\$ 69,583,556	\$ 73,909,267
	TOTAL ASSETS	\$ 80,765,540	\$ 87,646,919

BALANCE SHEET (CONTINUED)

Acct. No.	LIABILITIES	Balance at Beginning of Year	Balance at End of Year
	CURRENT LIABILITES		
231	Accounts Payable		
232	Notes Payable (Current Portion)	\$ 169,600	\$ 169,600
234	Notes/Accounts Payable to Associated Companies		
235	Customer Deposits		
236	Accrued Taxes	\$ 39,067	\$ 100,407
237	Accrued Interest	\$ 87,538	\$ 84,708
241	Miscellaneous Current and Accrued Liabilities	\$ 63,450	\$ 2,205,149
	TOTAL CURRENT LIABILITIES	\$ 359,655	\$ 2,559,864
	LONG-TERM DEBT (Over 12 Months)		
224	Long-Term Notes and Bonds	\$ 5,021,714	\$ 4,955,344
	DEFERRED CREDITS		
251	Unamortized Premium on Debt		
252	Advances in Aid of Construction	\$ 29,728,643	\$ 32,164,708
253	Other Deferred Credits		\$ 2,845,544
255	Accumulated Deferred Investment Tax Credits		
271	Contributions in Aid of Construction	\$ 4,941,962	\$ 4,252,013
272	Less: Amortization of Contributions	\$ 189,879	\$ 180,613
281	Accumulated Deferred Income Tax	\$ 2,701,827	\$ 2,701,827
	TOTAL DEFERRED CREDITS	\$ 37,182,553	\$ 42,144,706
	TOTAL LIABILITIES	\$ 42,563,922	\$ 49,659,913
	CAPITAL ACCOUNTS		
201	Common Stock Issued	\$ 44,574	\$ 41,446
211	Paid in Capital in Excess of Par Value	\$ 26,866,383	\$ 23,187,924
215	Retained Earnings	\$ 11,290,662	\$ 14,757,636
218	Proprietary Capital (Sole Props and Partnerships)		
	TOTAL CAPITAL	\$ 38,201,618	\$ 37,987,005
	TOTAL LIABILITIES AND CAPITAL	\$ 80,765,540	\$ 87,646,919

COMPARATIVE STATEMENT OF INCOME AND EXPENSE

Acct. No.	OPERATING REVENUES	2013	2014
461	Metered Water Revenue	\$ 11,625,594	\$ 11,843,086
460	Unmetered Water Revenue		
474	Other Water Revenues	\$ 211,976	\$ 200,203
	TOTAL REVENUES	\$ 11,837,571	\$ 12,043,289
	OPERATING EXPENSES		
601	Salaries and Wages	\$ 1,091,766	
610	Purchased Water	\$ 934	\$ 2,617
615	Purchased Power	\$ 977,532	\$ 978,732
618	Chemicals	\$ 137,595	\$ 127,776
620	Repairs and Maintenance	\$ 64,005	\$ 67,318
621	Office Supplies and Expense		
630	Outside Services	\$ 2,327,381	\$ 3,574,649
635	Water Testing	\$ 58,785	\$ 33,117
641	Rents	\$ (4,074)	\$ 1,717
650	Transportation Expenses	\$ 75,033	\$ 70,661
657	Insurance - General Liability	\$ 131,833	\$ 58,008
659	Insurance - Health and Life		
666	Regulatory Commission Expense - Rate Case		
675	Miscellaneous Expense	\$ 218,931	\$ 389,511
403	Depreciation Expense	2,720,979	2,525,701
408	Taxes Other Than Income		
408.11	Property Taxes	188,162	214,018
409	Income Tax		
	TOTAL OPERATING EXPENSES	\$ 7,988,863	\$ 8,043,826
	OTHER INCOME/EXPENSE		
419	Interest and Dividend Income	\$ 34,653	\$ 10,955
420	AFUDC Income	20,320	107,597
426	Miscellaneous Non-Utility Expenses		
427	Interest Expense	367,396	651,041
	TOTAL OTHER INCOME/EXP	\$ (312,423)	\$ (532,489)
	NET INCOME/(LOSS)	\$ 3,536,284	\$ 3,466,974

COMPANY NAME

Litchfield Park Service Company (Sewer)

BALANCE SHEET

Acct. No.	ASSETS	Balance at Beginning of Year	Balance at End of Year
	CURRENT AND ACCRUED ASSETS		
131	Cash		73,450
132	Special Deposits	\$ 2,083,201	3,021,321
135	Temporary Cash Investments	\$ -	
141	Customer Accounts Receivable	\$ 1,538,629	1,586,927
146	Notes/Receivables from Associated Companies	\$ 6,120,635	6,861,417
151	Plant Material and Supplies	\$ -	
162	Prepayments	\$ 30,500	125,659
174	Miscellaneous Current and Accrued Assets	\$ 284,962	440,950
	TOTAL CURRENT AND ACCRUED ASSETS	\$ 10,057,927	12,109,723
	FIXED ASSETS		
101	Utility Plant in Service	76,282,231	77,851,821.04
103	Property Held for Future Use		3,547,445.06
105	Construction Work in Progress	357,041	1,800,152.26
108	Accumulated Depreciation - Utility Plant	16,405,407	17,802,627.22
121	Non-Utility Property		
122	Accumulated Depreciation - Non Utility		
	TOTAL FIXED ASSETS	\$ 60,233,865	\$ 65,396,791
	TOTAL ASSETS	\$ 70,291,793	\$ 77,506,514

COMPANY NAME

Litchfield Park Service Company (Sewer)

BALANCE SHEET (CONTINUED)

Acct. No.	LIABILITIES	Balance at Beginning of Year	Balance at End of Year
	CURRENT LIABILITES		
231	Accounts Payable	\$ -	
232	Notes Payable (Current Portion)	\$ 150,400	\$ 150,400
234	Notes/Accounts Payable to Associated Companies		
235	Customer Deposits	\$ -	
236	Accrued Taxes	\$ 34,644	\$ 89,040
237	Accrued Interest	\$ 77,628	\$ 75,118
241	Miscellaneous Current and Accrued Liabilities	\$ 56,249	\$ 1,226,964
	TOTAL CURRENT LIABILITIES	\$ 318,921	\$ 1,541,523
	LONG-TERM DEBT (Over 12 Months)		
224	Long-Term Notes and Bonds	\$ 4,453,218	\$ 4,394,362
	DEFERRED CREDITS		
252	Advances in Aid of Construction	\$ 12,110,401	\$ 6,160,061
253	Other Deferred Credits		\$ 1,893,783
255	Accumulated Deferred Investment Tax Credits	\$ -	
271	Contributions in Aid of Construction	\$ 35,077,436	\$ 39,274,604
272	Less: Amortization of Contributions	\$ 5,957,420	\$ 6,634,373
281	Accumulated Deferred Income Tax	\$ 2,395,960	\$ 2,395,960
	TOTAL DEFERRED CREDITS	\$ 43,626,377	\$ 43,090,035
	TOTAL LIABILITIES	\$ 48,398,516	\$ 49,025,919
	CAPITAL ACCOUNTS		
201	Common Stock Issued	\$ 33,626	\$ 36,754
211	Other Paid in Capital	\$ 13,728,278	\$ 17,076,936
215	Retained Earnings	\$ 8,131,373	\$ 11,366,905
218	Proprietary Capital (Sole Props and Partnerships)		
	TOTAL CAPITAL	\$ 21,893,277	\$ 28,480,595
	TOTAL LIABILITIES AND CAPITAL	\$ 70,291,793	\$ 77,506,514

COMPANY NAME

Litchfield Park Service Company (Sewer)

COMPARATIVE STATEMENT OF INCOME AND EXPENSE

	OPERATING REVENUES	2013	2014
521	Flat Rate Revenues	\$ 8,624,304	\$ 9,641,090
522	Measured Revenues	\$ 861,147	\$ 767,699
536	Other Wastewater Revenues	\$ 374,767	\$ 603,470
	TOTAL REVENUES	\$ 9,860,219	\$ 11,012,259
	OPERATING EXPENSES		
701	Salaries and Wages	\$ 1,201,594	
710	Purchased Wastewater Treatment	\$ 39,395	\$ 26,008
711	Sludge Removal Expense	\$ 246,971	\$ 251,738
715	Purchased Power	\$ 628,493	\$ 629,688
716	Fuel for Power Production	\$ -	\$ 3,114
718	Chemicals	\$ 295,100	\$ 359,790
720	Materials and Supplies	\$ 119,214	\$ 74,361
731	Contractual Services - Professional	\$ (40,983)	\$ 1,603,931
735	Contractual Services - Testing	\$ 36,144	\$ 33,337
736	Contractual Services - Other	\$ 2,439,628	\$ 2,151,134
740	Rents	\$ 2,472	
750	Transportation Expense	\$ 18,856	\$ 16,827
755	Insurance Expense	\$ 84,335	\$ 48,329
765	Regulatory Commission Expense	\$ -	\$ -
775	Miscellaneous Expense	\$ 122,361	\$ 260,287
403	Depreciation Expense	\$ 1,648,570	\$ 1,473,255
408	Taxes Other Than Income	\$ -	\$ -
408.11	Property Taxes	\$ 752,647	\$ 856,251
409	Income Taxes		
	TOTAL OPERATING EXPENSES	\$ 7,594,797	\$ 7,788,049
	OTHER INCOME/EXPENSE		
419	Interest and Dividend Income	\$ 24,550	\$ 10,955
420	AFUDC Income	\$ 15,996	\$ 14,710
426	Misc non-utility		
427	Interest Expense	\$ 339,090	\$ 14,344
	TOTAL OTHER INCOME/EXP	\$ (298,544)	\$ 11,322
	NET INCOME/(LOSS)	\$ 1,966,878	\$ 3,235,532

**LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSE TO CCN INSUFFICIENCY LETTER DATED AUGUST 7, 2015**

October 5, 2015

Respondent: Steve Carlson
Title: Manager Development Services
Company: Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Address: 12725 W. Indian School Road, Suite D101, Avondale, AZ 85392
Company Response Number: Deficiency Item No. 3

Q. Please provide the estimated annual operating revenue and expenses for the first five years of operation for the requested service area or extension area, expressed separately for residential, commercial, industrial, and irrigation services, and including a description of each assumption made to derive the estimates. Please note that the revenues and expenses in the Application were not listed separately for residential, commercial, industrial, and irrigation services.

RESPONSE: See attached Schedule 2 "Projected Incremental Revenues and Expenses by Type." The total revenues and expenses set forth on Schedule 2 for years 1-5 correspond to the totals set forth on Exhibit 8 to the Company's application. Schedule 2, however, estimates revenues and expenses separately for residential, commercial, industrial, and irrigation services. Schedule 2 segregates variable costs by service type with the total variable costs equaling the original submitted Total Variable Expenses. The sewage treatment related variable costs are based on specific dollar amounts for pumping, power, purchased water, sludge removal, chemicals and testing on a per 1,000 gallons treated basis. The billing, postage, operations, insurance, materials and supplies variable costs are based on combined costs for materials and supplies and combined costs for billing, postage, operations and insurance calculated on a per month per customer count for each specific service type. The methodologies used for calculating these costs and expenses are set forth in the notes on Exhibit 8 to the Company's application.

Litchfield Park Service Company - Wastewater Division dba Liberty Utilities
 Zanjero Trails CC&N Extension
 Projected Incremental Revenues and Expenses by Type
 For the 12 Months Ended

Exhibit
 Schedule 2

Line No.	1	2	3	4	5
3	Single Family Revenues	\$19,656	\$154,813	\$246,100	\$349,483
4	Apartment Revenues	-	-	20,315	57,870
5	Small Commercial	-	-	1,521	6,479
6	Elementary School	-	-	-	6,078
7	Effluent	1,035	4,143	8,631	22,842
8	Total Revenues	\$20,693	\$163,444	\$282,645	\$442,762
9	Sewage Treatment related costs				
10	Single Family	2,894	12,035	25,088	40,307
11	Apartment	-	-	2,402	7,236
12	Small Commercial	-	-	109	476
13	Elementary School	-	-	-	1,129
14	Total Sewage Treatment Costs	2,894	12,035	25,088	66,555
15	Billing, Postage, Operations, Insurance, Materials, Supplies				
16	Single Family	5,567	22,711	48,262	114,482
17	Apartment	-	-	6,537	20,085
18	Small Commercial	-	-	279	1,239
19	Elementary School	-	-	-	80
20	Effluent	74	151	154	161
21	Total Billing, Postage, Operations, Insurance, Materials, Supplies	5,641	22,863	48,416	136,046
22	Total Variable Costs	\$8,535	\$34,898	\$73,504	\$202,601
23	Other Expenses				
24	Depreciation net of Amortization of CIAC	-	-	-	-
25	Legal & Accounting	500	510	520	531
26	Miscellaneous (d)(b)	300	306	312	318
27	Property Taxes (e)	553	1,080	2,351	4,685
28	Total Other Expense	\$1,353	\$1,896	\$3,184	\$8,766
29	Total Operating Expenses	\$9,888	\$36,793	\$76,688	\$211,387
30	Operating Income before Income Tax	\$10,805	\$42,980	\$86,756	\$231,375
31	Income Taxes	2,071	8,254	20,747	46,272
32	Less:	-	-	-	-
33	Interest (Expense) Income on Work. Cap. (c)	-	87	523	1,536
34	Interest Expense Long-term Debt (c)	-	-	-	-
35	Net Income	\$8,734	\$34,813	\$66,531	\$152,852

**LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSE TO CCN INSUFFICIENCY LETTER DATED AUGUST 7, 2015**

October 5, 2015

Respondent: Brian Hamrick/Steve Carlson
Title: Senior Project Manager/Manager Development Services
Company: Liberty Utilities (Litchfield Park Water & Sewer) Corp.
Address: 12725 W. Indian School Road, Suite D101, Avondale, AZ 85392
Company Response Number: Deficiency Item No. 4

Q. According to the Company's annual report, Palm Valley Treatment Plant ("PVTP") has 5.1 Million Gallon per Day ("MGD") capacity. The highest peak day flow in 2014 was 4.6 MGD. The projected peak flow from the entire requested area (contains 6 Phases) is 2.2 MGD. The PVTP will not have adequate treatment capacity to treat the flow, if the Company believes that entire requested area is to be built out in the future. Using Phase I as an example, since the Company projects that Phase I construction will be completed in 2015, the proposed peak flow from Phase I is 0.28 MGD, therefore, PVTP will treat a 4.88 MGD peak flow when Phase I is added in PVTP service. Since the Company has not submitted its PVTP expansion plant in this application, it appears that PVTP does not have adequate treatment capacity to serve this requested area. Please explain how the Company plans to resolve this issue.

RESPONSE: In the Master Plan, Hilgart Wilson projects the peak flows from the entire Zanjero Trails development (including phases 1-6) at 2.2 MGD. Those phases of Zanjero Trails are anticipated to be completed from 2015-2035. The peak flow figures contained in the Master Plan (Table 2) represent the dry weather peak hour flow anticipated from the Zanjero Trails development in each phase and at full build out. The peak hour flow calculations are shown in Table B-2 of the Master Plan and the peaking factors used in the Master Plan (ranging from 2.24 to 3.62) are based on the Arizona Administrative Code R18-9-E301.D. Under that regulation (A.A.C. R18-9-E301.D), the dry weather peak flow is used to design the components of a sewer collection system (sewer mains and lift stations), not the wastewater plant. A dry weather peak flow represents domestic flows that are generated during a two hour period in the morning (usually 6-8 a.m.).

Here, Palm Valley Water Reclamation Facility (PVWRF) does not see the full magnitude of these flow peaks due to transient time for wastewater flows through the collection system, which reduces these peak hour flows by the time they reach PVWRF. Conservatively assuming a two hour peak flow event at 2.2 MGD (1,527 gallons per minute), the total contributed volume is only 180,000 gallons for a two hour period meaning that PVWRF has adequate available capacity for these anticipated peak flows.

Also, PVWRF is designed for an average daily flow of 5.1 MGD, a maximum day flow of 6.6 MGD and a maximum hour flow of 10.2 MGD. It is not possible and improper engineering to compare the 5.1 MGD average daily flow capacity of the plant to a peak hour flow from a development such as Zanjero Trails. In reviewing the impact of a development in relation to PVWRF's treatment capacity, the proper comparison is the average daily flow from the development versus the historical average daily flow at the plant during the highest month. In 2014, the average daily flow at PVWRF during the highest month was 4,034,484 gallons per day (gpd), which leaves 1,065,516 gpd of available capacity at PVWRF. That available capacity is sufficient to accept the anticipated average flow from the first five phases of the Zanjero Trails development, which is estimated to generate an average daily flow of 1,023,806 gpd through phase 5 in 2034 as set forth in Table 3 (Population and Wastewater Flow Projections) of the Master Plan. Under the circumstances, PVWRF has sufficient existing treatment capacity to serve phases 1-5 of Zanjero Trails, and the Company anticipates expanding PVWRF to add additional treatment capacity in the near future.

ORIGINAL

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8 Attorneys for Liberty Utilities (Litchfield Park Water & Sewer) Corp.
9

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AZ CORP COMMISSION
DOCKET CONTROL

Arizona Corporation Commission

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10 **BEFORE THE ARIZONA CORPORATION COMMISSION**

11 IN THE MATTER OF THE APPLICATION
12 OF LIBERTY UTILITIES (LITCHFIELD
PARK WATER & SEWER) CORP. FOR
13 APPROVAL OF AN EXTENSION OF A
CERTIFICATE OF CONVENIENCE AND
14 NECESSITY TO PROVIDE WASTEWATER
UTILITY SERVICE IN MARICOPA
15 COUNTY, ARIZONA.

DOCKET NO: SW-01428A-15-0259

**NOTICE OF FILING RESPONSE TO
INSUFFICIENCY LETTER #2
DATED NOVEMBER 6, 2015**

16
17 Liberty Utilities (Litchfield Park Water & Sewer) Corp. hereby submits its
18 response to Insufficiency Letter #2 dated November 6, 2015. See **Exhibit A**.

19 RESPECTFULLY SUBMITTED this 10th day of December, 2015.

20 SHAPIRO LAW FIRM, P.C.

21
22
23 By: _____


Jay L. Shapiro
1819 E. Morten Avenue, Suite 280
Phoenix, Arizona 85020

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and

LIBERTY UTILITIES

Todd C. Wiley
Assistant General Counsel
12725 W. Indian School Road, Suite D-101
Avondale, Arizona 85392

Attorneys for Liberty Utilities (Litchfield Park
Water & Sewer) Corp.

ORIGINAL and thirteen (13) copies
of the foregoing filed
this 10th day of December, 2015, with:

Docket Control
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing hand-delivered
this 10th day of December, 2015, to:

Sasha Paternoster, ALJ
Hearing Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

COPY of the foregoing emailed & hand-delivered
this 10th day of December, 2015, to:

Robin Mitchell
Legal Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007
rmitchell@azcc.gov

1 **COPY** of the foregoing emailed & mailed
2 this 10th day of December, 2015, to:

3 Michele Van Quathem
4 Ryley Carlock & Applewhite
5 One North Central Avenue, Suite 1200
6 Phoenix, AZ 85004
7 mvq@rcalaw.com

8 By: Whitney Zink

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EXHIBIT A



1. **The design report estimates 250 GPD/DU (single family residential dwelling unit) and the design engineer projects average day flow of 1,223 MGD. Based on the Company's Off-Site Hookup Fee Tariff, a 320 GPD/ERU (equivalent residential unit for single home) should be used in the design. It appears that the wastewater treatment capacity design is underestimated. If the Company disagrees, please state how the Company is going to handle the Off-Site Hookup Fee requirement.**

Response: The design report for the Zanjero Trails development utilized a calculation of 250 gpd/DU for the development as approved in 2004 as part of the preliminary plat process with Maricopa County. Liberty LP currently uses 320 gpd/DU to calculate developer Hook-Up Fees as noted in the Company's current Wastewater Hook-Up Fee approved in Decision No. 74437. The treatment capacity for PVWRF is not underestimated as a result of the difference between the design report calculation (250 gpd/DU) and the Wastewater Hook-Up Fee calculation (320 gpd/DU). The Company determines developer financial contributions for treatment capacity and other off-site facilities through Hook-Up Fees based on the 320 gpd/DU figure. The developer's design report calculation of 250 gpd/DU does not impact the actual or design treatment capacity of PVWRF. Finally, the Zanjero Trails development is projected to take 20 plus years to buildout, which means that any relatively small variations in actual flows, such as this example, from the design report will not have any impact on the Company's collection system or wastewater plant.

For the Zanjero Trails development, the Company intends to apply its applicable Wastewater Hook-Up Fee tariff as approved by the Commission, which is currently \$1,800 based on the Equivalent Residential Unit (ERU) of 320 gallons per day. Developer payments of Hook-Up Fees will not impact the PVWRF treatment capacity design or expansion.

2. **ADEQ Compliance Report indicates that PVWRF exceeds the discharge limit, please explain what caused this problem, is this an ongoing issue or one-time event? How did the Company correct the problem?**

Response: The Company assumes that this question relates to the ADEQ Compliance Report dated July 28, 2015 that shows certain "daily exceedances" at PVWRF. These



daily exceedances are minor events resulting from normal operations of the plant. In fact, the ADEQ Compliance Report notes that “ADEQ has determined that as of this date the facility was not in violation at a level at which ADEQ would take an action or issues a Notice of Opportunity to Correct or Notice of Violation...” July 28, 2015 ADEQ Compliance Report at 2. These types of daily exceedances are routine at a wastewater treatment plant and often result from torn filter pads, failing UV bulbs or other minor operational occurrences. As noted below, the Company remedied all of these minor violations.

Although the Company strives and operates to maintain plant equipment in peak performance at all times, failures can happen without realization of the occurrence until the Company receives lab results indicating an issue. At PVWRF, the filter units are taken down on a weekly rotating basis for cleaning and inspection for tears in the filter pads or any other abnormality. During operation, these filter pads are submerged under water and cannot be easily inspected on daily rounds at PVWRF to locate tears in the filter pads. Occasionally a filter pad will suffer a tear thus allowing some unfiltered water through and into the disinfection zone of the treatment process. Many times these types of failures are first discovered when test results are received by the Company from the certified lab, several days later, indicating a daily exceedance of the E-Coli limits. Upon receipt of those lab tests, the Company immediately investigated the cause for the exceedances. When the Company found that a filter pad was torn, the filter unit was immediately removed from service and the failed component was replaced. Once the unit was repaired, a verification sample was taken the next day. The same holds true for a faulty or failing UV unit in the disinfection stream. Occasionally a UV bulb will not be at optimal performance due to premature failure of the component and requires a change out. Such UV bulb failure can't be readily identified until the bulb goes out or until a lab test identifies an issue several days after the actual failure. Once such issue was discovered, the Company immediately replaced the failing part and obtained verification tests the next day. There were other causes of exceedances such as weather related (rain), which was identified as the probable cause of a contaminated sample. Again, the Company obtained verification tests the next day.

All of these issues are corrected as soon as they are discovered and any excursions are reported by the Company as required under its permit. See attached verification results from Legend Technical Services of Arizona, Inc. relating to verification that all such exceedances were remedied and PVWRF was in full compliance the next day.



Liberty Utilities[®]
WATER | GAS | ELECTRIC

Liberty LP is currently in full compliance with all applicable permits relating to operation of PVWRF.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 5/5/14
Project Manager: Ray Scott

Reported:
05/13/14 15:40

050514-RL-01@Inf. Comp Sampler A (4050321-01) Wastewater (Composite) Sampled: 05/05/14 12:22 Received: 05/05/14 14:50

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Inorganic Chemistry

Biochemical Oxygen Demand	277	2	mg/L	1	B4E0142	05/06/14 13:00	05/06/14 13:00	SM 5210B	K5
Total Suspended Solids	262	1	mg/L	1	B4E0242	05/06/14 09:30	05/06/14 09:30	SM 2540 D	

050514-RL-02,03-Eff. Comp Sampler A (4050321-02) Wastewater (Composite) Sampled: 05/05/14 12:33 Received: 05/05/14 14:50

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Inorganic Chemistry

Biochemical Oxygen Demand	2	2	mg/L	1	B4E0142	05/06/14 13:00	05/06/14 13:00	SM 5210B	K5
Total Suspended Solids	11	1	mg/L	1	B4E0242	05/06/14 09:30	05/06/14 09:30	SM 2540 D	

050514-RL-04@Eff Flow Tap A (4050321-03) Wastewater (Grab) Sampled: 05/05/14 12:46 Received: 05/05/14 14:50

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Microbiology

E. coli, MPN (WW-Colilert)	7		1 MPN/100 mL	1	B4E0292	05/06/14 16:25	05/06/14 16:25	SM 9223B	
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Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4050321

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 5/7/2014
Project Manager: Ray Scott

Reported:
05/13/14 09:51

050714-DA-01@EFF FLOW TAP A (4050666-01) Wastewater (Grab) Sampled: 05/07/14 11:03 Received: 05/07/14 15:10

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Microbiology									
E. coli, MPN (WW-ColiIert)	<1		1 MPN/100 mL	1	B4E0294	0507/14 18:25	0507/14 16:25	SM 9223B	

Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4050666

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 6/7/2014
Project Manager: Ray Scott

Reported:
06/16/14 12:05

14-MK-01@Eff Flow Tap A (4060667-01) Wastewater (Grab) Sampled: 06/07/14 10:23 Received: 06/07/14 11:23

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Microbiology									
E. coli, MPN (WW-Colilert)	<1	1	MPN/100 mL	1	B4F0212	06/07/14 12:30	06/07/14 12:30	SM 9223B	

Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4060667

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 6/15/14
Project Manager: Ray Scott

Reported:
06/19/14 12:28

514-MK-01@Eff Flow Tap A (4061210-01) Wastewater (Grab) Sampled: 06/15/14 11:36 Received: 06/15/14 13:25

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Legend Technical Services of Arizona, Inc.									
Microbiology									
E. coli, MPN (WW-Colilert)	<1	1	MPN/100 mL	1	B4F0467	06/15/14 13:35	06/15/14 13:35	SM 9223B	

Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4061210

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 7/11/2014
Project Manager: Ray Scott

Reported:
07/14/14 13:50

1114-MK-01@Eff Flow Tap A (4071119-01) Wastewater (Grab) Sampled: 07/11/14 12:58 Received: 07/11/14 14:15

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Microbiology

E. coli, MPN (WW-Colilert)	<1	1 MPN/100	ml	1	B4G0354	07/11/14 16:20	07/11/14 16:20	SM 9223B	
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Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4071119

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 10/14/14
Project Manager: Ray Scott

Reported:
10/22/14 10:12

101414-RD-01@Eff Flow Tap A (4101303-01) Wastewater (Grab) Sampled: 10/14/14 12:26 Received: 10/14/14 15:20

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Microbiology

E. coli, MPN (WW-Colilert)	<1	1	MPN/100 mL	1	B4J0423	10/14/14 17:40	10/14/14 17:40	SM 9223B	
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Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 4101303

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Palm Valley WRF
14222 W. McDowell
Goodyear, AZ 85395

Project: Daily and Weekly
Project Number: 100310 1/12/2015
Project Manager: Ray Scott

Reported:
01/15/15 11:58

011215-RD-01@Eff Flow Tap A (5010852-01) Wastewater (Grab) Sampled: 01/12/15 11:19 Received: 01/12/15 15:00

Analyte	Result	PQL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Legend Technical Services of Arizona, Inc.

Microbiology

E. coli, MPN (WW-Colilert)	<1	1	MPN/100 mL	1	B5A0253	01/12/15 16:10	01/12/15 16:10	SM 9223B	
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Legend Technical Services of Arizona, Inc.

Laboratory Work Order No.: 5010852

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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12 Todd.Wiley@LibertyUtilities.com

13 Attorneys for Liberty Utilities (Litchfield Park Water & Sewer) Corp.

14 **BEFORE THE ARIZONA CORPORATION COMMISSION**

15 IN THE MATTER OF THE APPLICATION
16 OF LIBERTY UTILITIES (LITCHFIELD
17 PARK WATER & SEWER) CORP. FOR
18 APPROVAL OF AN EXTENSION OF A
19 CERTIFICATE OF CONVENIENCE AND
20 NECESSITY TO PROVIDE WASTEWATER
21 UTILITY SERVICE IN MARICOPA
22 COUNTY, ARIZONA.

DOCKET NO: SW-01428A-15-0259

RESPONSE TO STAFF REPORT

23 Liberty Utilities (Litchfield Park Water & Sewer) Corp. ("Liberty Litchfield Park"
24 or "Company") hereby responds to the Staff Report filed in the above-captioned matter on
25 April 5, 2016. Specifically, the Company opposes Staff's recommendation that some of
26 the expansion area be left out of the CC&N extension. The Company does not believe
there are any extenuating circumstances warranting or justifying piecemeal extension of
the Company's CC&N to include the Zanjero Trails development. As a result, Liberty
Litchfield Park joins the landowner in requesting that the Commission reject Staff's
partial use of an Order Preliminary and, instead, issue a conditional CC&N extension for
the entire Zanjero Trails property. A conditional CC&N for all phases is in the public

EXHIBIT
A-3
ADMITTED

1 interest because it would be far more efficient and avoid the disruption to the landowner's
2 plans that would arise from the unnecessary use of an Order Preliminary.

3 The Company also opposes Staff's recommendation that the Company be required
4 to expand its Palm Valley treatment plant to 6.55 MGD by December 31, 2021. Adoption
5 of this recommendation not only eliminates all of the Company's operation flexibility,
6 it risks saddling ratepayers with the cost of plant that is not yet used and useful.

7 The Company's opposition to these two Staff recommendations is addressed
8 below.

9 BRIEF STATEMENT OF FACTS

10 The disputes in this case do not involve the essential facts. As discussed in the
11 Application and in the Staff Report, Liberty Litchfield Park seeks an extension of its
12 wastewater CC&N to serve a roughly 1,700 acre property. A municipal corporation, the
13 Maricopa County Municipal Water Conservation District Number One ("MWD"), owns
14 the entire expansion area, which is being developed into the Zanjero Trails community.
15 The entire Zanjero Trails development is located in the water CC&N held by EPCOR
16 Water, and MWD has requested that Liberty Litchfield Park expand its wastewater CC&N
17 to include all of its property. MWD intends to fully develop the Zanjero Trails
18 development.

19 After several months of negotiation and cooperation, MWD and Liberty Litchfield
20 Park entered a master service agreement governing wastewater service to the entire
21 Zanjero Trails development. Liberty Litchfield Park is willing and able to extend
22 wastewater utility service to the entire Zanjero Trails property. A main transmission line
23 already connects Liberty Litchfield Park's system to the property such that the expansion
24 area will be served by Liberty Litchfield Park's regional wastewater treatment plant
25 known as the Palm Valley Water Reclamation Facility ("PVWRF"). These facts are not
26 in dispute.

1 **ISSUES IN DISPUTE**

2 **Disputed Recommendation:**

3 **Order Preliminary to Liberty Litchfield Park for Extension of Service**
4 **to Zanjero Trails Phases III, IV, V, and VI**

5 Staff claims that “there are circumstances where the issuance of an Order
6 Preliminary is the most logical and reasonable course of action.”¹ Staff then asserts that
7 “this matter represents a unique set of facts that warrants the issuance of an Order
8 Preliminary for Phases III through VI.”² But a closer examination reveals that there is
9 nothing particularly unique about this case, and that Staff’s recommendation is
10 inconsistent with recent Commission decisions and should be rejected. That’s not to
11 mention that an Order Preliminary poses substantial problems and issues for MWD as the
12 Zanjero Trails project owner/developer as reflected in the landowner’s concurrent filing
13 opposing Staff’s recommendation.

14 Staff’s suggestion for the rarely used Order Preliminary is based on nothing more
15 than the current projected timeline for Zanjero Trails. Staff segregates Phases I and II, for
16 which it recommends a conditional CC&N extension, from Phases III through VI because
17 Phases III through VI are currently planned for development over the next 20 years, not
18 the next 10 years.³ But phasing of large developments like Zanjero Trails is hardly
19 “unique.” Nor are the currently planned phases fixed in stone. There are many reasons
20 “actual phasing could vary” including market conditions.⁴ Staff ignores this possibility,
21 banishing Phases III-VI to Order Preliminary status. This is wholly unnecessary, which
22 may explain why Staff doesn’t even offer an explanation why the public interest favors an

23 ¹ Staff Report at 3.

24 ² Staff Report at 4.

25 ³ Staff Report at 3-4.

26 ⁴ Application, Exhibit 4 (Master Wastewater Plan) at 5; Liberty Litchfield Park’s
Response to Staff Data Request DH 2-1, attached as **Exhibit A**.

1 Order Preliminary over a conditional CC&N. Staff does not identify any harm that would
2 arise from granting a conditional CC&N for all of MWD's property. In this light, an
3 Order Preliminary simply does not appear logical.

4 For one thing, one landowner owns the entire expansion area. The landowner,
5 MWD, has requested that all of its property, not some parts, be included in the Company's
6 wastewater CC&N. The entire expansion area is subject to one master wastewater utility
7 agreement and plan and all phases are already included in one water utility's CC&N.
8 There is simply nothing so unusual about this landowner and its plans that use of a
9 preliminary remedy is warranted. The conditional CC&N, recommended by Staff for
10 Phases I-II and traditionally approved by the Commission in CC&N extension dockets, is
11 more than adequate.

12 Understandably, MWD does not wish to be irrevocably bound to the current
13 phasing plan if market conditions change, and/or face the uncertainty of future regulatory
14 proceedings before Phases III-VI will have equal status. Without inclusion of the entire
15 Zanjero Trails development in Liberty Litchfield Park's CC&N, MWD may not be able to
16 close deals with prospective developers if that developer wishes to buy land in Phases III-
17 VI before Phases I and II. The bottom line is that MWD intends to develop the entire
18 Zanjero Trails development and the entire expansion area should be included in the
19 Company's CC&N subject to appropriate conditions. Put another way, there is no valid
20 reason or justification for arbitrarily including Phases I and II, but subjecting Phases III-
21 VI to a preliminary order.

22 A conditional CC&N was satisfactory in recent CC&N expansion proceedings for
23 Johnson Utilities and EPCOR Water. In Decision No. 74786 (October 24, 2014), Staff
24 also recommended an Order Preliminary with conditions.⁵ In that case, Staff asserted that
25

26 ⁵ *Johnson Utilities, L.L.C.*, Decision No. 74786 at 2:16-17.

1 an Order Preliminary was appropriate because (1) the planned development was “far into
2 the future;” and (2) the applicant was not in compliance with ADEQ requirements.⁶ Both
3 the utility and landowners opposed an Order Preliminary, and the Commission rejected
4 Staff’s recommendation. In sum, the Commission found that Staff had failed to articulate
5 a legitimate basis for the use of a preliminary order.⁷ In other words, the Commission was
6 not persuaded that an Order Preliminary was reasonable simply because part of a
7 development would take place further in the future.⁸

8 Staff did not even recommend an Order Preliminary in Decision No. 75293
9 (October 27, 2015). In that docket, EPCOR Water sought to extend its wastewater CC&N
10 to include roughly 4400 acres known as the Loop 303 Project.⁹ The Loop 303 Project
11 included three different residential developments owned by 20 different landowners
12 located not far from the Zanjero Trails property.¹⁰ The Staff Report in the EPCOR Water
13 CC&N docket discusses only the projections for the first five years, even though full build
14 out of the expansion area in the EPCOR Water CC&N case was estimated for 2045, some
15 30 years away.¹¹ The Commission issued a conditional CC&N for the entire Loop 303
16 Project area.¹²

17 Why Staff sometimes recommends an Order Preliminary and sometimes doesn’t is
18 unclear. Staff does not point to any policy, precedent, rule or guideline that identifies
19 when an Order Preliminary is favored over a conditional CC&N. Here, Staff simply

20 ⁶ Decision No. 74786 at 4:3-4, 7:3-5.

21 ⁷ Decision No. 74786 at 16:14-24.

22 ⁸ The Commission also rejected an Order Preliminary due to the utility’s ADEQ
23 compliance status (*see* Decision No. 74786 at 16), however, that aspect of the decision is
not relevant to the comparison for purposes of this proceeding.

24 ⁹ *EPCOR Water Arizona, Inc.*, Decision No. 75293 at 45:5-8, 46:21-22.

25 ¹⁰ Decision No. 75293 at 46:23-24.

26 ¹¹ Application for a New Certificate of Convenience and Necessity, filed January 27, 2015
in Docket No. WS-01303A-15-0018, Exhibit 6.

¹² Decision No. 75293 at 50:4-7.

1 draws an arbitrary line at the 10-year mark and says that anything estimated to be
2 completed beyond this line should be treated differently. Yet, just last year in the EPCOR
3 Water CC&N matter, Staff recommended a conditional CC&N for an area nearly three
4 times the size of Zanjero Trails, including three distinct developments owned by 20
5 different landowners to be built out over the next 30 years. Staff's inconsistent use of the
6 Order Preliminary, coupled with the Commission's recent rejection of "future"
7 development as a legitimate basis for use of this preliminary remedy, warrants rejection
8 again in this case.

9 That's particularly true here where Staff's Order Preliminary potentially harms
10 MWD and its development plans. Again, in this case, there is one landowner requesting
11 that one residential development, which is already entirely within one utility's water
12 CC&N, be included in Liberty's wastewater CC&N. There is simply no reason for an
13 Order Preliminary. Instead, the Commission should grant the requested CC&N expansion
14 subject to appropriate conditions.

15 **Disputed Recommendation:**

16 **Expansion of the Palm Valley Water Reclamation Facility to 6.55 MGD**
17 **By December 31, 2021**

18 Staff recommends that Liberty Litchfield Park be required to expand PVWRF to
19 6.55 MGD prior to build out of Zanjero Trails Phases 1 and 2, or by December 31, 2021.¹³
20 The Company does not know from where Staff has drawn its information, but suspects
21 that this recommendation is simply the result of a misunderstanding.

22 Liberty Litchfield Park is in the midst of expanding PVWRF from its present
23 treatment capacity of 5.1 MGD to a total capacity equal to 5.8 MGD. The Company
24

25 ¹³ Staff Report at 5. Staff further recommends that the Company file with Docket Control,
26 as a compliance item, a copy of the associated Certificate of Approval of Construction no
later than December 31, 2022. *Id.*

1 received Approvals to Construct for the expansion from 5.1 MGD to 5.8 MGD from
2 MCESD on August 13, 2015 and February 2, 2016.¹⁴ Although there also exists a
3 certificate of approval of proposed plan for the expansion of PVWRF up to 6.55 MGD,¹⁵
4 the Approval to Construct issued by MCESD is only for expansion up to 5.8 MGD.¹⁶
5 Liberty Litchfield Park does not need to expand PVWRF to 6.55 MGD to begin serving
6 Zanjero Trails. Liberty Litchfield Park will follow ADEQ and MCESD requirements for
7 future expansions, but sees no circumstances under which it will need to expand to 6.55
8 MGD by December 2021.

9 If Staff merely misunderstood, then this matter should be easily remedied.
10 The CC&N expansion can be conditioned on Liberty completing the expansion of
11 PVWRF to 5.8 MGD by December 31, 2021. If Staff is actually seeking to force the
12 Company to expand PVWRF to 6.55 MGD by December 31, 2021, the recommendation
13 should be eliminated because Liberty Litchfield Park does not need to expand PVWRF to
14 6.55 MGD to serve Phases I-II of Zanjero Trails.¹⁷ Therefore, if adopted, Staff's
15 recommendation to require Liberty Litchfield Park to expand PVWRF beyond 5.8 MGD
16 will result in an order to build treatment capacity that won't yet be needed. In turn,
17 because the Commission will have mandated the plant expansion, the Company's
18 customers would be saddled with the bill for the unnecessary expansion from 5.8 MGD to
19 6.55 MGD. If this was Staff's intended result, it certainly runs counter to prudence and
20 the public interest.

21
22
23 ¹⁴ Attached as **Exhibits B and C**.

24 ¹⁵ The Certificate of Approval of Proposed Plan with Stipulations is attached as
Exhibit D.

25 ¹⁶ See **Exhibits B and C**.

26 ¹⁷ Application, Exhibit 4 (Master Wastewater Plan) at 5.

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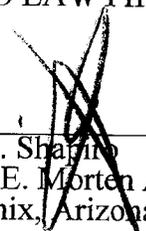
RELIEF REQUESTED

For the reasons discussed above, and those stated in the concurrent filing by the landowner, MWD, Liberty Litchfield Park opposes Staff's recommendation for an Order Preliminary and seeks to have all six phases of Zanjero Trails included in a conditional CC&N extension order. Liberty Litchfield Park also asks that Staff's recommendation regarding PVWRF be modified or eliminated for the reasons discussed above.

RESPECTFULLY SUBMITTED this 19th day of April, 2016.

SHAPIRO LAW FIRM, P.C.

By: _____


Jay L. Shapiro
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Attorneys for Liberty Utilities (Litchfield Park
Water & Sewer) Corp.

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1200 W. Washington Street
Phoenix, AZ 85007

1 **COPY** of the foregoing hand-delivered
2 this 19th day of April, 2016, to:

3 Sasha Paternoster, ALJ
4 Hearing Division
5 Arizona Corporation Commission
6 1200 W. Washington Street
7 Phoenix, AZ 85007

8 **COPY** of the foregoing emailed & hand-delivered
9 this 19th day of April, 2016, to:

10 Robin Mitchell
11 Legal Division
12 Arizona Corporation Commission
13 1200 W. Washington Street
14 Phoenix, AZ 85007
15 rtmitchell@azcc.gov

16 **COPY** of the foregoing emailed & mailed
17 this 19th day of April, 2016, to:

18 Sheryl Sweeney
19 Ryley Carlock & Applewhite
20 One North Central Avenue, Suite 1200
21 Phoenix, AZ 85004
22 ssweeney@rcalaw.com

23 Michele Van Quathem
24 Law Offices of Michele Van Quathem, PLLC
25 7600 N. 15th Street, Suite 150-30
26 Phoenix, AZ 85020
mvq@mvqlaw.com

By: Courtney Bink

EXHIBIT A

LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSES TO STAFF'S SECOND SET OF DATA REQUESTS

January 22, 2016

Respondent: Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85392

Company Response Number: DH 2-1

Q. The "Anticipated Construction Year" for Phase I-IV listed in Table 2 (Exhibit 4, the Application), shows as:

Phase #	Anticipated Construction year
I	2015
II	2019
III	2023
IV	2027
V	2031
VI	2035

Staff has suggested that the table be updated to reflect the passage of 2015. Staff has emailed the following suggested updates to the Company. Please confirm that these changes are acceptable. If not, please submit the Company's proposed updates.

Phase #	Anticipated Construction year
I	2017
II	2021
III	2025
IV	2029
V	2033
VI	2037

**LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) CORP.
DOCKET NOS. SW-01428A-15-0259
RESPONSES TO STAFF'S SECOND SET OF DATA REQUESTS**

January 22, 2016

Respondent: Liberty Utilities (Litchfield Park Water & Sewer) Corp.

Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85392

RESPONSE:

The Company has reviewed the above revised table showing anticipated construction years associated with each corresponding phase of the Zanjero Trails development. At this time, the Company does not have knowledge of a more accurate schedule. The Company has already received construction plans for certain areas within Phase 1. The Zanjero Trails project, like any other land development project, is market driven and is subject to scheduling changes. At this time, the above revised table as presented is acceptable to the Company.

EXHIBIT B



DATE: August 13, 2015
OWNER: Litchfield Park Service Company (LPSCo)

MCESD Project #: 2015070
SYSTEM ID #: 04-37-191

1001 N. Central Ave., Suite 150
Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

CERTIFICATE OF APPROVAL TO CONSTRUCT WITH STIPULATIONS

PROJECT DESCRIPTION: LPSCo, Palm Valley Water Reclamation Facility (WRF) 5.1 to 5.8 Million Gallon per Day (MGD) Expansion, Phase 1 of 2.

Background: The certificate of approval of proposed plan (AOPP) for the expansion of the WRF from 5.1 to 6.55 MGD was approved by the Maricopa County Environmental Services Department (the Department) under MCESD Project #2015045. The 6.55 MGD AOPP was based on a BOD loading of 350 milligrams per liter (mg/l). Although historic BOD levels on either an average or a seasonal peak basis have never exceeded 350 mg/l trend line analysis indicates that BOD levels could exceed 350 mg/l prior to the next facility upgrade. As a consequence, the BOD loading has been revised from 350 to 375 mg/l and the design capacity reduced from 6.55 to 5.8 MGD. The 5.8 MGD expansion shall be submitted to the Department in two phases:

- two new sequencing batch reactor basins (SBR 3 and 4) and all associated pumps, valves, piping, instrumentation, and ancillary equipment (phase 1);
- new blower/electrical building (phase 1);
- five new blowers for SBR 3 and 4 (phase 1);
- new odor control system including chemical wet scrubber and carbon adsorber polisher for the new SBRs (phase 1);
- addition of one new influent screen (phase 2);
- addition of one new vortex grit removal system (phase 2);
- replacement of the grit classifier with a grit washer (phase 2);
- replacement of two filter feed vertical turbine pumps (phase 2);
- addition of one new tertiary disk filter (phase 2);
- replacement of four effluent vertical turbine pumps (phase 2)
- replacement of the original centrifuge system with a new higher capacity centrifuge system (phase 2);
- conversion of SBR 3A to Sludge Holding Tank #4 (phase 2);
- conversion of SBR 3B to Surge Tank #2 (phase 2); and
- two new supernatant pumps for Sludge Holding Tank #4 (phase 2).

Proposed Phase 1 of 2 Components: Phase 1 work under this certificate of approval to construct (ATC) includes:

- two new sequencing batch reactor basins (SBR 3 and 4) and all associated pumps, valves, piping, instrumentation, and ancillary equipment (phase 1);
- new blower/electrical building (phase 1);
- five new blowers for SBR 3 and 4 (phase 1); and
- new odor control system including chemical wet scrubber and carbon adsorber polisher for the new SBRs (phase 1).

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Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

LOCATION: Goodyear, Maricopa County
T2N, R1W, SEC 33
33°27'56" N, -112°21'54" W
Palm Valley WRF
14222 West McDowell Road
Goodyear, AZ 85338

PROJECT OWNER: Litchfield Park Service Company
Attn. Mr. Matthew Garlick
12725 W. Indian School Road,
Suite D101
Avondale, AZ 85323

Pursuant to Arizona Administrative Code, Chapters 11 and 9 (AAC R18-11 and 9) and Maricopa County Environmental Health Code (MCEHC) Chapters II and V, this ATC for the above-described facilities as represented in the approved plan documents on file with the Department is hereby given subject to the following provisions:

1. This ATC is issued based on submission of: an application for ATC prepared by the Owner dated 07/15/2015; a project letter from AMEC Foster Wheeler dated 08/10/2015; a design report dated 11/2014 and sealed 08/07/2015 by Timothy S. LeClair, PE (#43824); design drawings and specifications sealed 08/07/2015 by Timothy S. LeClair, PE (#43824); a modified Arizona Discharge Elimination System (AZPDES) permit from Arizona Department of Environmental Quality (ADEQ); and equipment sheets from Parkson, Aerzen, and Evoqua Water Technologies LLC.
2. Any change in the approved design that may affect capacity, quality, flow, location or operational performance of the system shall be submitted to the Department for review, and Department approval shall be obtained prior to undertaking the work affected by the change.
3. This approval is void if major modifications occur to this system without the knowledge and consent of the Department.
4. Failure to comply with all conditions of this certificate may result in forfeiture and cancellation of this permit and may require the treatment facility to be immediately taken out of service.
5. When modifications have been completed, submit the following documentation to the Department:
 - an application for approval of construction certificate (AOC),
 - an engineer's certificate of completion (COC), and
 - equipment installation testing and calibration documentation.The Department will evaluate the submitted material, inspect the facility, and issue an interim approval of construction (IAOC) for the portion of completed work.
6. A Grade 4 daily on-site wastewater treatment operator (the Operator), certified by the ADEQ is required for this operation of this facility. The Operator in direct responsible charge shall be certified at the grade of the facility. Shift foremen or other operators in charge of the facility in the absence of the Operator shall be certified at a grade no lower than one grade below the grade of the facility.
7. The Owner/Operator shall make such tests and keep such records as are necessary to assure efficient operation of the treatment works. Following receipt of an AOC, records of plant operation shall be transmitted to the Department on approved forms on a regular basis and frequency as currently established with the current operation.
8. No connection may exist between potable water and non-potable water.
9. Provide hose racks at all hose bibb locations (both potable and non-potable).
10. Provide appropriate signage for all hose bibb connections (both potable and non-potable).
11. The Department reserves the right to modify this approval pursuant to future state regulations.

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12. Representative(s) of the Department shall be allowed access to the site to conduct inspections of this facility during reasonable hours.
13. No certificate shall be issued until all outstanding plan review fees are received by the Department pursuant to MCEHC Chapter I, Regulation 5, Plan Review Fee Schedule.
14. The Owner is responsible for obtaining all other permits related to the project from other agencies and authorities.

If construction has not commenced within one year of the plan approval date, or if there is a halt in construction of more than one year, or if construction is not completed within three years, this certificate will expire.

WATER AND WASTE MANAGEMENT DIVISION

By *Elin J. Kampanger, PE for*
Dale G. Bodiya, PE
Manager Water / Wastewater Treatment Program

Plan Approval Date: August 13, 2015

cc: Arizona Dept of Environmental Quality, WQEU, 1110 W Washington Street, Phoenix, AZ 85007
Kevin Chadwick, PE, MCESD, Water & Waste Division Manager
Timothy LeClair, PE, AMEC Foster Wheeler, 4600 E. Washington St, Ste 600, Phoenix, AZ 85034-191
MCESD Facility File
MCESD Project File
MCESD Sequential File

EXHIBIT C



DATE: February 02, 2016
OWNER: Litchfield Park Service Company (LPSCo)

MCESD Project #: 2015070
SYSTEM ID #: 04-37-191

1001 N. Central Ave., Suite 150
Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

CERTIFICATE OF APPROVAL TO CONSTRUCT WITH STIPULATIONS

PROJECT DESCRIPTION: LPSCo, Palm Valley Water Reclamation Facility (WRF) 5.1 to 5.8 Million Gallon per Day (MGD) Expansion, Phase 1 of 2.

Background: The certificate of approval of proposed plan (AOPP) for the expansion of the WRF from 5.1 to 6.55 MGD was approved by the Maricopa County Environmental Services Department (the Department) under MCESD Project #2015045. The 6.55 MGD AOPP was based on a BOD loading of 350 milligrams per liter (mg/l). Although historic BOD levels on either an average or a seasonal peak basis have never exceeded 350 mg/l trend line analysis indicates that BOD levels could exceed 350 mg/l prior to the next facility upgrade. As a consequence, the BOD loading has been revised from 350 to 375 mg/l and the design capacity reduced from 6.55 to 5.8 MGD. The 5.8 MGD expansion shall be submitted to the Department in two phases:

- two new sequencing batch reactor basins (SBR 3 and 4) and all associated pumps, valves, piping, instrumentation, and ancillary equipment (phase 1);
- new blower/electrical building (phase 1);
- five new blowers for SBR 3 and 4 (phase 1);
- new odor control system including chemical wet scrubber and carbon adsorber polisher for the new SBRs (phase 1);
- addition of one new influent screen (phase 2);
- addition of one new vortex grit removal system (phase 2);
- replacement of the grit classifier with a grit washer (phase 2);
- replacement of two filter feed vertical turbine pumps (phase 2);
- addition of one new tertiary disk filter (phase 2);
- replacement of four effluent vertical turbine pumps (phase 2)
- replacement of the original centrifuge system with a new higher capacity centrifuge system (phase 2);
- conversion of SBR 3A to Sludge Holding Tank #4 (phase 2);
- conversion of SBR 3B to Surge Tank #2 (phase 2); and
- two new supernatant pumps for Sludge Holding Tank #4 (phase 2).

An approval to construct certificate (ATC) was issued for phase 1 08/13/2015. This current ATC is for phase 2 construction:

Proposed Phase 2 of 2 Components: Phase 2 work under this ATC includes:

- addition of one new influent screen (phase 2);
- addition of one new vortex grit removal system (phase 2);
- replacement of the grit classifier with a grit washer (phase 2);
- replacement of two filter feed vertical turbine pumps (phase 2);
- addition of one new tertiary disk filter (phase 2);
- replacement of four effluent vertical turbine pumps (phase 2)
- replacement of original centrifuge system with a new higher capacity centrifuge system (phase 2);
- conversion of SBR 3A to Sludge Holding Tank #4 (phase 2);
- conversion of SBR 3B to Surge Tank #2 (phase 2); and
- two new supernatant pumps for Sludge Holding Tank #4 (phase 2).

LPSCo, Palm Valley WRF Expansion from 5.1 to 5.8 MGD
Phase 2 of 2 Approval to Construct – February 02, 2016

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Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

LOCATION: Goodyear, Maricopa County
T2N, R1W, SEC 33
33°27'56" N, -112°21'54" W
Palm Valley WRF
14222 West McDowell Road
Goodyear, AZ 85338

PROJECT OWNER: Litchfield Park Service Company
Attn. Mr. Matthew Garlick
12725 W. Indian School Road,
Suite D101
Avondale, AZ 85323

Pursuant to Arizona Administrative Code, Chapters 11 and 9 (AAC R18-11 and 9) and Maricopa County Environmental Health Code (MCEHC) Chapters II and V, this ATC for the above-described facilities as represented in the approved plan documents on file with the Department is hereby given subject to the following provisions:

1. This ATC is issued based on submission of: an application for ATC prepared by the Owner dated 07/15/2015; a project letter from AMEC Foster Wheeler dated 01/15/2016; a design report dated 11/2014 and sealed 08/07/2015 by Timothy S. LeClair, PE (#43824); design drawings and specifications sealed 12/15/2015 by Timothy S. LeClair, PE (#43824); a modified Arizona Discharge Elimination System (AZPDES) permit from Arizona Department of Environmental Quality (ADEQ); and equipment sheets from Parkson, Aerzen, and Evoqua Water Technologies LLC.
2. Any change in the approved design that may affect capacity, quality, flow, location or operational performance of the system shall be submitted to the Department for review, and Department approval shall be obtained prior to undertaking the work affected by the change.
3. This approval is void if major modifications occur to this system without the knowledge and consent of the Department.
4. Failure to comply with all conditions of this certificate may result in forfeiture and cancellation of this permit and may require the treatment facility to be immediately taken out of service.
5. When modifications have been completed, submit the following documentation to the Department:
 - an application for approval of construction certificate (AOC),
 - an engineer's certificate of completion (COC), and
 - equipment installation testing and calibration documentation.The Department will evaluate the submitted material, inspect the facility, and issue an interim approval of construction (IAOC) for the portion of completed work.
6. A Grade 4 daily on-site wastewater treatment operator (the Operator), certified by the ADEQ is required for this operation of this facility. The Operator in direct responsible charge shall be certified at the grade of the facility. Shift foremen or other operators in charge of the facility in the absence of the Operator shall be certified at a grade no lower than one grade below the grade of the facility.
7. The Owner/Operator shall make such tests and keep such records as are necessary to assure efficient operation of the treatment works. Following receipt of an AOC, records of plant operation shall be transmitted to the Department on approved forms on a regular basis and frequency as currently established with the current operation.
8. No connection may exist between potable water and non-potable water.
9. Provide hose racks at all hose bibb locations (both potable and non-potable).
10. Provide appropriate signage for all hose bibb connections (both potable and non-potable).
11. The Department reserves the right to modify this approval pursuant to future state regulations.

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12. Representative(s) of the Department shall be allowed access to the site to conduct inspections of this facility during reasonable hours.
13. No certificate shall be issued until all outstanding plan review fees are received by the Department pursuant to MCEHC Chapter I, Regulation 5, Plan Review Fee Schedule.
14. The Owner is responsible for obtaining all other permits related to the project from other agencies and authorities.

If construction has not commenced within one year of the plan approval date, or if there is a halt in construction of more than one year, or if construction is not completed within three years, this certificate will expire.

WATER AND WASTE MANAGEMENT DIVISION

By *Eric J. Kampanger, PE for*

Dale G. Bodiya, PE
Manager Water / Wastewater Treatment Program

Plan Approval Date: February 02, 2016

cc: Arizona Dept of Environmental Quality, WQEU, 1110 W Washington Street, Phoenix, AZ 85007
Kevin Chadwick, PE, MCESD, Water & Waste Division Manager
Timothy LeClair, PE, AMEC Foster Wheeler, 4600 E. Washington St, Ste 600, Phoenix, AZ 85034-191
MCESD Facility File
MCESD Project File
MCESD Sequential File

EXHIBIT D



Maricopa County
Environmental Services

Water and Waste Management Division

1001 N. Central Ave., Suite 150
Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

DATE: April 30, 2015
OWNER: Litchfield Park Service Company (LPSCo)

MCESD Project #: 2015045
SYSTEM ID #: 04-37-191

**CERTIFICATE OF APPROVAL OF PROPOSED PLAN
WITH STIPULATIONS**

PROJECT DESCRIPTION: LPSCo, Palm Valley Water Reclamation Facility (WRF) 6.55 Million Gallon per Day (MGD) Expansion. The certificate of approval of proposed plan (AOPP) involves the expansion of the WRF from 5.1 to 6.55 MGD.

The conceptual expansion includes:

- two new sequencing batch reactor (SBR) trains;
- conversion of existing basins to additional surge tank and sludge holding tank capacity;
- one new influent screen;
- one new grit system;
- one new cloth-disk tertiary filter;
- one new influent pump;
- two tertiary filter feed pump replacements;
- four effluent pump replacements;
- two new supernatant pumps;
- a new sludge dewatering system;
- a new odor control yard; and
- a new blower building.

LOCATION: Goodyear, Maricopa County
T2N, R1W, SEC 33
33°27'56" N, -112°21'54" W
Palm Valley WRF
14222 West McDowell Road
Goodyear, AZ 85338

PROJECT OWNER: Litchfield Park Service Company
Attn. Mr. Matthew Garlick
12725 W. Indian School Road,
Suite D101
Avondale, AZ 85323

Pursuant to Maricopa County Environmental Health Code (MCEHC) Chapters II and V, this AOPP for the above-described facilities as represented in the approved plan documents on file with the Maricopa County Environmental Services Department (the Department) is hereby given subject to the following provisions:

1. This certificate is based on submission of: an application for AOPP prepared by the Owner dated 04/21/2015; a design report dated 11/2014 and sealed 11/24/2014 by Timothy S. LeClair, PE (#43824); and 60% design drawings by Amec Foster Wheeler.
2. Approval to construct is not granted with the AOPP. Construction shall require an approval to construct application package and receipt by the Owner of an approval to construct certificate (ATC).
3. Any change in the approved plan that may affect capacity, quality, flow, location or operational performance of the WRF shall be submitted to the Department for review, and approval shall be obtained prior to undertaking the work affected by the change.
4. This approval is void if major modifications occur to this system without the knowledge and consent of the Department.
5. Failure to comply with all conditions of this certificate may result in forfeiture and cancellation and may require the treatment facility to be immediately taken out of service.

Water and Waste Management Division

1001 N. Central Ave., Suite 150
Phoenix, AZ 85004
Phone: (602) 506-6666
Fax: (602) 506-6925
TDD: 602 506 6704
www.maricopa.gov/envsvc

6. A minimum Grade 4 wastewater treatment system operator, certified by the Arizona Department of Environmental Quality (ADEQ) is required for this facility.
7. No connection may exist between potable water and non-potable water.
8. Provide appropriate signage for all hose bibb connections (both potable and non-potable).
9. Representative(s) of the Department shall be allowed access to the site to conduct inspections of this facility during reasonable hours.
10. The Department reserves the right to modify this approval pursuant to future state regulations.

WATER AND WASTE MANAGEMENT DIVISION

Eric J. Kaufmayer, PE for

By _____

Dale G. Bodiya, PE
Manager Water / Wastewater Treatment Program

Plan Approval Date: April 30, 2015

cc: ADEQ, WQEU, 1110 W Washington St, Phoenix, AZ 85007
Arizona Corporation Commission, Utilities Division - Engineering Section, 1200 W Washington Street,
Phoenix, AZ 85007-2996
Kevin Chadwick, PE, MCESD Manager, Water & Waste Management Division
Timothy LeClair, PE, AMEC Foster Wheeler, 4600 E Washington St, Ste 600, Phoenix, AZ 85034
MCESD Facility File
MCESD Project File
MCESD Sequential File

ORIGINAL

MEMORANDUM

TO: Docket Control

FROM: Thomas M. Broderick
Director
Utilities Division

for

Amigos



DATE: April 5, 2016

RE: STAFF REPORT FOR LIBERTY UTILITIES (LITCHFIELD PARK WATER AND SEWER) CORP. - APPLICATIONS FOR EXTENSION OF ITS CERTIFICATE OF CONVENIENCE AND NECESSITY TO PROVIDE WATER AND WASTEWATER UTILITY SERVICE TO A PORTION OF MARICOPA COUNTY (DOCKET NO. SW-01428A-15-0259)

Attached is the Staff Report for the application of Liberty Utilities (Litchfield Park Water and Sewer), Corp. for extension of its existing Certificate of Convenience and Necessity ("CC&N"). Staff is recommending approval with conditions.

TMB:BNC:red\RRM

Originator: Blessing Chukwu

Arizona Corporation Commission
DOCKETED

APR 05 2016

DOCKETED BY *KK*

RECEIVED
AZ CORP COMMISSION
DOCKET CONTROL
2016 APR 5 PM 2 13

Service List for: Liberty Utilities (Litchfield Park Water and Sewer) Corp.
Docket No. SW-01428A-15-0259

Mr. Jay Shapiro
Shapiro Law Firm, P.C.
1819 East Morten Avenue, Suite 280
Phoenix, Arizona 85020

Mr. Todd C. Wiley
Liberty Utilities Corporation
12725 West Indian School Road, Suite D101
Avondale, AZ 85392

Ms. Michele L. Van Quathem
Ryley Carlock & Applewhite
One North Central Avenue, Suite 1200
Phoenix, Arizona 85004-4417

Ms. Janice Alward
Chief Counsel, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Mr. Thomas M. Broderick
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Ms. Dwight Nodes
Chief Administrative Law Judge, Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

LIBERTY UTILITIES (LITCHFIELD PARK WATER AND SEWER) CORP.

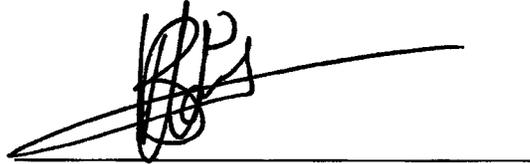
DOCKET NO SW-01428A-15-0259

**APPLICATION FOR EXTENSION OF ITS
CERTIFICATE OF CONVENIENCE
AND NECESSITY**

APRIL 5, 2016

STAFF ACKNOWLEDGMENT

The Staff Report for Liberty Utilities (Litchfield Park Water and Sewer) Corp. (Docket No. SW-01428A-15-0259) was the responsibility of the Staff members signed below. Blessing Chukwu was responsible for the review and analysis of the application. Dorothy Hains was responsible for the engineering and technical analysis.

A handwritten signature in black ink, appearing to be 'Blessing Chukwu', written over a horizontal line.

Blessing Chukwu
Executive Consultant

A handwritten signature in black ink, appearing to be 'Dorothy Hains', written over a horizontal line.

Dorothy Hains
Utilities Engineer

EXECUTIVE SUMMARY
LIBERTY UTILITIES (LITCHFIELD PARK WATER AND SEWER) CORP.
DOCKET NO. SW-01428A-15-0259

On July 10, 2015, Liberty Utilities (Litchfield Park Water and Sewer), Corp. ("Liberty" or "Applicant" or "Company") filed an Application for extension of its Certificates of Convenience and Necessity ("CC&N") with the Arizona Corporation Commission ("ACC" or "Commission") to provide wastewater utility service to a portion of Maricopa County. On July 28, 2015, Maricopa County Municipal Water Conservation District Number One ("MWD") filed its Application to Intervene. On August 7, 2015, MWD was granted intervention by Procedural Order. On January 11, 2016, Staff informed Liberty that its application was sufficient for administrative purposes. The hearing is set for April 26, 2016.

Liberty is requesting Commission approval to serve Zanjero Trails development. The requested area will be developed in phases and the expected build out period is over 20 years.

Staff believes there are circumstances where the issuance of an Order Preliminary is the most logical and reasonable course of action. Such circumstances include where a number of issues remain unresolved and are subject to future events outside of the Applicant's control and where there is a need to provide a degree of certainty whether a given Applicant should be granted approval subject to the occurrence of anticipated events.

Staff believes that the construction planning horizon should be based on a reasonable projection of growth. In this matter, Staff has assumed a reasonable projection of growth exists through 2025 (ten years). Staff selected ten years as a reasonable construction planning horizon. Phase I and II construction is projected to be completed within ten years. Staff believes the timing of construction in Phases III through VI is a lot more speculative and uncertain (over 20 years). Because the landowner has demonstrated need and requested service and in light of the magnitude of the requested area, the current economic conditions, the expected build out period and the fact that the timing of the construction in Phases III through VI is speculative, Staff believes granting an Order Preliminary to a CC&N is appropriate for Phases III through VI.

Zanjero Trails Phases I and II

Staff recommends the Commission approve Liberty's application for extension of its CC&N for wastewater service to Zanjero Trails Phases I and II, located in a portion of Maricopa County, Arizona, subject to compliance with the following conditions:

1. To require Liberty to charge its existing rates and charges in the proposed extension area.
2. To require Liberty to file with Docket Control an amended legal description for Phases I and II prior to the hearing in this matter.
3. To require Liberty to file with Docket Control an amended legal description for Phases III through VI prior to the hearing in this matter.

4. To require Liberty to file with Docket Control, a copy of the county franchise agreement for the extension area as a compliance item in this docket no later than December 31, 2017.
5. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase I Development area no later than December 31, 2017.
6. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase II Development area no later than December 31, 2021.
7. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the Palm Valley Water Reclamation Facility expansion to 6.55 MGD no later than December 31, 2022.

Staff further recommends that the Commission's Decision granting this extension of CC&N to Liberty, for Zanjero Trails Phases I and II, be considered null and void, after due process, should Liberty fail to meet Conditions Nos. 3, 4, 5, 6 and 7 within the time specified.

Zanjero Trails Phases III, IV, V and VI

Staff recommends the Commission issue an Order Preliminary to Liberty for extension of its CC&N for wastewater service to Zanjero Trails Phases III, IV, V and VI, located in a portion of Maricopa County, Arizona, subject to compliance with the following conditions:

1. To require Liberty to charge its existing rates and charges in the proposed extension area.
2. To require Liberty to file with Docket Control, a copy of the county franchise agreement for the extension area as a compliance item in this docket no later than December 31, 2017.
3. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase III Development area no later than December 31, 2024.
4. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase III Development area no later than 36 months after obtaining the Approval to Construct from Arizona Department of Environmental Quality ("ADEQ").
5. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase IV Development area no later than December 31, 2028.
6. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the

Phase IV Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.

7. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase V Development area no later than December 31, 2032.
8. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase V Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
9. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase VI Development area no later than December 31, 2036.
10. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase VI Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
11. That after Liberty complies with Requirement Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10, Liberty shall make a filing stating so. Within 60 days of this filing, Staff shall file a response. The Commission should schedule this item for a vote to grant the CC&N, to Zanjero Trails Phases III, IV, V and VI Developments, as soon as possible after Staff's filing that confirms Liberty's compliance with the requirements Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10. If Liberty does not comply with any one of Requirements Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10 within the time specified, the Order Preliminary shall be null and void, and this docket shall be closed.

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INTRODUCTION

On July 10, 2015, Liberty Utilities (Litchfield Park Water and Sewer), Corp. ("Liberty" or "Applicant" or "Company") filed an Application for extension of its Certificates of Convenience and Necessity ("CC&N") with the Arizona Corporation Commission ("ACC" or "Commission") to provide wastewater utility service, to a portion of Maricopa County.

On July 28, 2015, Maricopa County Municipal Water Conservation District Number One ("MWD") filed its Application to Intervene. On August 7, 2015, MWD was granted intervention by Procedural Order.

On January 11, 2016, Staff informed Liberty that its application was sufficient for administrative purposes. Hearing is set for April 5, 2016.

BACKGROUND

Liberty is an Arizona corporation in good standing with the Commission's Corporation Division. Liberty provides water and wastewater utility service to the public in communities within the cities of Litchfield Park, Goodyear, and Avondale, and in adjacent unincorporated areas of Maricopa County in the west Phoenix valley, west of Agua Fria River and north of Interstate Highway 10. Liberty's affiliates provide services in Santa Cruz County, Cochise County, and Pinal County. Currently, Liberty provides water utility service to approximately 18,400 customers and wastewater utility service to approximately 20,500 customers.

Liberty is wholly owned by Liberty Utilities (Sub) Corp., a Delaware corporation, which is a wholly owned subsidiary of Liberty Utilities Co., a Delaware corporation. Liberty's ultimate parent is Algonquin Power & Utilities Corp., a Canadian corporation whose shares are traded on the Toronto Stock Exchange.

THE WASTEWATER SYSTEM

Liberty owns and operates its Palm Valley Water Reclamation Facility ("WRF"); two lift stations ("LS") and a collection system. Palm Valley WRF has a treatment capacity of 5.1 million gallon per day ("MGD") and has received an Approval to Construct for Palm Valley WRF to expand its treatment capacity from 5.1 MGD to 6.55 MGD, on April 30, 2015. Liberty intends to finance the wastewater facilities through a combination of contributions, advances in aid of construction ("AIAC") (Hook-up Fees) made by MWD and/or subsequent developers, as well as capital improvements (equity) paid by Liberty.

Attachment A is Staff's Engineering Report which describes Liberty's current wastewater system, the proposed wastewater plan, the projected wastewater construction schedule and the costs to serve the requested area. The report includes the finding that Liberty is in compliance with the Commission decisions. The report indicates that Arizona Department of Environmental Quality ("ADEQ") has determined that Liberty's Palm Valley WRF was not in violation at a level at which ADEQ will take an action or issue a Notice of Opportunity to Correct or Notice of Violation

and/or is in compliance with the Order/Judgment.¹ The report also indicates that Liberty's wastewater system has adequate treatment capacity to treat the existing customer base. Further, that the proposed wastewater plan by Liberty is appropriate and the costs are reasonable. No "used and useful" determination of the proposed plants was made, and no conclusions should be inferred for future rate making or rate base purposes.

Staff recommends that Liberty file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase I Development area no later than December 31, 2017.

Staff recommends that Liberty file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase II Development area no later than December 31, 2021.

The Palm Valley WRF expansion should be completed prior to Phases I and Phase II build out. Therefore, Staff further recommends that Liberty file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the Palm Valley Water Reclamation Facility expansion to 6.55 MGD no later than December 31, 2022.

EPCOR Water Arizona, Inc. – Agua Fria Water District ("EPCOR") will provide water service. The Zanjero Trails development is located within EPCOR's service territory.

PROPOSED RATES

Liberty intends to provide wastewater utility service to the extension area under its authorized rates and charges.

HOOKUP FEE TARIFFS

Liberty has an approved Offsite Hookup Fee Tariff for wastewater on file.

FRANCHISE

Every applicant for a CC&N and/or CC&N extension is required to submit to the Commission evidence showing that the applicant has received the required consent, franchise or permit from the proper authority, authorizing the use of public roads or lands to construct, install, operate and maintain a water and/or wastewater system. If the applicant operates in an unincorporated area, the company has to obtain the franchise from the County. If the applicant operates in an incorporated area of the County, the applicant has to obtain the franchise from the City/Town.

Liberty did not file, in the docket, a copy of the franchise agreement it had entered into with Maricopa County, for its proposed extension area.

¹ ADEQ Compliance Status Report dated July 28, 2015.

REQUEST FOR SERVICE

The entire Zanjero Trails development is owned by MWD. MWD requested wastewater service from Liberty. A request for service is fundamental in determining whether a need for a CC&N exists. On August 7, 2015, MWD was granted intervention by Procedural Order.

PROPOSED EXTENSION AREA

Liberty is requesting Commission approval to serve Zanjero Trails development, located within Sections 4, 9 and 16 of Township 2 North, Range 2 West and in Sections 28 and 33 of Township 3 North, Range 2 West. The requested area is bounded by Perryville Road on the east, Peoria Avenue on the north, Camelback Road on the south and Beardsley Canal on the west. Zanjero Trails development consists of approximately 1,740 acres and will have a total of 4,595 residential dwelling units and 4,894 equivalent dwelling units² at build out. The requested area is in the unincorporated area of Maricopa County, approximately two miles west of Loop 303 and three miles north of I-10, near City of Goodyear. Attachment B contains a map which shows the portion of Maricopa County.

The requested area will be developed in phases. Phase I is planned for 806 single family homes and is located in the southern portion of the requested area, bounded by Perryville Road, Camelback Road, Bethany Home Road and Beardsley Canal. Phase II is located north of Phase I and is bounded by Perryville Road, Glendale Avenue, Bethany Home Road and Beardsley Canal. Phase II is planned for 628 single family homes. Phase III is planned for 641 single family homes; Phase IV is planned for 934 single family homes; Phase V is planned for 841 single family homes; and Phase VI is planned for 484 single family homes. The expected build out period is over 20 years.

STAFF ANALYSIS

A.R.S. §40-282(D) permits the issuance of an Order Preliminary and the process has been used by the Commission. Staff believes there are circumstances where the issuance of an Order Preliminary is the most logical and reasonable course of action, such as instances where a number of issues remain unresolved and subject to future events outside of the Applicant's control, through no fault of the Applicant, and where there is a need to provide a degree of certainty as to whether a given Applicant should be granted approval subject to the occurrence of anticipated events.

Staff believes that the construction planning horizon should be based on a reasonable projection of growth. In this matter, Staff has assumed a reasonable projection of growth exists through 2025 (ten years). Staff selected ten years as a reasonable construction planning horizon. Phase I and II construction is projected to be completed within ten years. Staff believes the timing of construction in Phases III through VI is a lot more speculative and uncertain (over 20years). Because the landowner has demonstrated need and requested service and in light of the magnitude of the requested area, the current economic conditions, the expected build out period and the fact

² This includes schools, restaurants, commercial, multi-family homes and light industrial users.

that the timing of the construction in Phases III through VI is speculative, Staff believes granting an Order Preliminary to a CC&N is appropriate for Phases III through VI.

Under Staff's proposal, the Order Preliminary would impose certain requirements on the Company that must be satisfied prior to the issuance of a subsequent "Final Order" by the Commission formally granting the requested CC&N extension, for Phases III through VI, to Liberty.

Staff believes that this matter presents a unique sets of facts that warrants the issuance of an Order Preliminary for Phases III through VI of the requested area. Granting an Order Preliminary will enable Liberty to move forward with its preliminary plans for serving the proposed extension area, and will enable MWD to have additional certainty regarding the provision of wastewater utility service. As such, preliminary approval will enhance the ability of MWD to maximize the price obtained for the land, thereby providing a benefit to the taxpayers. Granting an order preliminary in this case will also allow Liberty to wait until the developer's plans are known before installing facilities necessary to serve the extension area and to secure other necessary regulatory approvals. In addition, issuance of the Order Preliminary will enable the Commission to maintain oversight of the process to ensure that all requirements have been met prior to granting final approval of the CC&N extension for Phase III through VI. Once Staff has determined Liberty's compliance with the conditions discussed herein, the Commission will have a further opportunity to review Staff's recommendation and issue a Final Order for Phase III through VI in this proceeding.

Staff would note that the water service CC&N was issued to Agua Fria Water Company (the predecessor to EPCOR), 55 years ago, by the Commission, on August 4, 1961, in Decision No. 33311. To date the property has not been developed.

RECOMMENDATIONS

Zanjero Trails Phases I and II

Staff recommends the Commission approve Liberty's application for extension of its CC&N for wastewater service to Zanjero Trails Phases I and II, located in a portion of Maricopa County, Arizona, subject to compliance with the following conditions:

1. To require Liberty to charge its existing rates and charges in the proposed extension area.
2. To require Liberty to file with Docket Control an amended legal description for Phases I and II prior to the hearing in this matter.
3. To require Liberty to file with Docket Control an amended legal description for Phases III through VI prior to the hearing in this matter.

4. To require Liberty to file with Docket Control, a copy of the county franchise agreement for the extension area as a compliance item in this docket no later than December 31, 2017.
5. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase I Development area no later than December 31, 2017.
6. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase II Development area no later than December 31, 2021.
7. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the Palm Valley Water Reclamation Facility expansion to 6.55 MGD no later than December 31, 2022.

Staff further recommends that the Commission's Decision granting this extension of CC&N to Liberty, for Zanjero Trails Phases I and II, be considered null and void, after due process, should Liberty fail to meet Conditions Nos. 3, 4, 5, 6 and 7 within the time specified.

Zanjero Trails Phases III, IV, V and VI

Staff recommends the Commission issue an Order Preliminary to Liberty for extension of its CC&N for wastewater service to Zanjero Trails Phases III, IV, V and VI, located in a portion of Maricopa County, Arizona, subject to compliance with the following conditions:

1. To require Liberty to charge its existing rates and charges in the proposed extension area.
2. To require Liberty to file with Docket Control, a copy of the county franchise agreement for the extension area as a compliance item in this docket no later than December 31, 2017.
3. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase III Development area no later than December 31, 2024.
4. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase III Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
5. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase IV Development area no later than December 31, 2028.

6. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase IV Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
7. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase V Development area no later than December 31, 2032.
8. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase V Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
9. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase VI Development area no later than December 31, 2036.
10. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construct for the first parcel served in the Phase VI Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
11. That after Liberty complies with Requirement Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10, Liberty shall make a filing stating so. Within 60 days of this filing, Staff shall file a response. The Commission should schedule this item for a vote to grant the CC&N, to Zanjero Trails Phases III, IV, V and VI Developments, as soon as possible after Staff's filing that confirms Liberty's compliance with the requirements Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10. If Liberty does not comply with any one of Requirements Nos. 2, 3, 4, 5, 6, 7, 8, 9, and 10 within the time specified, the Order Preliminary shall be null and void, and this docket shall be closed.

MEMORANDUM

DATE: February 8, 2016

TO: Blessing N. Chukwu
Executive Consultant III

FROM: Dorothy Hains, P. E. *DH*
Utilities Engineer

RE: The Application of Liberty Utilities (Litchfield Park Water and Wastewater) Corp. For Approval of An Extension Of A Certificate Of Convenience and Necessity To Provide Wastewater Utility Service In Maricopa County, Arizona (Docket No. SW-01428A-15-0259)

BACKGROUND

On July 10, 2015, Liberty Utilities (Litchfield Park Water and Sewer) Corp. ("Applicant" or "Liberty") filed an application (Docket No. SW-01428A-15-0259) for an extension of its wastewater Certificate of Convenience and Necessity ("CC&N") to serve the Zanjero Trails development which is located within Sections 4, 9 and 16 of Township 2 North and Range 2 West and in Sections 28 and 33 of Township 3 North and Range 2 West. It is anticipated that the requested area of 1,740 acres will have a total of 4,595 residential dwelling units and 4,894 equivalent dwelling units¹ at build out. The requested area is surrounded by Perryville Road, Peoria Avenue, Camelback Road and Beardsley Canal in the west Valley near City of Goodyear. Construction of the offsite and onsite facilities will be financed through a combination of contributions and advances in aid of construction via Hook-up fees paid by Maricopa County Municipal Water Conservation District Number One and/or subsequent developers, as well as capital improvements paid by the Applicant.

II. PROPOSED WATER PLAN

EPCOR Water Arizona Inc. – Agua Fria Water District will provide water service to the requested area.

III. PROPOSED WASTEWATER PLAN

The wastewater from the requested area will be treated by Palm Valley Water Reclamation Facility ("PVWRF") which is owned and operated by the Applicant. Based on wastewater flow data for PVWRF from June 2014 to May 2015, maximum peak day flow was 4.4 million gallons per day ("MGD"). At present time, PVWRF has a treatment capacity of 5.1 MGD, however, the Applicant received an Approval to Construct for PVWRF to expand its treatment capacity from 5.1 MGD to 6.55 MGD on April 30, 2015.

¹ This includes schools, restaurants, commercial, multi-family homes and light industrial users.

The Applicant plans a total of six phases of sewer improvement projects in the requested area at an estimated cost of approximate 23 million dollars. The following table illustrates the estimated construction cost and the year construction is projected to start in each phase.

Phase No.	Year construction is projected to start	Estimated total construction cost (\$)
I	2017	4,572,357
II	2021	3,576,501
III	2025	3,689,492
IV	2029	4,414,517
V	2033	3,789,128
VI	2037	2,702,645
Total		22,744,640

The Applicant proposes to begin Phase I construction in 2017 and complete construction in 2021. The Applicant plans to construct Phase II in 2021 and complete construction in 2025. In the next Paragraph, detailed construction of Phase I and Phase II will be discussed.

Phase I and II Wastewater Infrastructure Improvement Plans²

Phase I contains 806 single family homes and is located in an area bounded by Perryville Road, Camelback Road, Bethany Home Road and Beardsley Canal. The Applicant estimates a daily average flow of 277,345 gallons per day (“GPD”) from Phase I at build out. The Applicant anticipates that Phase I construction will begin in 2017. The estimated costs to install Phase I infrastructure is \$4,572,357. Sewage will be collected through on-site sewer lines which will be connected to existing manholes on Camelback Road between Beardsley Canal and Perryville Road, from there sewage is gravity flow to PVWRF.

Phase II contains 628 single family homes and is located in an area bounded by Perryville Road, Bethany Home Road, Beardsley Canal and Glendale Road. The Applicant estimates a daily average flow of 160,250 GPD from Phase II at build out. The Applicant anticipates that Phase II construction will begin in 2021, the estimated costs to install Phase II infrastructure is about \$3,576,501. Sewage will be collected through on-site sewer lines which will be connected to manholes in Phase I on Bethany Home Road, from there sewage is gravity flow to PVWRF.

² Staff believes that the construction planning horizon should be based on an accurate projection of growth. In this matter Staff has assumed an accurate projection of growth exists through 2025 (ten years). Staff selected ten years as a reasonable construction planning horizon. Phase I and II construction is projected to be completed within ten years. Staff believes the timing of construction in Phases III through VI is a lot more speculative and uncertain.

*Estimated Construction Costs***Estimated Engineering Costs For Phase I Wastewater Infrastructure**

Project Description	Estimated Costs by the Applicant (\$)
Off-site Perryville Road Truck Sewer (south of Bethany Homes Road)	
4,583' 15" SDR 35 PVC (@ \$50/ft) & backfill material	229,150
677' 18" SDR 35 PVC (@ \$50/ft) & backfill material	33,850
Thirteen 60" diameter manholes (@ \$4,000/unit)	52,000
Others (testing, camera logging)	7,210
Others (40' steel casing /Jack and Bore sewer line & connect to existing plant)	12,500
subtotal	334,710
On-site Sewer Trunk Lines	
53,154' 8" SDR 35 PVC (@ \$24/ft) & backfill material	1,275,456
Two hundred ninety six 60" diameter manholes (@ \$4,000/unit)	1,184,000
7 sewer Stub out (\$300/unit)	2,100
13 connection to existing plants (\$500/unit)	6,500
Others (testing, camera logging)	97,544
1,067 4" services	506,825
subtotal	3,072,425
Grading & Paving	
20 square yards of 5" AC on 7" ABC (\$35/square yard)	700
Traffic Control	5,000
subtotal	5,700
Misc.	200
Testing	
Soil/compaction test	68,256.7
Consultant Services	
Management fee	120,754.45
Engineering design	24,985
Construction staking	85,320.88
surveying	4,156
subtotal	235,216.32
Permit Fees	123,304.23
Plan Review & Processing Fees	99,000

Clean up	
56,404' Hydro-Vac clean (@ \$0.5/ft)	29,202
5,260' dust control (@ \$1.00/ft)	5,260
5,260' Final walk (@ \$1.00/ft)	2,630
subtotal	37,092
Printing	5,000
One-year warranty (1% of \$3,450,127)	34,501
Sales Tax (4.095% of \$3,450,127)	141,283
Contingency (10% of \$4,156,688)	415,669
Total Costs of Phase I Wastewater Construction Plan	4,572,357

Estimated Engineering Costs For Phase II Wastewater Infrastructure

Project Description	Estimated Costs by the Applicant (\$)
Sewer Line Extension on Perryville Road	
5324' 15" SDR 35 PVC (@ \$50/ft) & backfill material	266,200
fourteen 60" diameter manholes (@ \$4,000/unit)	56,000
One connection to existing sewer truck line (@ \$500/unit)	500
Others (testing, camera logging)	7,424
Others (40' steel casing /Jack and Bore sewer line & connect to existing plant @ \$12,000/unit)	12,000
subtotal	342,124
On-site Sewer Trunk Lines	
42,492' 8" SDR 35 PVC (@ \$24/ft) & backfill material	1,019,808
Two hundred thirty seven 60" diameter manholes (@ \$4,000/unit)	948,000
5 sewer Stub out (\$300/unit)	1,500
7 connection to existing plants (\$500/unit)	3,500
Others (testing, camera logging)	78,042
628 4" services	298300
subtotal	2,349,150
Testing	
Soil/compaction test	53,825

Consultant Services	
Management fee	95,311
Engineering design	25,289
Construction staking	67,282
surveying	4,195
subtotal	192,076
Permit Fees	
	98,050
Plan Review & Processing Fees	
	40,500
Clean up	
47,816' Hydro-Vac clean (@ \$0.5/ft)	23,908
5,324' dust control (@ \$1.00/ft)	5,324
5,324' Final walk (@ \$0.5/ft)	2,662
subtotal	31,894
Printing	
	5,000
One-year warranty (1% of \$2,723,168)	
	27,232
Sales Tax (4.095% of \$2,723,168)	
	111,514
Contingency (10% of \$3,251,365)	
	325,136
Total Costs of Phase II Wastewater Construction Plan	
	3,576,501

Staff concludes that the listed system improvements are appropriate and the costs are reasonable. No "used and useful" determination of the proposed plant was made, and no conclusions should be inferred for future rate making or rate base purposes.

Staff recommends that Liberty file with Docket Control, as a compliance item in this docket, a copy of the Approval of Construction ("AOC") for the first parcel served in the Phase I Development area by December 31, 2017 and for the first parcel served in the Phase II Development area by December 31, 2021.

The PVWRF expansion should be completed prior to Phases I and Phase II build out. Therefore, Staff further recommends that Liberty file with Docket Control, an AOC for the Palm Valley Water Reclamation Facility expansion to 6.55 MGD by December 31, 2022.

IV. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Staff received a compliance status report for PVWRF dated July 28, 2015, in which ADEQ has determined that as of this date the facility was not in violation at a level at which ADEQ would take an action or issue a Notice of Opportunity to Correct or Notice of Violation and/or is in compliance with the Order/Judgment.

V. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check of the Commission's Compliance Section database dated July 17, 2015, indicates there is no delinquent compliance items for the Applicant.

VI. MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT ("MCESD") COMPLIANCE

MCESD, acting as the formally delegated agent of ADEQ has reported in a Compliance Status Report dated July 23, 2015, that EPCOR's Agua Fria system operating under public water system ("PWS") No. 07-695 has no major deficiencies and is delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

SUMMARY

Recommendations

1. Staff recommends that Liberty file with Docket Control, as a compliance item in this docket, a copy of the AOC for the first parcel served in the Phase I Development area by December 31, 2017 and for the first parcel served in the Phase II Development area by December 31, 2021.
2. Staff further recommends that Liberty file with Docket Control, an AOC for the Palm Valley Water Reclamation Facility expansion to 6.55 MGD by December 31, 2022.
3. Staff further recommends that the Company to docket the ATC for the first parcel for Phase III by December 31, 2024, the ATC for the first parcel for Phase IV by December 31, 2028, the ATC for the first parcel for Phase V by December 31, 2032, and the ATC for the first parcel for Phase VI by December 31, 2036.
4. Staff would also recommend that the Company be required to file an AOC for the first parcel in Phases III, IV, V and VI within time period to be determined by Staff.

Conclusions

1. Staff concludes that PVWRF has adequate treatment capacity to serve the existing customer base.
2. Staff concludes that the listed system improvements for Phase I and Phase II Wastewater Infrastructures are appropriate and the costs are reasonable. No "used and useful" determination of the proposed plant was made, and no conclusions should be inferred for future rate making or rate base purposes.
3. A check of the Commission's Compliance Section database dated July 17, 2015, indicates there is no delinquent compliance items for the Applicant.

MEMORANDUM

TO: Blessing Chukwu
Executive Consultant III
Utilities Division

FROM: Lori H. Miller *lhm*
GIS Specialist
Utilities Division

THRU: Del Smith *DS*
Engineering Supervisor
Utilities Division

DATE: August 7, 2014

RE: LIBERTY UTILITIES (LITCHFIELD PARK WATER & SEWER) – DOCKET NO.
SW-01428A-15-0259)

The area requested by Litchfield Park Water & Sewer for an extension has been plotted with no complications using the legal description provided with the application (a copy of which is attached).

Also attached is a copy of the map for your files.

/lhm

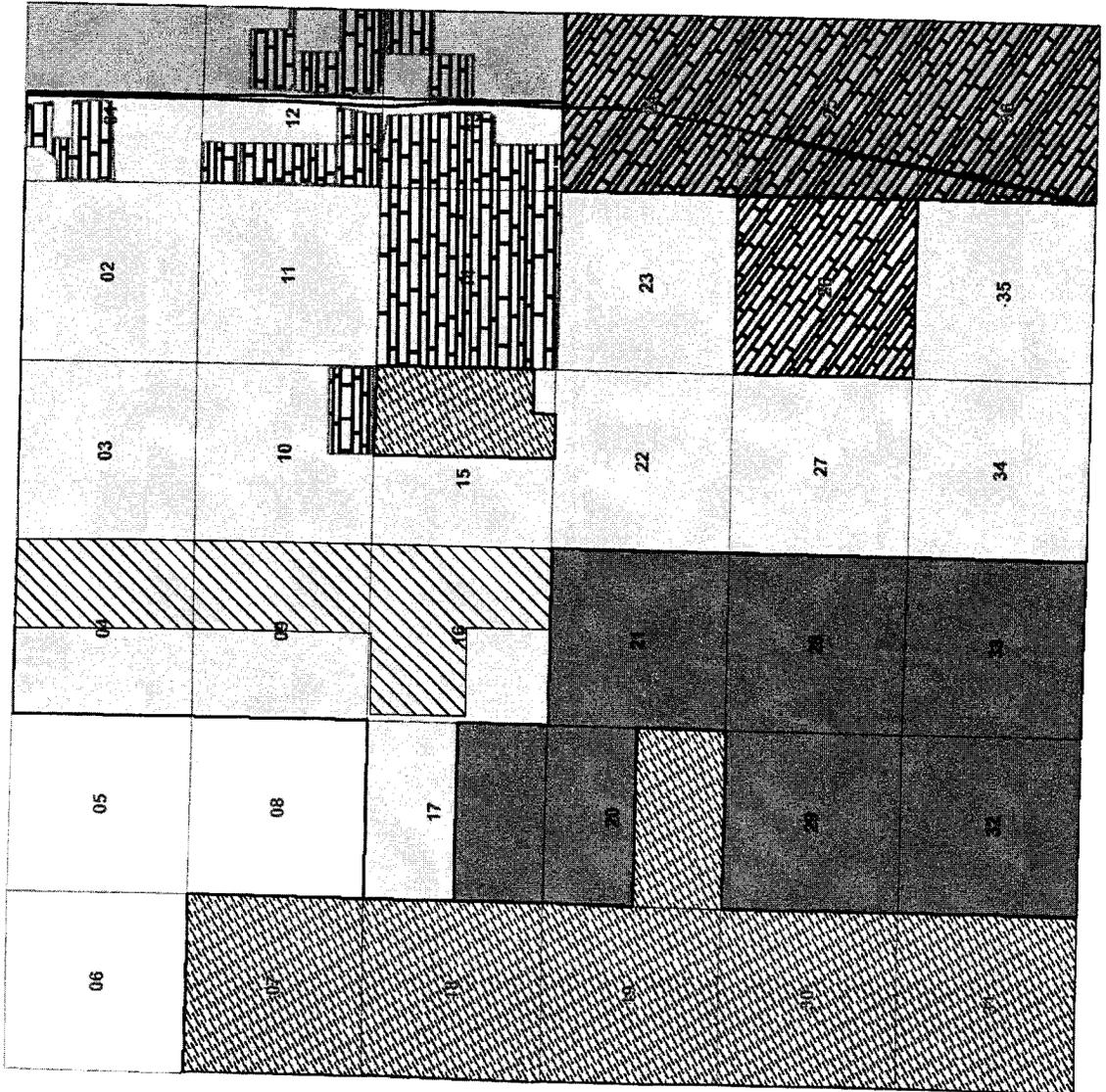
Attachments

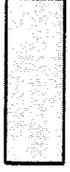
cc: Mr. Jay L. Shapiro
Ms. Dorothy Hains
Ms. Deb Person (Hand Carried)
File

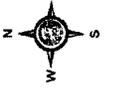
MARICOPA COUNTY

RANGE 2 West

TOWNSHIP 2 North



- 
W-01997A (2)
 Adaman Mutual Water Company
- 
WS-01303A (14)(8)
 EPCOR Water Arizona, Inc. (Agua Fria)
- 
W-01445A (3)
 Arizona Water Company (White Tanks)
- 
W-01427A (4)
 Litchfield Park Service Company
- 
SW-01428A (4)
 Litchfield Park Service Company
- 
(4)
 EPCOR Water Arizona, Inc.
 Docket No. WS-01303A-15-0018
 Request for CC&N
- 
(2)
 Liberty Utilities
 (Litchfield Park Water & Sewer)
 Docket No. SW-01428A-15-0259
 Request for CC&N Extension

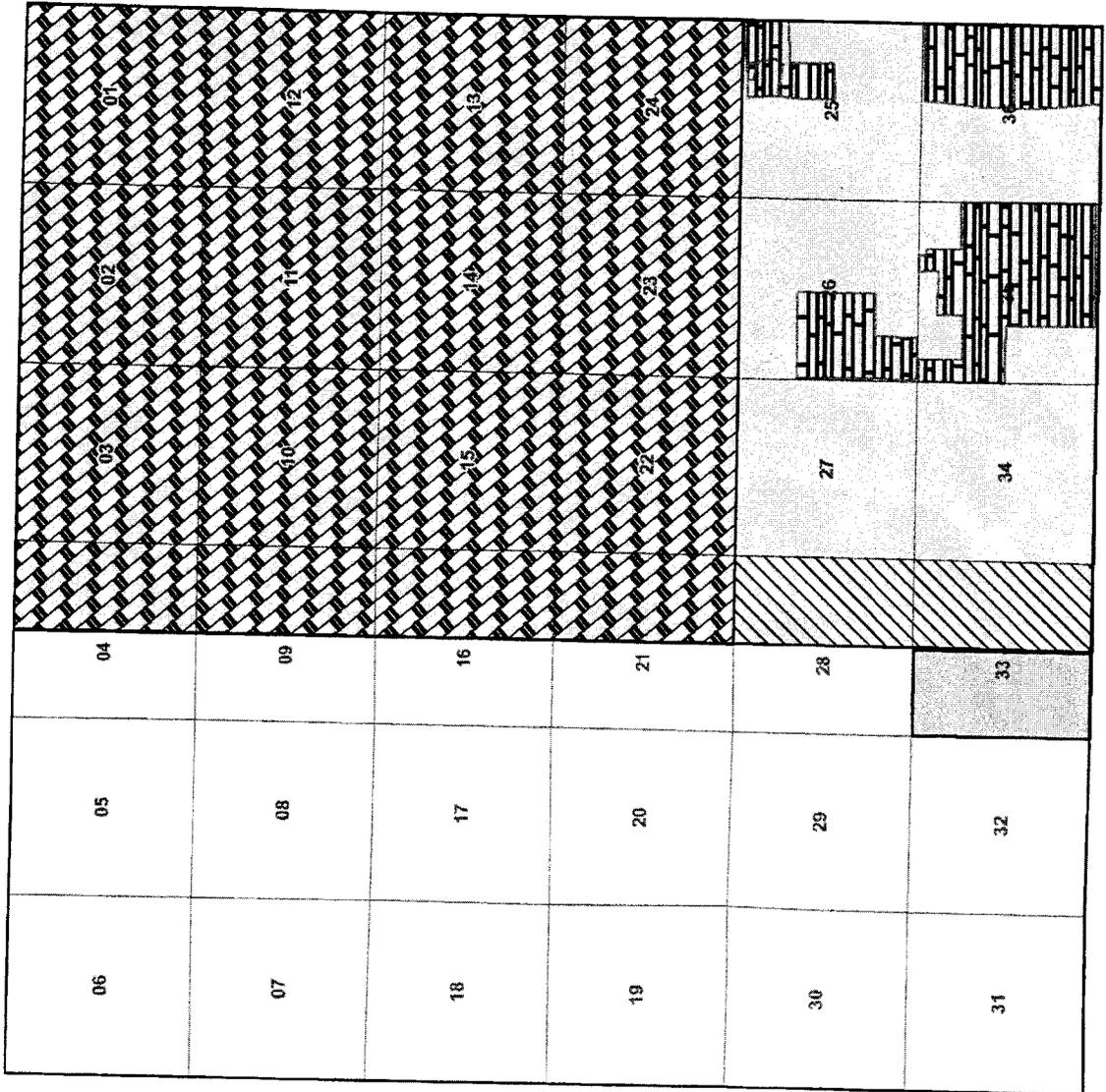


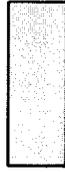
Prepared by:
 Arizona Corporation Commission
 Utilities Division
 Engineering Section/GIS Mapping
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MARICOPA COUNTY

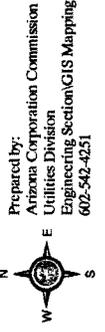
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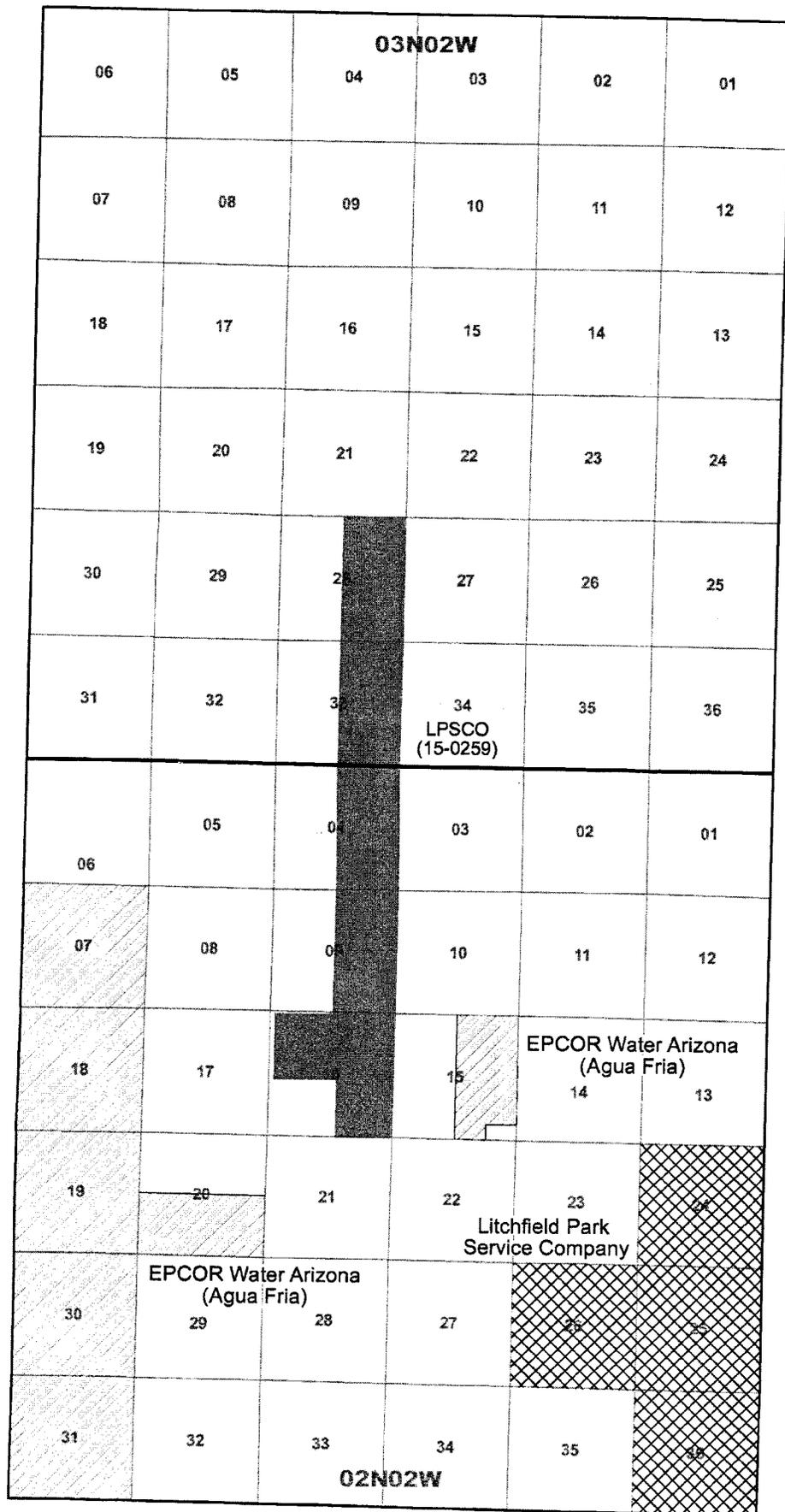


-  WS-01303A (14)(8)
EPCOR Water Arizona, Inc. (Agua Fria)
-  W-01212A (6)
Valencia Water Company, Inc.
-  Sewer (4)
City of Surprise (Nonjurisdictional)

-  Sewer (4)
EPCOR Water Arizona(4) Inc.
Docket No. WS-01303A-15-0018
Request for CC&N
-  Sewer (2)
Liberty Utilities
(Litchfield Park Water & Sewer)
Docket No. SW-01428A-15-0259
Request for CC&N Extension



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Utilities Division
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602-542-4251



LEGAL DESCRIPTION
Zanjero Trails - Legal Description
(Liberty CC&N Expansion)

Parcel 1:

Portions of land situated within Sections 28 & 33 of Township 3 North, Range 2 West and Sections 4, 9, & 16 of Township 2 North, Range 2 West of the Gila and Salt River Meridian, Maricopa County, Arizona, being more particularly described as follows:

Beginning at a Flush Brass Cap (MCDOT) accepted as the Northeast corner of said Section 28;

Thence, South 00°20'19" West, 2638.46 feet along the east line of said section to a Masonry Nail accepted as the East 1/4 corner of said section 28;

Thence, continuing along said east line, South 00°21'13" West, 2635.60 feet to a Flush Brass Cap accepted as the Southeast corner of said section;

Thence, South 00°22'08" West, 2640.72 feet along the east line of said Section 33 to an Aluminum Cap stamped 2003 accepted as the East 1/4 corner of said Section 33;

Thence, continuing along said east line, South 00°21'40" West, 2639.95 feet to an Aluminum Cap stamped 2009 accepted as the Southeast corner of said Section 33;

Thence, South 00°33'38" East, 2640.27 feet along the east line of said Section 4 to a Brass Cap stamped LS 33307 accepted as the East 1/4 corner of said Section 4;

Thence, continuing along said east line, South 00°33'48" East, 2630.48 feet to a Brass Cap in Handhole stamped MCDOT 2003 accepted as the Southeast Corner of said section 4;

Thence, South 00°23'42" West, 5273.14 feet along the east line of said Section 9 to a 3" Aluminum Cap stamped FCD 2009 accepted as the Southeast corner of said Section 9;

Thence, South 00°24'28" West, 2637.84 feet along the east of Section 16 to a Flush Brass Cap stamped MCDOT accepted as the East 1/4 of said Section 16;

Thence, continuing along said east line, South 00°24'32" West, 2637.33 feet to a found Brass Cap in Handhole stamped SE COR SEC 16 T2N R2W accepted as the Southeast corner of said Section 16;

Thence, leaving said east line, North 89°36'46" West, 2529.49 feet along the south line of said Section 16 to a found Brass Cap stamped S1/4 S16 accepted as the South 1/4 corner of said Section 16;

Thence, North 00°30'54" East, 2464.95 feet along the north-south of said Section 16;

Thence, North 89°51'17" West, 2654.20 feet along a line 162.00 feet south of and parallel with the east-west mid-section line of said Section 16 to a point on the west line of said Section 16;

Thence, along said west line, North 00°23'25" East 162.00 feet to a found Flush Brass Cap stamped MCDOT accepted as the West 1/4 corner of said Section 16;

Thence, continuing along said west line, North 00°30'12" East, 2635.21 feet to a found Flush Brass Cap stamped MCDOT 2003 accepted as the Northwest corner of said Section 16;

Thence, South 89°50'46" East, 2655.09 feet along the north line of said Section 16 to a Flush Brass Cap stamped MCDOT 2003 accepted as the North 1/4 corner of said Section 16;

Thence, North 89°46'46" East, 75.00 feet to a line 75 feet east of and parallel with the west line of the east half of said Section 9;

Thence, North 00°27'02" East, 5268.31 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 9;

Thence, North 00°44'08" West, 5280.79 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 4;

Thence, North 00°21'39" East, 5282.64 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 33;

Thence, North 00°20'37" East, 5276.35 feet along a line 75 feet east of and parallel with the west line of the east half of said Section 28;

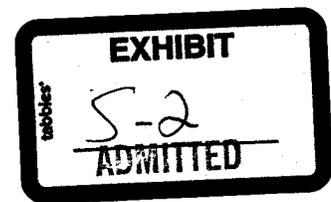
Thence, South 89°42'03" East, 2564.43 feet along the north line of said Section 28 to the **POINT OF BEGINNING**.

Parcel 1 as described hereon contains 75,288,064 sq.ft. or 1728.38 acres, more or less.

This description shown hereon is not to be used to violate subdivision regulations of the state, county and/or municipality of any other land division restrictions.

Prepared by: HilgartWilson
2141 E Highland Ave., Suite 250
Phoenix, AZ 85016
Project No. 1078
Date: January 2015





Revised Staff Recommendations

Staff recommends the Commission approve Liberty's application for extension of its CC&N for wastewater service to Zanjero Trails, located in a portion of Maricopa County, Arizona, subject to compliance with the following conditions:

1. To require Liberty to charge its existing rates and charges in the proposed extension area.
2. To require Liberty to file with Docket Control, a copy of the county franchise agreement for the extension area as a compliance item in this docket no later than December 31, 2017.
3. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase I Development area no later than December 31, 2017.
4. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase II Development area no later than December 31, 2021.
5. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the Palm Valley Water Reclamation Facility expansion to 5.8 MGD no later than December 31, 2022.
6. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase III Development area no later than December 31, 2024.
7. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase III Development area no later than 36 months after obtaining the Approval to Construct from Arizona Department of Environmental Quality ("ADEQ").
8. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase IV Development area no later than December 31, 2028.
9. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase IV Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
10. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase V Development area no later than December 31, 2032.

11. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase V Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.
12. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval to Construct for the first parcel served in the Phase VI Development area no later than December 31, 2036.
13. To require Liberty to file with Docket Control, as a compliance item in this docket, a copy of the Certificate of Approval of Construction for the first parcel served in the Phase VI Development area no later than 36 months after obtaining the Approval to Construct from ADEQ.

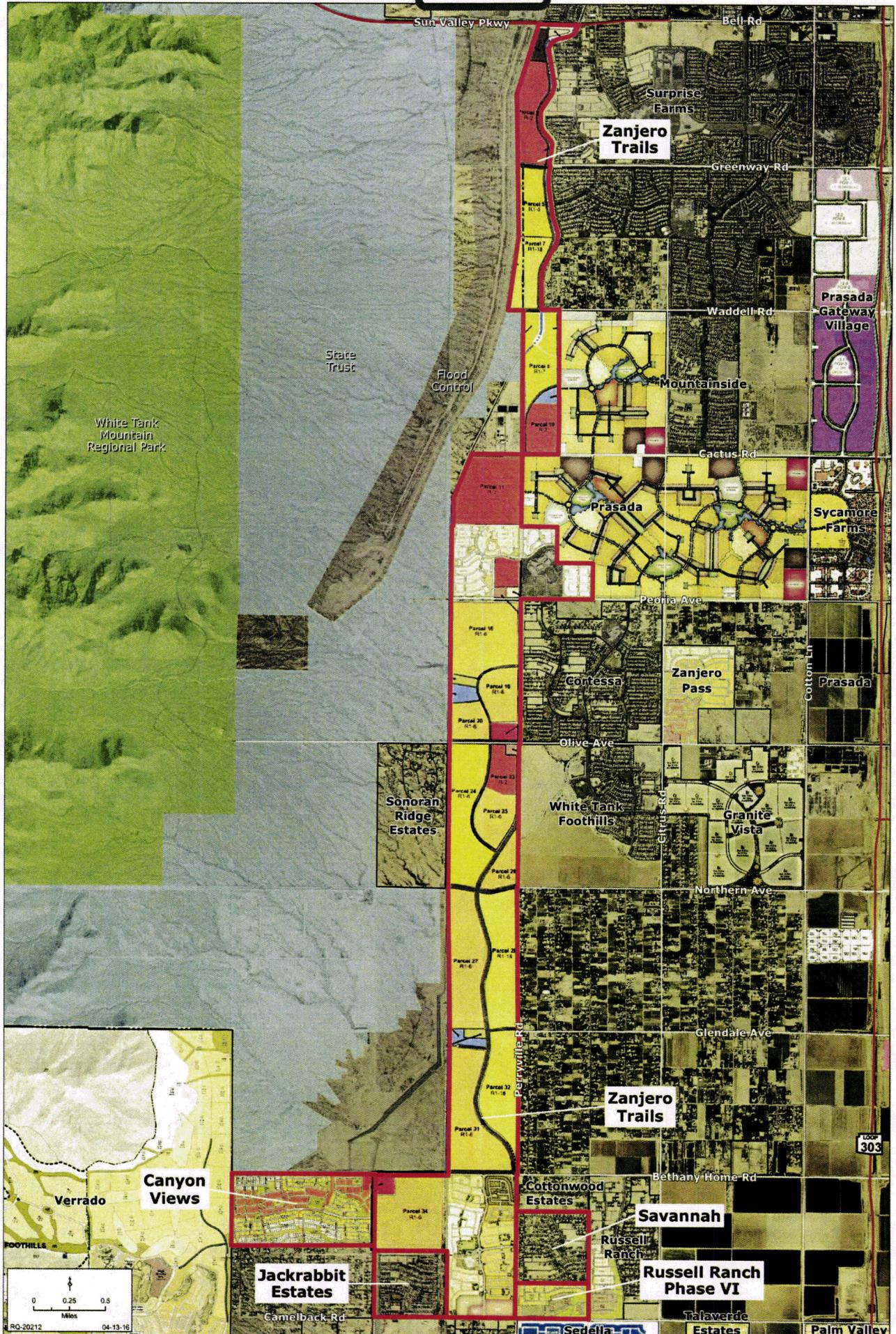
Staff further recommends that the Commission's Decision granting this extension of CC&N to Liberty, for Zanjero Trails, be considered null and void, after due process, should Liberty fail to meet Conditions 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 within the time specified.

ORIGINAL LANDOWNER PROPERTIES

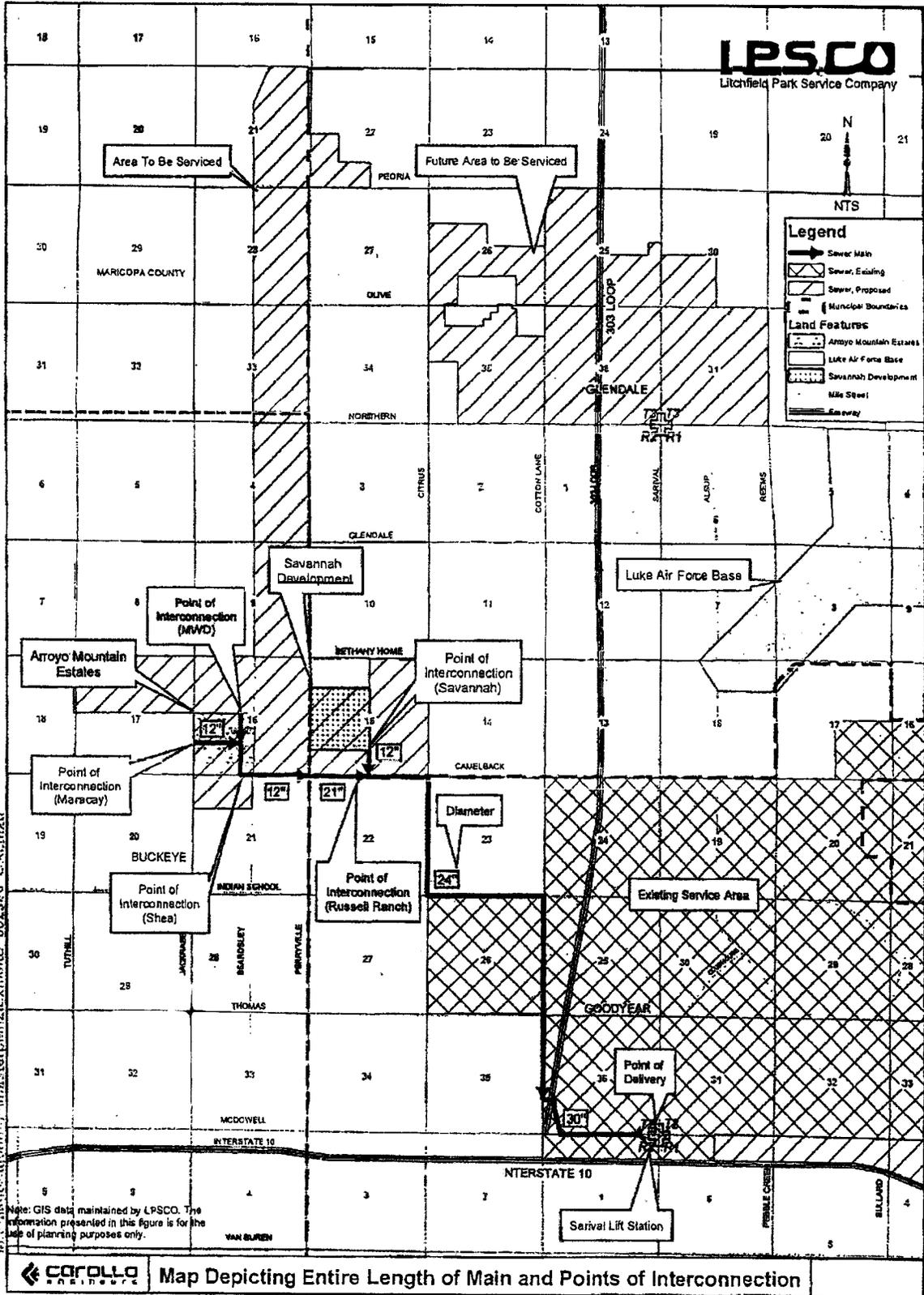
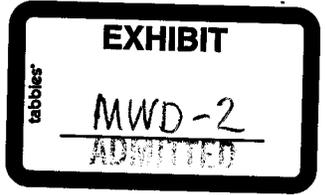
Mike Schwab | 480.483.8100 | www.landadvisors.com

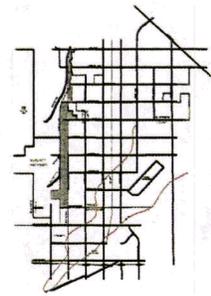


Exhibit A
Land Advisors
ORGANIZATION



Map and Description of Main



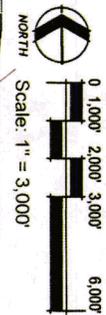
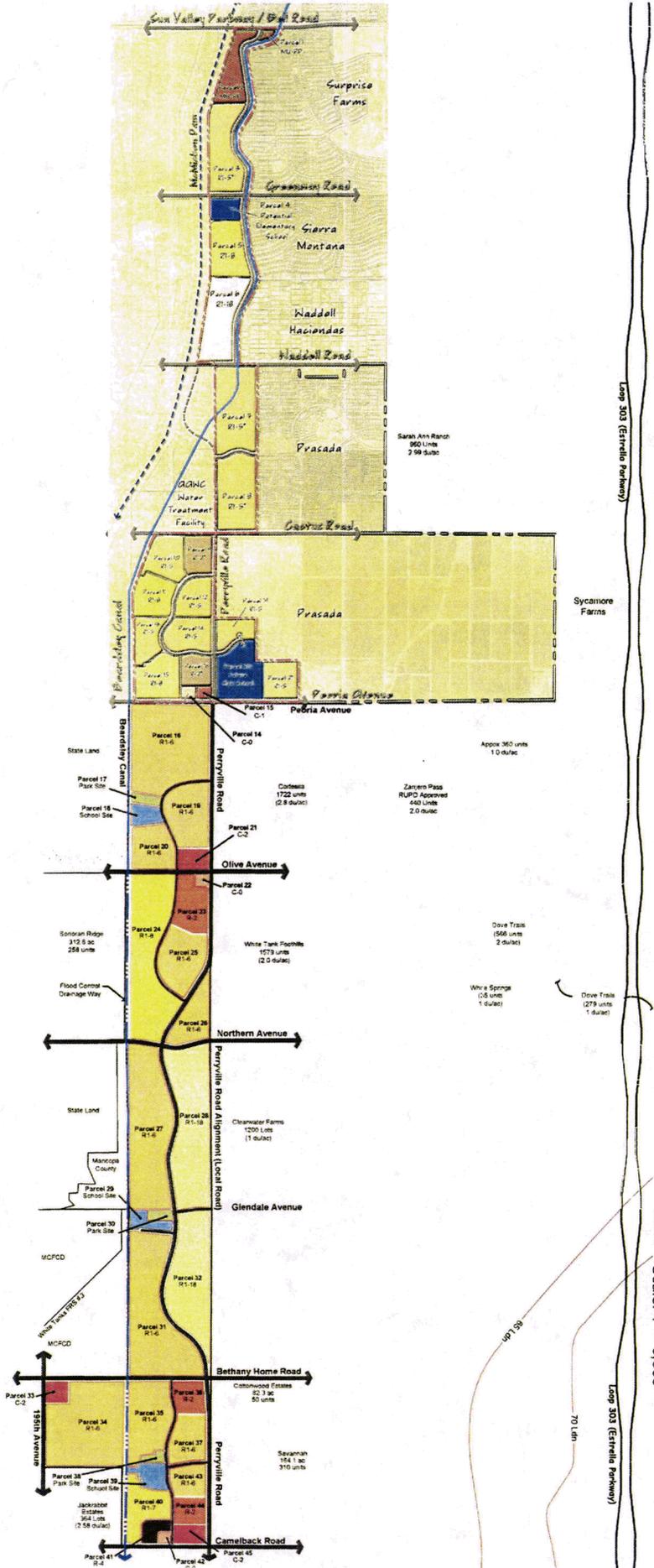


Vicinity Map
N.T.S.

Legend

- Boundary
 - Beardsley Canal
 - McMeiken Dam
 - Arterial
 - Collector
- Surprise Zoning Category**
- PAD-R1-18
 - PAD-R1-8
 - PAD-R1-5
 - PAD-R-2
 - MU-PD
 - PAD-C-1
 - PAD-C-2
 - PAD-School
- Surprise Zoning District**
- PAD
 - C-2
- County Zoning District**
- Rural-43

- County Zoning Category**
- R1-18 (RUPD) with PAD overlay
 - R1-8 (RUPD) with PAD overlay
 - R1-7 (RUPD) with PAD overlay
 - R1-6 (RUPD) with PAD overlay
 - R-2 (RUPD) with PAD overlay
 - R-4 (RUPD) with PAD overlay
 - C-2 (CUPD) with PAD overlay
 - C-0 (CUPD) with PAD overlay
 - C-1 (CUPD) with PAD overlay
 - Rural - 43 (Park Site) with PAD overlay
 - R1-6 (RUPD) (School) with PAD overlay
 - Potential Church Site with PAD overlay



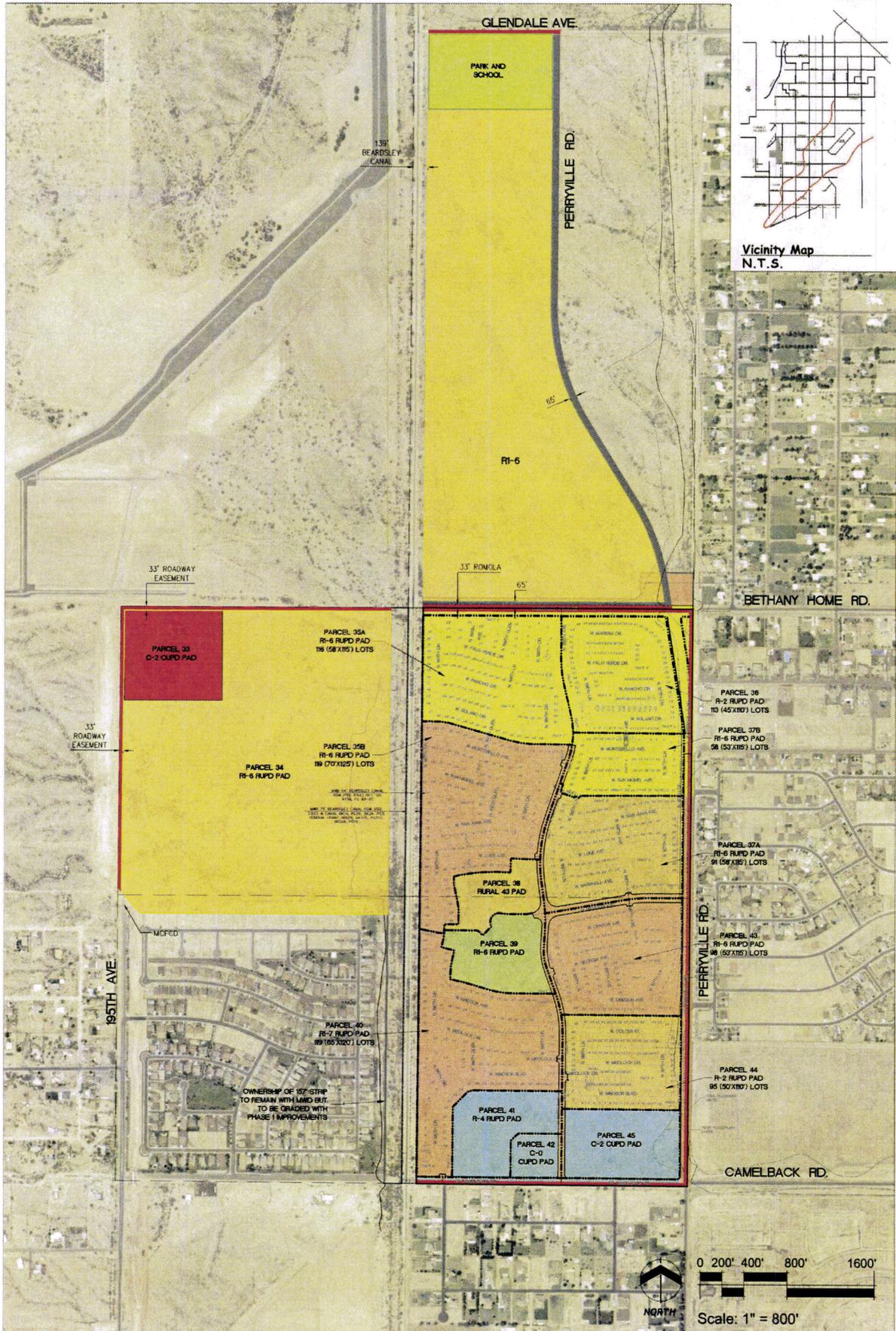
Location Map

Zanjero Trails

hilgartwilson
ENGINEERS • PLANNERS • SURVEYORS

Project Manager: R. HILGART
Designed By: hilgartwilson
Drawn By: hilgartwilson
Revision Date: FEBRUARY 2010





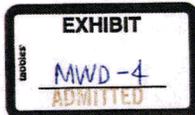
Vicinity Map
N.T.S.

PHASE 1 SUB-PHASING							
	PLAT BOUNDARY		PHASE 1A		PHASE 1C		PHASE 1E
	PARCEL BOUNDARY		PHASE 1B		PHASE 1D		
PHASE 2 & 3 ZONING CATEGORIES							
	R1-6						
	C-2*						

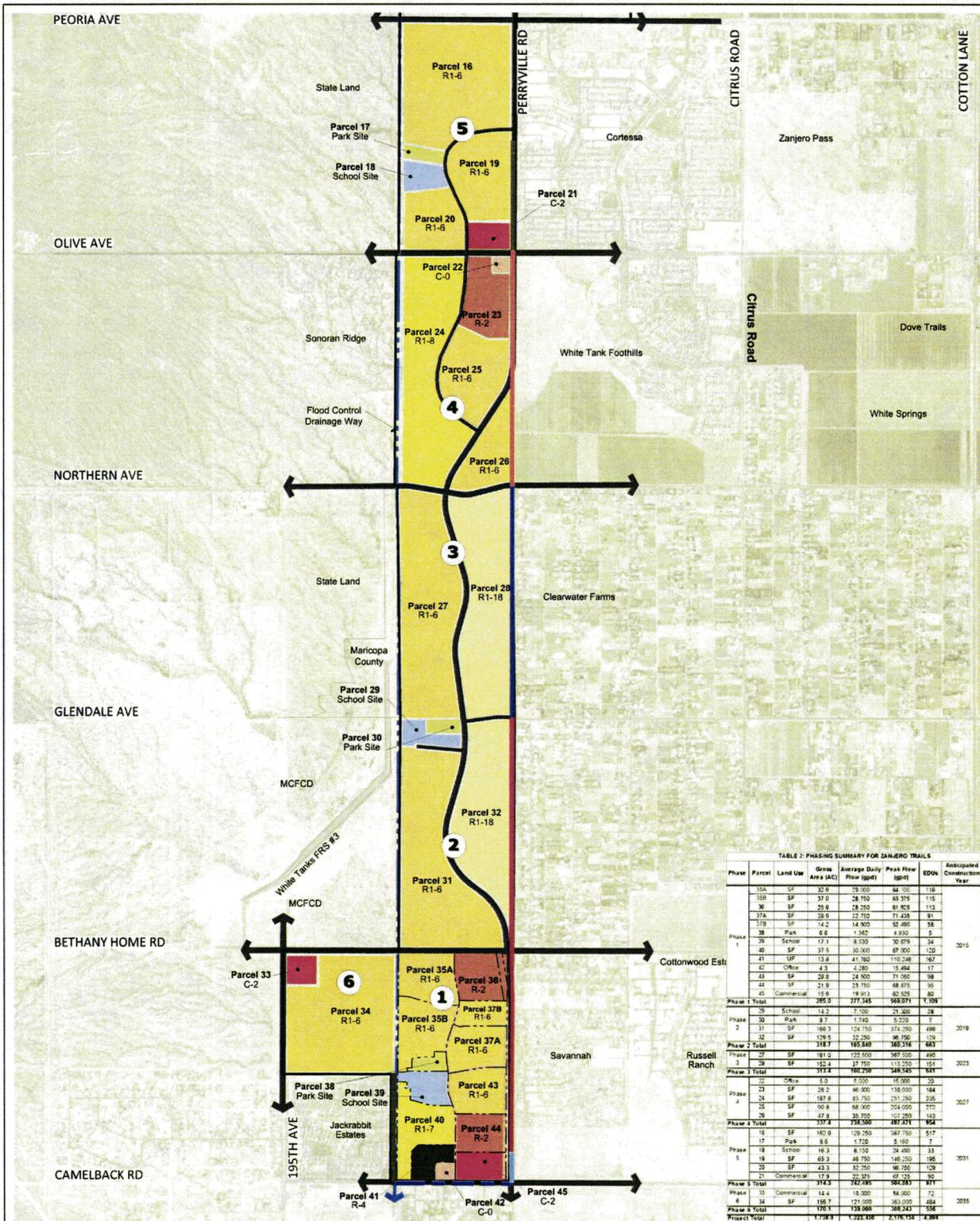
OCTOBER 2015
 Project Number: 1003.70
 Project Manager: Tom Hight, PE
 Designed By: T. Bonar, AICP
 Graphics By: DR
 Drawn By: DR

hilgartwilson
 ENGINEERS-PLANNERS-SURVEYORS
 1841 E. CAMELBACK RD., SUITE 270, PHOENIX, AZ 85016
 PH: 602.998.0000 FAX: 602.998.0001
 www.hilgartwilson.com

Zanjero Trails
 Maricopa County, Arizona



1:1000 (2008) Planning & Consulting 2008/10/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000



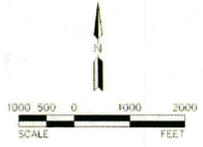
Color Coding Legend
Conduit: Diameter (in)

Black	<= 8.0
Red	<= 10.0
Blue	<= 12.0
Green	<= 15.0
Yellow	<= 18.0
Orange	<= 21.0
Light Blue	<= 24.0

LEGEND
PHASING ①

TABLE 2: PHASING SUMMARY FOR ZANJERO TRAILS

Phase	Parcel	Land Use	Area (AC)	Average Daily Peak Flow (gpd)	EDUs	Anticipated Construction Year
Phase 1	15A	SP	32.6	35,000	42,000	118
	15B	SP	37.0	38,750	43,375	115
	36	SP	25.6	26,250	41,875	113
	37A	SP	23.8	22,750	37,438	91
	17B	SP	14.2	14,900	32,490	58
	38	Park	6.6	1,262	4,932	5
	39	School	17.1	8,100	28,879	34
	40	SP	37.5	39,000	47,900	120
	41	SP	13.8	11,760	110,246	167
	42	Office	4.3	4,200	13,464	12
Phase 2	43	SP	28.8	24,900	31,560	94
	44	SP	21.9	28,750	48,875	95
	45	Commercial	15.9	18,913	62,155	80
Phase 2 Total			265.3	277,345	569,071	1,109
Phase 3	39	School	12.2	7,100	23,300	28
	30	Park	8.7	1,148	3,223	2
Phase 4	31	SP	168.3	124,750	374,350	499
	32	SP	128.5	122,500	96,950	129
Phase 4 Total			296.8	247,250	348,348	628
Phase 5	37	SP	161.2	122,500	387,000	490
	38	SP	152.4	37,750	113,750	151
Phase 5 Total			313.6	160,250	500,750	641
Phase 6	42	Office	4.3	4,200	13,464	12
	23	SP	26.2	46,000	118,000	164
	24	SP	187.6	83,750	251,750	325
	25	SP	204.8	48,900	254,600	321
Phase 7	26	SP	37.8	35,750	101,250	143
	27	SP	37.8	35,750	101,250	143
	16	SP	102.8	129,250	267,750	317
	17	Park	8.6	1,710	6,165	7
Phase 8	18	School	16.3	8,100	28,460	33
	19	SP	65.3	48,750	148,250	186
	20	SP	43.3	32,500	46,750	129
	21	Commercial	17.9	22,375	67,125	85
Phase 8 Total			142.9	247,580	348,348	628
Phase 9	33	Commercial	14.4	18,200	54,600	72
	34	SP	156.7	121,000	363,000	454
Phase 9 Total			171.1	139,200	417,600	526
Project Total			1,728.3	1,222,108	2,176,124	2,804

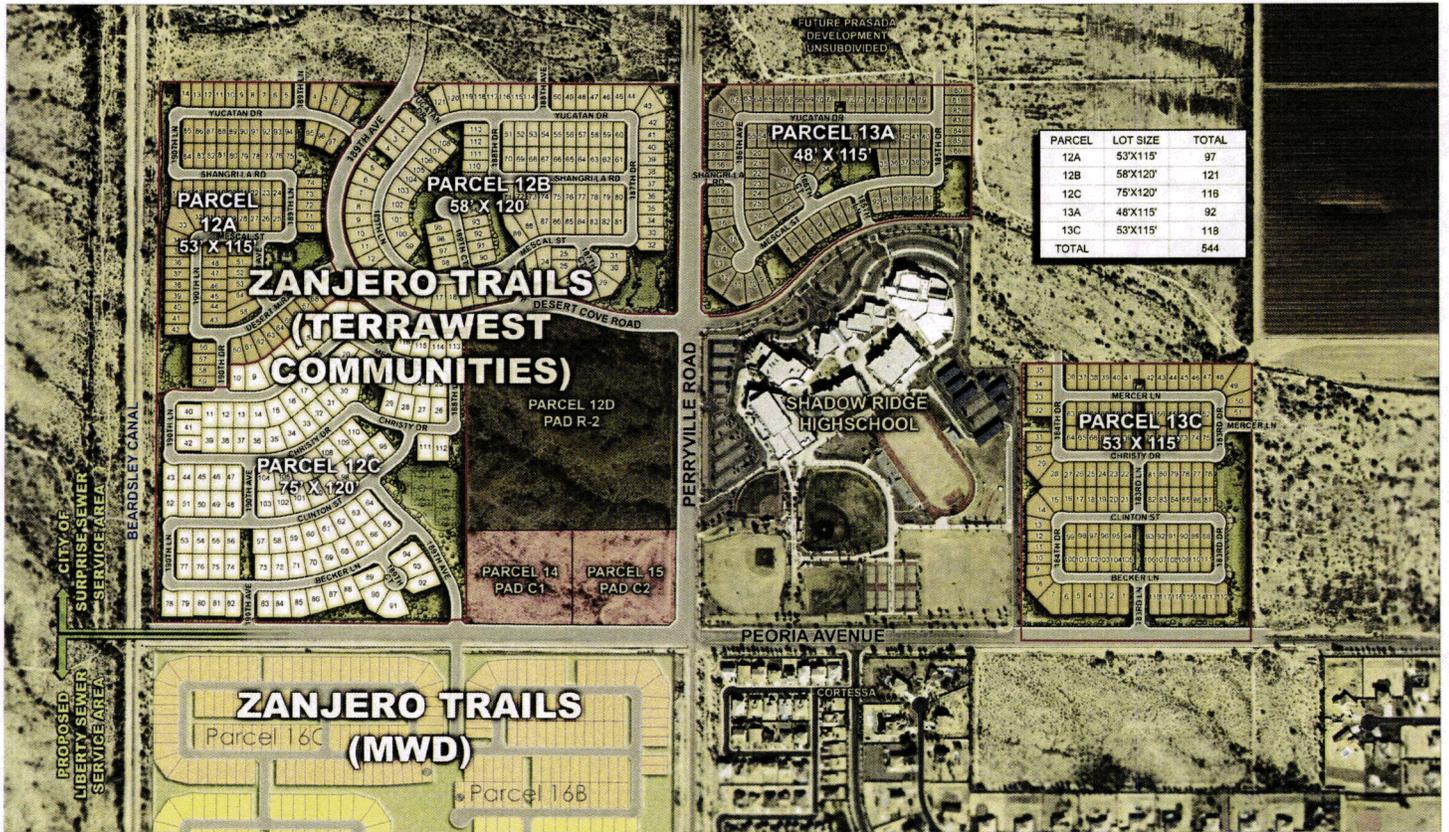


HILGARTWILSON
 PROJ NO.: 1003
 DATE: NOV 2014
 SCALE: 1" = 1000'
 DRAWN: HW
 DESIGNED: HW
 APPROVED: HW

ZANJERO TRAILS
 PERRYVILLE ROAD
 MARICOPA COUNTY, ARIZONA
FIG 4: PHASING PLAN

HILGARTWILSON
 ENGINEER | PLAN | SURVEY | MANAGE
 2141 E. HIGHLAND AVE., STE. 250 | P. 602.490.0535 / F. 602.388.2436
 PHOENIX, AZ 85016
 www.hilgartwilson.com

REV:	



ZANJERO TRAILS
SEWER SERVICE AREA

EXHIBIT
MWD-6
ADMITTED

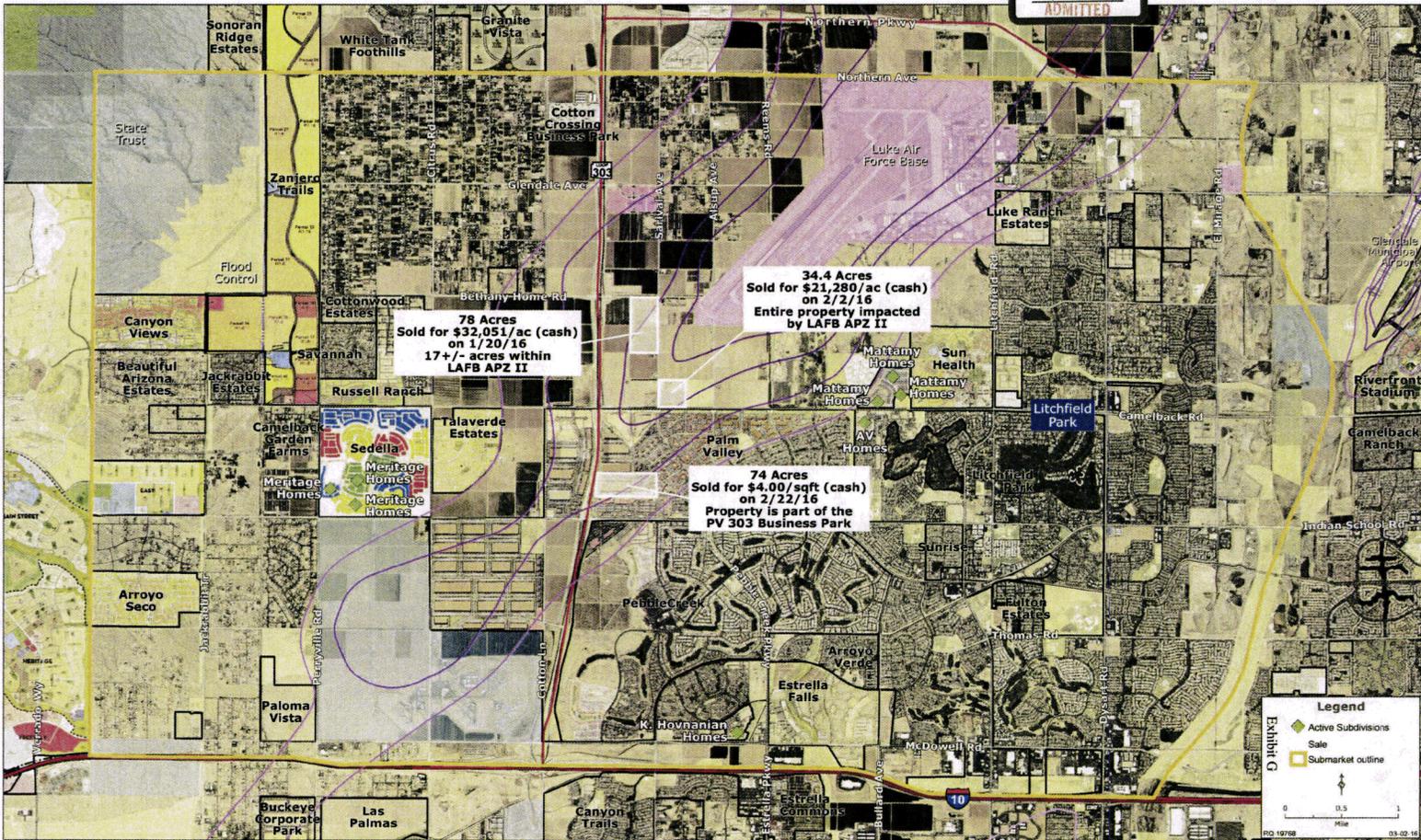
APRIL 2016
HILGARTWILSON
ENGINEER | PLANNING | SURVEY | MANAGE

Exhibit F

NORTH GOODYEAR SUB-MARKET: 2016 MARKET ACTIVITY

Mike Schwab | Ryan Semro | 480.483.8100 | www.landadvisors.com

EXHIBIT
MWD-7
ADMITTED



NORTH GOODYEAR SUB-MARKET

Finished and Partially Improved Production Lot Inventory (45' - 100' Width) Status

Updated: 3-7-16 (Belfiore Survey Date 2/17/16 - 2/26/16)

Builder or Owner	Subdivision	Lot		Finished		Partially Improved	Comments
		Width	Depth	Active	Inactive		
Meritage Homes	La Paz/Cadiz at Sedella	75	135	41			4 sales / month YTD 2016
K Hovnanian	Artisan at Palm Valley	60	120	10			
Meritage Homes	Del Mar/Molina at Sedella	65	130	11			
Av Homes	The Villas at Litchfield Park	80	140	37			3.0 sales / month YTD 2016
Mattamy	Canyons at Palm Valley N	60	125	25			
Mattamy	Reserve at Palm Valley N	70	130	31			3.5 sales / month YTD 2016
Meritage Homes	Vino/Almeria at Sedella	100	145	33			
Mattamy	Estates at Palm Valley N	80	135	48			
AV Homes	Reserve at Litchfield Park	110	150		32		
SCC-Canyon II LLC	Village at Litchfield Park	70	135		29		Investor
Meritage Homes	Sedella Phs 2B	65	130			105	Final Plat Recorded
Meritage Homes	Sedella Phs 2C	90	140			75	Final Plat Recorded
8 Active Subdivision Inventory				236	61	180	477
New Inventory Projected to be Selling Homes in 2016				32	Dec-15	Feb-15	Total Active, Inactive and Future
Total Lot Inventory				268	305	493	Lot Inventory
(Average Net Sales per Month)				20.00	22.5	26.67	
Months Supply of Lot Inventory				13.4	13.6	18.5	
Median Base Home Price				\$337,195	\$328,740	\$317,490	
Net New Build Median Home Price				\$328,865	\$324,390	\$307,990	

Notes: None

FUTURE LOT INVENTORY

	# Lots	Width	Depth	Owner or Parcel	Project
	0				
Final Plat Approved (UC)	0	TOTAL			
	# Lots	Width	Depth	Owner or Parcel	Project
	98	53	115	MWD / Sunbelt	Windrose
	91	58	115	MWD / Sunbelt	Windrose
	119	65	120	MWD / Sunbelt	Windrose
	119	70	125	MWD / Sunbelt	Windrose
	151	65	130	Parcel 3B	Sedella
	119	75	135	Parcel 3C	Sedella
	63	90	140	Parcel 3A	Sedella
Final Plat Approval Pending	760	TOTAL			
	# Lots	Width	Depth	Owner or Parcel	Project
	113	45	110	MWD / Sunbelt	Windrose
	95	50	120	MWD / Sunbelt	Windrose
	58	53	115	MWD / Sunbelt	Windrose
	116	60	120	MWD / Sunbelt	Windrose
	163	65	130	Parcel 2B	Sedella
	70	75	135	Parcel 2A	Sedella
	75	90	145	Parcel 2C	Sedella
	97	65	130	Parcel 1	Russell Ranch
	72	55	125	Parcel 2	Russell Ranch
	95	55	125	Parcel 3	Russell Ranch
	69	100	135	Parcel 4	Russell Ranch
	191	53	120	Parcels 1 & 5	Arroyo Seco
	113	58	120	Parcel 7	Arroyo Seco
	124	63	120	Parcel 2	Arroyo Seco
	225	68	120	Parcels 3 & 6	Arroyo Seco
	115	73	120	Parcels 3 & 8	Arroyo Seco
	48	90	135	Parcels 4 & 9	Arroyo Seco
	36	120	150	Parcels 4 & 9	Arroyo Seco
Preliminary Plats Approved	1,875	TOTAL			
	# Lots	Acres	% of Supply	Owner	Project
	770	443	49.37%	MWD	Zanjero Trails
	804	321		MWD	Windrose
	1,064	318	33.38%	Sarver / Pollack	Canyon Views
	550	162	17.25%	Cowley	Paloma Vista
Zoning Approved & Vested	3,188	1,244	100.00%	TOTAL	

EXHIBIT

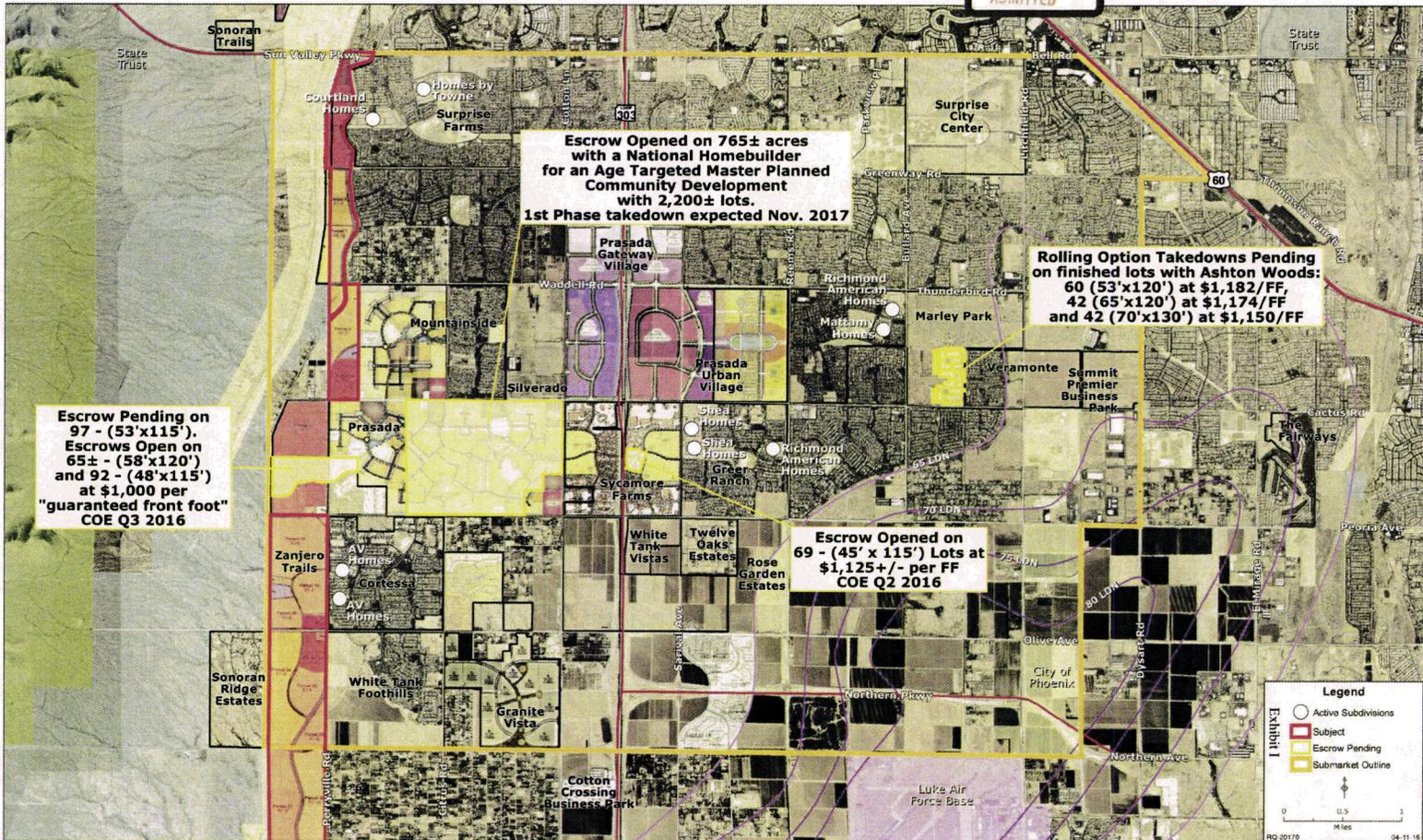
tabbles

MWD-8
ADMITTED

SOUTH SURPRISE SUB-MARKET: 2016 MARKET ACTIVITY

Mike Schwab | Greg Vogel | 480.483.8100 | www.landadvisors.com

EXHIBIT
MWD-9
ADMITTED



SOUTH SURPRISE SUB-MARKET							
Finished and Partially Improved Production Lot Inventory (45' - 100' Width) Status							
Updated: 3/7/16 (Belfiore Survey Dates 2/16/16 - 2/25/16)							
Builder or Owner	Subdivision	Lot		Finished		Partially Improved	Comments
		Width	Depth	Active	Inactive		
Richmond American	Cascade at Marley Park	65	120	29			
Mattamy Homes	Estate Series at Marley Park	75	120	19			
Av Homes	Manor Series at Cortessa	53	115	8			
Homes by Towne	Mesquite Trails at Surprise Farms	50	120	50			
Richmond American	Parkside at Greer Ranch	53	115	14			
Courtland Homes	Ironwood at Surprise Farms	80	130	50			6.5 sales / month YTD 2016
Shea Homes	Greer Ranch - Intrigue	58	115	11			5.0 sales / month YTD 2016
Shea Homes	Greer Ranch - Inspire	63	115	134			4.0 sales / month YTD 2016
DMB	Marley Park Parcel 6	90	160		15		Investor / Developer
Shea Homes	Greer Ranch	53	115		95		Builder Inventory
8 Active Subdivision Inventory				315	110	0	425
New Inventory Projected to be Active in 2016				95	Dec-15	Feb-15	Total Finished and Partially Improved Lot Inventory
Total Lot Inventory				410	451	792	
(Avg. Net Sales per Month)				24.8	32.7	33.3	
Months Supply of Lot Inventory				16.5	13.8	23.8	
Median Base Home Price				\$264,490	\$264,990	\$243,740	
Net New Build Median Home Price				\$253,570	\$255,440	\$237,553	

Notes: Av Homes (63' x 115') Estate Series at Cortessa built-out

FUTURE LOT INVENTORY					
	# Lots	Width	Depth	Owner or Parcel	Project
Under Construction	139	50	115	Elliott Homes	Granite Vista
Under Construction	74	60	120	Elliott Homes	Granite Vista
Under Construction	26	70	130	Elliott Homes	Granite Vista
Final Plat Approved (UC)	239	TOTAL			
	# Lots	Width	Depth	Owner or Parcel	Project
Under Construction	94	48	120	Ashton Woods	Marley Park
Under Construction	60	53	120	Ashton Woods	Marley Park
Under Construction	59	58	120	Ashton Woods	Marley Park
Under Construction	42	65	120	Ashton Woods	Marley Park
Under Construction	42	70	120	Ashton Woods	Marley Park
297 Lots	52	48	120	Parcels 16, 17 & 18	Marley Park
	64	53	120	Parcels 16, 17 & 18	Marley Park
	52	58	120	Parcels 15, 16, 17 & 18	Marley Park
	43	65	120	Parcels 15, 16, 17 & 18	Marley Park
	37	70	130	Parcels 15, 16 & 18	Marley Park
Escrow Pending	92	48	115	Parcel 13A	Zanjero Trails- Terrawest
Escrow Pending	97	53	115	Parcel 12A	Zanjero Trails- Terrawest
Escrow Pending	121	58	120	Parcel 12B	Zanjero Trails- Terrawest
310 Lots	118	53	115	Parcel 13C	Zanjero Trails- Terrawest
	116	75	120	Parcel 12C	Zanjero Trails- Terrawest
Final Plat Approval Pending	1,089	TOTAL			
	# Lots	Width	Depth	Owner or Parcel	Project
	145	55	120	Parcel 2	Zanjero Pass
	131	60	120	Parcel 3	Zanjero Pass
	138	70	125	Parcel 4	Zanjero Pass
	77	80	130	Parcel 5	Zanjero Pass
	179	60	125	Parcel C	Woolf Crossing
	186	65	130	Parcels D & E	Woolf Crossing
	202	70	125	Parcels H & J	Woolf Crossing
	89	85	135	Parcel I	Woolf Crossing
	120	48	115	Parcel 11C	Zanjero Trails- LS Cactus
	131	58	120	Parcel 11A	Zanjero Trails- LS Cactus
	110	68	120	Parcel 11B	Zanjero Trails- LS Cactus
Preliminary Plats Approved	1,508	TOTAL			
	# Lots	Acres	% of Supply	Owner	Project
	1,943	615	25.24%	MWD	Zanjero Trails (County)
	1,357	407		MWD	Zanjero Trails (Surprise)
	1,083	220	8.28%	DMB	Marley Park
	6,909	1,600	52.84%	SLR	Prasada Lakes Village
	1,089	368	8.33%	Elliott Homes	Granite Vista
	695	390	5.32%	Hinton Financial	White Tank Foothills
Zoning Approved & Vested	13,076	3,600	100.00%	TOTAL	

