

#2  
MAR 26 2015



**MEMORANDUM**                      **Planning Division – CC Memo 15-049**

**DATE:**            MARCH 26, 2015

**TO:**                MAYOR AND COUNCIL

**THRU:**            RICH DLUGAS, CITY MANAGER *RD*  
MARSHA REED, ASSISTANT CITY MANAGER *MR*  
JEFF KURTZ, PLANNING ADMINISTRATOR *JK*  
KEVIN MAYO, PLANNING MANAGER *KM*

**FROM:**            LAUREN SCHUMANN, CITY PLANNER *LS*

**SUBJECT:**        RESOLUTION NO. 4853 AUTHORIZING THE EXECUTION OF A PRE-ANNEXATION DEVELOPMENT AGREEMENT FOR MISSION ESTATES LIFT STATION WITH YEG DEVELOPMENTS, INC

**RECOMMENDATION**

Staff recommends Council adopt Resolution No. 4853 authorizing the execution of a Pre-Annexation Development Agreement with YEG Developments, Inc., for Mission Estates Lift Station and authorizing the Mayor to sign the Pre-Annexation Development Agreement as approved by the City Attorney.

**BACKGROUND/DISCUSSION**

YEG Developments, Inc., has requested the City annex ten acres located at the northwest corner of McQueen Road and Sunnydale Drive (about a quarter mile north of Hunt Highway). Along with the City initial zoning of the parcel, a request for rezoning to PAD for single-family residential are forthcoming. Currently the City's sewer main in McQueen Road cannot support the development. In order to provide wastewater service to facilitate the development of the property, the design, installation, and construction of additional public wastewater transmission facilities are necessary.

The developer has requested a Pre-Annexation Development Agreement to address the wastewater service issues prior to annexation. The developer has agreed to pay the entire cost associated with the design, construction, and installation of the wastewater public infrastructure identified as the Mission Estates Lift Station, per the plans attached including oversizing the lift station to accommodate future development in the area. Exhibit C, states the lift station will serve the project's 26 lots and an additional 245 lots for future development. The developer will

March 26, 2015

convey to the City ownership in land area identified on the wastewater infrastructure plans, and a one-time lump sum payment of \$41,805, which estimates the City's cost to operate and maintain the infrastructure for three years.

**FINANCIAL IMPLICATIONS**

In exchange for the Developer's payment, the City shall be responsible for all cost associated with the operation and maintenance of the wastewater infrastructure, and releases the Developer from future operation and maintenance.

**PROPOSED MOTION**

Move to adopt Resolution No. 4853 authorizing the execution of the Pre-Annexation Development Agreement with YEG Developments, Inc., for Mission Estates Lift Station and authorizing the Mayor to sign the Pre-Annexation Development Agreement as approved by the City Attorney.

**Attachments**

1. Resolution No. 4853
2. Development Agreement

RESOLUTION NO. 4853

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA (THE CITY) APPROVING A PRE-ANNEXATION AGREEMENT BETWEEN THE CITY OF CHANDLER AND YEG DEVELOPMENTS, INC. (YEG) AND BRADLEY DANIELS, ROBERTA DANIELS AND DIANE DANIELS (collectively "OWNER")(collectively "PARTIES")

**RECITALS:**

WHEREAS, Owner owns approximately 10.04 acres of land at the northwest corner of South McQueen Road and East Sunnydale Drive in Maricopa County and is under contract to sell said property to YEG, which YEG wishes to develop; and

WHEREAS, the Parties wish to enter into an agreement in order to facilitate annexation of the property for future development within the City of Chandler and to provide for future reimbursement from benefitted property owners relating to the installation of certain wastewater infrastructure; and

WHEREAS, Section 51-21 of the City Code of the City of Chandler authorizes reimbursement for certain wastewater infrastructure installed by an owner or developer; and

WHEREAS, A.R.S. § 9-500.05 authorizes pre-annexation agreements for purpose of addressing annexation issues.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Chandler, Arizona, hereby approves the Pre-Annexation Agreement between the City of Chandler and YEG and OWNERS in the form attached hereto.

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this \_\_\_\_ day of \_\_\_\_\_, 2015.

ATTEST:

\_\_\_\_\_  
CITY CLERK

\_\_\_\_\_  
MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. \_\_\_\_\_ was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the \_\_\_\_\_ day of \_\_\_\_\_, 2015, and that a quorum was present thereat.

\_\_\_\_\_  
CITY CLERK

APPROVED AS TO FORM:

\_\_\_\_\_  
CITY ATTORNEY (*K. J. M.*)



BURCH & CRACCHIOLO

BRIAN GREATHOUSE  
DIRECT LINE: 602.234.9903  
DIRECT FAX: 602.343.7903  
E-MAIL: BGREATHOUSE@BCATTORNEYS.COM

March 5, 2015

K. Scott McCoy  
Assistant City Attorney  
City of Chandler  
175 S. Arizona Avenue, 2<sup>nd</sup> floor  
Chandler, Arizona 85225

RE: YEG Developments, Inc.  
DVR14-0028

Dear Scott:

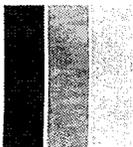
Enclosed are two executed originals of the Pre-Annexation and Development Agreement.  
Please let us know if you need any additional information.

Very truly yours,  
**BURCH & CRACCHIOLO, P.A.**



Brian D. Greathouse

BDG/jlc  
Enclosures  
c: David De La Torre (via email)  
Art Valerio (via email)



Burch & Cracchiolo, P.A.  
702 E. Osborn Rd., Suite 200 • Phoenix, AZ 85014  
Main: 602.274.7611 • Fax: 602.234.0341

BCATTORNEYS.COM

When recorded, return to:

K. Scott McCoy  
Assistant City Attorney  
City of Chandler  
175 South Arizona Avenue  
2nd Floor  
Chandler, Arizona 85225

**PRE-ANNEXATION AND DEVELOPMENT AGREEMENT**

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This Pre-Annexation and Development Agreement (“Agreement”) is entered into this \_\_\_\_ day of \_\_\_\_\_, 2015, by and between the CITY OF CHANDLER, Arizona, an Arizona municipal corporation (“City”), YEG DEVELOPMENTS, INC. (“Developer”), a Canadian Corporation, BRADLEY DANIELS and ROBERTA DANIELS, and DIANE M. DANIELS, as Trustee of the Eddie L. Daniels and Diane M. Daniels Revocable Living Trust, dated July 10, 1992 (collectively the “Owner”). The City, Developer and Owner are collectively, the “Parties”.

**RECITALS**

A. Owner holds fee simple title to approximately ten and four hundredths (10.04) gross acres of land (“Property”), which is located in Maricopa County, Arizona (“County”), legally described in the attached **Exhibit A**, and depicted in attached **Exhibit B**. The Property is situated at the northwest corner of South McQueen Road and East Sunnydale Drive. Developer has an interest in and intends to purchase and develop the Property.

B. Subject to the terms and conditions of this Agreement, Developer may desire to annex into the City’s municipal limits that portion of the Property which is within unincorporated Maricopa County (approximately 10 acres) and process applications in the City requesting (for the entire property) Planned Area Development zoning (“PAD”), Preliminary Development Plan (“PDP”) and Preliminary Subdivision Plat (“Plat”) approvals (collectively, “PAD, PDP and Plat”).

C. City may desire to annex the Property in accordance with A.R.S. §9-471 and is willing to process Developer’s request for annexation and applications for PAD, PDP and Plat (collectively, the “Developer’s Applications”) in accordance with applicable law and the terms and conditions of this Agreement.

D. The Parties have determined it may be in their best mutual interest to annex the Property into City’s municipal limits and, subject to the final and effective adoption of the Developer’s Applications, for Developer to process the PAD, PDP, Plat and other approvals in the City rather than the County.

E. The Parties acknowledge that due to conditions of the Property and the depth of the City’s sewer main in McQueen Road, a direct gravity flow connection to City public wastewater transmission facilities is not available and in order to provide wastewater treatment to facilitate the development of the Property the design, installation and construction of additional public wastewater transmission facilities are necessary.

F. The Parties desire to enter into this Agreement for the purpose of outlining and setting forth certain obligations and commitments of the Parties relative to the contemplated development of the Property and are entering into this Agreement pursuant to the provisions in A.R.S. §9-500.05 in order to facilitate annexation of the Property for future development and to provide for a procedure to prevent the proposed annexation from becoming effective if the Developer's Applications are not approved subject to conditions that are acceptable to the Developer.

G. The Parties neither desire nor intend that this Agreement shall in any way affect, hinder or interfere with the ability of City's governing body (the "City Council") (i) to approve or deny the annexation and/or PAD, PDP, and Plat applications and/or (ii) to impose conditions of approval in connection with the approval of PAD, PDP and Plat applications.

NOW, THEREFORE, in consideration of the foregoing premises and agreements herein, the Parties hereto state, confirm and agree as follows:

#### AGREEMENT

1. Incorporation of Recitals. The foregoing recitals are hereby incorporated into this Agreement as though fully restated.

2. Initiation of Annexation Processes. At Developer's request, City has initiated proceedings to annex the Property into City's municipal limits. Concurrent with an annexation ordinance for the Property (the "Annexation Ordinance") being introduced for consideration by the City Council, City will also introduce for consideration by the City Council an ordinance for City's proposed initial zoning classification for the Property (the "Equivalency Zoning Ordinance") (collectively, the "Annexation and Equivalency Ordinances").

3. PAD, PDP and Preliminary Plat Applications and Effectiveness. Developer has applied to the City for PAD with PDP zoning and a Preliminary Plat to be applied to the Property. City agrees to process the applications in accordance with applicable law and the terms and conditions of this Agreement. Developer has submitted applications for PAD, PDP and Preliminary Plat prior to the Annexation and Equivalency Ordinances being introduced to the City Council for its consideration, and City shall schedule, advertise, and conduct hearings before the City's Planning & Zoning Commission and the City Council so that Developer's Applications are considered by the City Council concurrent with the Annexation and Equivalency Ordinances. If the City Council approves the Developer's Applications and finally adopts the PAD Ordinance, then the effective date of the PAD Ordinance shall be established as being after the effective date of the Annexation and Equivalency Ordinances.

4. Annexation and Equivalency Ordinances Adoption and Effectiveness. City agrees that at any time prior to the City Council's adoption of the Annexation Ordinance, Developer and/or Owner may withdraw the annexation petition for the Property. In the event the City Council adopts the Annexation Ordinance and Equivalency Ordinances and such Ordinances are not timely rescinded by the City Council or challenged by referendum, the Annexation and Equivalency Ordinances will become effective thirty (30) calendar days after being adopted by the City Council as outlined in A.R.S §9-471. In the event (a) the Developer withdraws its PAD, PDP, and Preliminary Plat Applications, (b) the City Council denies Developer's PAD, PDP and/or Preliminary Plat Applications before the Annexation and Equivalency Ordinances have become final and effective, or (c) the Annexation Ordinance, the

Equivalency Zoning Ordinance, the PAD Ordinance and/or Approval of the Preliminary Plat are challenged by reconsideration or referendum, the City Council shall (by Motion for Reconsideration or other appropriate means) schedule, advertise, and conduct a City Council hearing to rescind the Annexation and Equivalency Ordinances prior to the effective date of the Annexation and Equivalency Ordinances. City agrees that at such hearing (for Reconsideration or otherwise), City shall repeal the Annexation Ordinance and the Equivalency Zoning Ordinance.

5. No Affect on PAD and PDP Applications. The Parties agree that nothing in this Agreement shall affect the ability of the City Council to approve or deny the PAD, PDP and Plat applications and/or to impose Conditions of Approval on the City's approval of the PAD, PDP and Plat.

6. No Requirement to Proceed. The Parties agree that nothing in this Agreement shall require any of the Parties to proceed with the proposed annexation, the proposed PAD and PDP, the proposed Preliminary Plat, a Final Plat, design, construction and installation of the Wastewater Infrastructure pursuant to below Paragraph 8.a.i or otherwise, and/or development of the Property.

7. Prop. 207 Waivers. On or before the Annexation and Equivalency Ordinances are placed on the City Council's agenda for introduction and tentative approval, Owner shall provide to City a completed "Proposition 207 Waiver" applicable to the Annexation and Equivalency Ordinances in form acceptable to the City's legal counsel. The Parties acknowledge and agree that City may and most likely will record the waiver form. Owner shall also provide to City a separate completed Proposition 207 Waiver form acceptable to City's legal counsel in connection with the PAD and PDP. The Parties acknowledge and agree the City also may, and most likely will, record the waiver form. In the event the Annexation and Equivalency Ordinances and/or the PAD Ordinance are not approved, or are rescinded, repealed or otherwise of no effect, the Parties shall take such steps as are required to release or rescind any applicable Proposition 207 Waiver.

8. Wastewater Public Infrastructure.

a. Wastewater. In the event the Annexation, PAD and PDP are completed and have become final, as a condition precedent to the City providing City wastewater treatment service to the Property, Developer agrees as follows.

i. Design, Construction and Installation. Developer agrees to pay the entire costs associated with the design, construction and installation of the wastewater public infrastructure identified on the Mission Estates Lift Station plans attached hereto as **Exhibit C** ("Wastewater Infrastructure"). Further, Developer agrees to construct and install the Wastewater Infrastructure at the location and in substantial conformance with the Wastewater Infrastructure plans depicted on **Exhibit C**. Developer shall convey to the City ownership in fee to the land area identified on the Wastewater Infrastructure Plans.

ii. Operation and Maintenance. Prior to the issuance of an Approval of Construction from Maricopa County Environmental Services Department, Developer shall make a one-time lump sum payment to the City in the amount of Forty-One Thousand Eight Hundred Five dollars (\$41,805.00), which represents

the City's estimated cost to operate and maintain the Wastewater Infrastructure for a period of three (3) years from the date of City acceptance ("O & M Fee") of the Wastewater Infrastructure. In exchange for Developer's payment of the O & M Fee, the City shall be responsible for all costs associated with the operation and maintenance of the Wastewater Infrastructure and releases Developer from future operation and maintenance obligations relating to the Wastewater Infrastructure. Notwithstanding the foregoing, the City shall provide sewer service to structures within the Property upon the same terms and conditions as those services are provided to other real properties in the City.

iii. Acceptance of Wastewater Infrastructure. The City shall own, operate, and maintain the Wastewater Infrastructure improvements following City's acceptance thereof, subject to Developer's warranty obligations as provided in this Paragraph 8.a.iii. The one-year Wastewater Infrastructure warranty shall commence as of the date the City delivers its written notice of acceptance of the Wastewater Infrastructure. The City shall give written notice to Developer of any warranty claims at least thirty (30) days prior to the expiration of the applicable one-year warranty period otherwise any claims received thereafter shall not be effective and Developer shall have no obligation with respect thereto.

iv. Wastewater Infrastructure Reimbursement. To the extent the Wastewater Infrastructure improvements constructed and installed by Developer are over-sized above and beyond the needs of the Property, at Developer's written request to City, which request must be made no later than one hundred eighty (180) calendar days from the date of the City's written notice of acceptance of the Wastewater Infrastructure, the City shall enter into an Agreement for Reimbursement of Offsite Construction Costs with Cost Determination in a form substantially similar to **Exhibit D**, attached hereto and incorporated herein by reference.

9. City Services. The City shall provide all municipal services to the Property to the same extent and upon the same terms and conditions as those services are provided to other real properties in the City, except as otherwise provided herein.

10. Assignment. The provisions of this Agreement are binding upon and shall inure to the benefit of the Parties, and all of their successors in interest and assigns; provided, however, that Owner's and Developer's rights and obligations hereunder may be assigned, in whole or in part only to a person or entity that has acquired title to all or a portion of the Property and only by a written instrument recorded in the Official Records of Maricopa County, Arizona, expressly assigning such rights and obligations. In the event of a complete or partial assignment by Owner or Developer, all of Owner's or Developer's rights and obligations hereunder shall terminate effective upon the assumption by Owners' or Developer's assignee of such rights and obligations.

11. Miscellaneous.

a. Good Standing; Authority. Each of the Parties represents and warrants to the other that it is duly formed and validly existing under the laws of Arizona and that the individual(s) executing this Agreement on behalf of their respective Party is authorized and empowered to bind the Party on whose behalf each such individual is signing.

b. Default and Remedies. In the event City is in default hereunder, Developer and/or Owner shall have all remedies available at law or in equity (including expedited equitable relief); whether under this Agreement or otherwise.

c. Governing Law. This Agreement shall be governed by and construed under the laws of the State of Arizona. This Agreement shall be deemed made and entered into in Maricopa County, Arizona.

d. Development Agreement. This Agreement is intended to be a "Development Agreement" within the meaning of A.R.S. §9-500.05.

e. Waiver. No waiver by any Party of a breach of any of the terms or conditions of this Agreement shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term or condition contained herein.

f. Severability. In the event that any phrase, clause, sentence, paragraph, or other portion of the Agreement shall be illegal, null or void or against public policy, for any reason, or shall be held by any court of competent jurisdiction to be illegal, null or void or against public policy, the remaining portions of this Agreement shall not be affected thereby and shall remain in full force and effect to the fullest extent permissible by law and the Parties will negotiate diligently in good faith for such amendments of this Agreement as may be necessary to achieve its intent, notwithstanding such invalidity or unenforceability.

g. Attorneys' Fees. If any judicial proceeding is initiated by any Party hereto with respect to this Agreement, the prevailing Party shall be entitled to recover, in addition to any other relief to which it is entitled, its costs and expenses incurred in connection with such legal proceeding, including, without limitation, its reasonable attorneys' fees.

h. Notices. All notices, demands or other communications given hereunder shall be in writing and shall be deemed to have been fully delivered upon personal delivery or as of the second business day after mailing by United States Mail, postage prepaid, by Certified Mail, return receipt requested, addressed as follows:

To City: City Manager  
City of Chandler  
175 Arizona Avenue  
Fifth Floor  
Chandler, AZ 85225-5540

Copy to: City Attorney  
City of Chandler  
175 Arizona Avenue  
Second Floor  
Chandler, AZ 85225-5540

To Developer: Art Valerio  
YEG Developments, Inc.  
14027-127 St.  
Edmonton, AB T6V 1E7

Copy to: Ed Bull  
Burch & Cracchiolo, P.A.

702 E. Osborn Rd., Suite 200  
Phoenix, AZ 85014

To Owner: Diane Daniels  
26412 S. McQueen Rd.  
Chandler, AZ

Notice of address may be changed by any Party by giving notice to the other Parties in writing of a change of address. Such change shall be deemed to have been effectively noticed five days after mailed by the Party changing address.

- i. Time of Essence. Time is of the essence of this Agreement.
- j. Effective Date. This Agreement is entered into effective as of the date of full execution by the Parties.
- k. Recordation. No later than ten (10) days after the effective date, the City will record this Agreement in the Official Records of Maricopa County.
- l. Entire Agreement. This Agreement constitutes the entire Agreement between the Parties hereto pertaining to the subject matter hereof and all prior and contemporaneous agreements, representations, negotiations and understandings of the Parties hereto, oral or written, are hereby superseded and merged herein.
- m. Amendments. This Agreement may be amended only by a written agreement fully executed by the Parties.

**[Signatures appear on following pages]**

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

**CITY OF CHANDLER,  
an Arizona municipal corporation**

By: \_\_\_\_\_  
Mayor

Date: \_\_\_\_\_

ATTESTED TO:

\_\_\_\_\_  
City Clerk

APPROVED BY:

\_\_\_\_\_  
City Attorney *KSM*

STATE OF ARIZONA        )  
  ) ss.  
County of Maricopa        )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by \_\_\_\_\_, in his capacity as Mayor of the City of Chandler, Arizona.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

DEVELOPER:  
YEG DEVELOPMENTS, INC.

By: [Signature]  
ART VALERIO  
PRESIDENT

Date: March 3, 2015

PROVINCE OF ALBERTA )

) ss.

EDMONTON )

Sworn before me at Edmonton in the Province of Alberta, this 3<sup>rd</sup> day of March, 2015, on behalf of YEG DEVELOPMENTS, INC., by Art Valerio, its DIRECTOR President

[Signature]  
Notary Public in the PROVINCE OF ALBERTA

My Commission Expires:

~~Benjamin C. Cairo~~  
Barrister & Solicitor

OWNER:

BRADLEY DANIELS

ROBERTA DANIELS

STATE OF ARIZONA )

) ss.

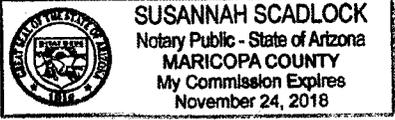
County of Maricopa )

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2015, on behalf of \_\_\_\_\_ and \_\_\_\_\_.



Susannah Scadlock  
Notary Public

My Commission Expires:  
11-24-2018



OWNER:

**DIANE M. DANIELS, as Trustee of the Eddie L. Daniels and Diane M. Daniels Revocable Living Trust, dated July 10, 1992**

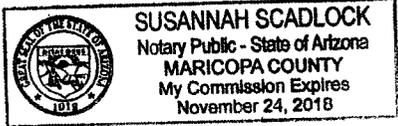
Diane M Daniels  
DIANE M. DANIELS

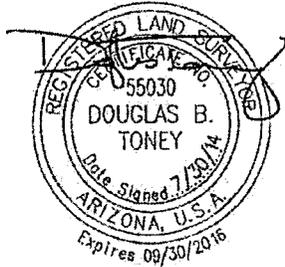
STATE OF ARIZONA     )  
  ) ss.  
County of Maricopa     )

The foregoing instrument was acknowledged before me this 3<sup>rd</sup> day of March, 2015, on behalf of Diane M. Daniels

Susannah Scadlock  
Notary Public

My Commission Expires:  
11-24-2018





**EXHIBIT A**  
**LEGAL DESCRIPTION**  
**MISSION ESTATES – ANNEXATION PARCEL**

THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 2 SOUTH, RANGE 5 EAST, OF THE GILA SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**COMMENCING** AT THE SOUTHEAST CORNER OF SAID SECTION 34, BEING A MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION BRASS CAP IN HAND HOLE, FROM WHICH THE EAST QUARTER CORNER OF SAID SECTION 34, BEING A CITY OF CHANDLER BRASS CAP IN HAND HOLE, BEARS NORTH 00°45'14" EAST, A DISTANCE OF 2643.86 FEET;

**THENCE** NORTH 00°45'14" EAST, ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 34, A DISTANCE OF 991.45 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH HALF OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 34, SAID POINT BEING THE **POINT OF BEGINNING**;

**THENCE** NORTH 89°54'42" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 1323.81 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 34;

**THENCE** NORTH 00°45'15" EAST, ALONG SAID WEST LINE, A DISTANCE OF 330.48 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 34, SAID NORTH LINE ALSO BEING THE SOUTH LINE OF TRACT L, FIELDSTONE ESTATES, ACCORDING TO BOOK 583 OF MAPS, PAGE 8, MARICOPA COUNTY RECORDS;

**THENCE** SOUTH 89°54'23" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 1323.81 FEET TO A POINT ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 34;

**THENCE** SOUTH 00°45'14" WEST, ALONG SAID EAST LINE, A DISTANCE OF 330.36 FEET TO THE **POINT OF BEGINNING**.

SAID PARCEL CONTAINS 437,387 SQUARE FEET OR 10.0410 ACRES, MORE OR LESS.



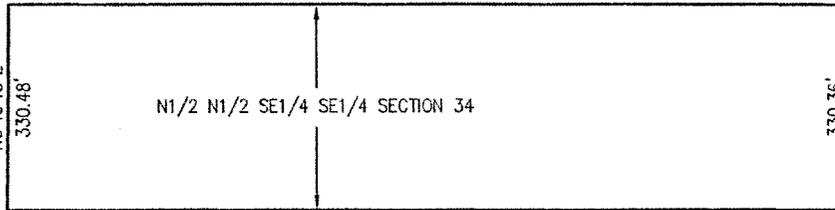
**EXHIBIT "B"  
TO PADA**

EAST QUARTER CORNER  
SECTION 34, T.2S, R.5E  
FOUND C.O.C. BRASS  
CAP IN HAND HOLE

FIELDSTONE ESTATES  
BOOK 583 OF MAPS,  
PAGE 08, M.C.R.

SANTAN VISTA  
UNIT 3 - PHASE 3  
BOOK 690 OF MAPS,  
PAGE 18, M.C.R.

N0°45'15"E  
330.48'



1322.05'

(BASIS OF BEARING)

330.36'

N00°45'14"E 2,643.86'

MCQUEEN RD

N89°54'42"W 1323.81'

SUNNYDALE DR

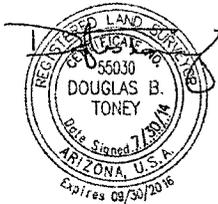
POINT OF  
BEGINNING

TOTAL AREA  
437,387 SQ.FT. OR  
10.0410 ACRES,  
MORE OR LESS

UNSUBDIVIDED

991.45'

SOUTHEAST CORNER  
SECTION 34, T.2S, R.5E  
FOUND M.C.D.O.T. BRASS  
CAP IN HAND HOLE  
POINT OF COMMENCEMENT



SHEET 1 OF 1	DATE:	EXHIBIT 'A'		
		MISSION ESTATES - ANNEXATION PARCEL		
	7/30/14	BY: DT	CHK: DT	QC: DT
		BCG PROJECT NO: 050001-01 TASK: 001		
		CLIENT REF NO:		

**Bowman**  
CONSULTING

1205 W Washington St, #108  
Tempe, AZ 85281  
Phone: (480) 628-8830  
Fax: (480) 628-8841  
www.bowmanconsulting.com

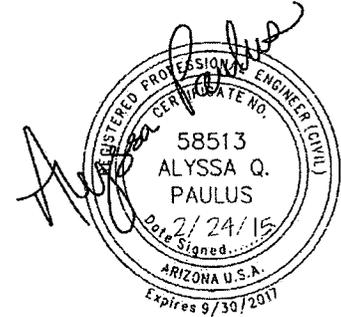
# Exhibit C: Wastewater Infrastructure

050001 – Mission Estates

## Preliminary 30% Lift Station Design

Initially, the lift station will serve 26 lots. An additional 245 lots, based off of 3.5 du/ac, will be added in the future. According to the Chandler 2008 Master Plan for rural lots, there are on average 3.23 persons per household. The total number of lots and total population are summarized in the following table.

Phase	Number of lots	Population	ADWF (gpm)	PDWF (gpm)	PWWF (gpm)
Initial	26	84	5	71	78
Final	271	875	49	193	212



Title 18 specifies a unit average dry-weather flow of 80 gallons per day per person. The total average dry-weather flow (ADWF) for each phase is summarized in the previous table. According to Title 18, the peak dry-weather flow (PDWF) for a lift station serving less than 600 single family dwelling units is to be calculated from one of the following two expressions. The second expression gives slightly greater PDWFs for 2.81 persons per household.

- $PDWF = 17 (\text{dwelling units})^{0.42}$
- $PDWF = 11.2 (\text{population})^{0.42}$

According to Title 18, the infiltration and inflow can be calculated by either a percentage of PDWF or a specified aerial flow rate. For the current calculations, the infiltration and inflow is taken to be 10 percent of the PDWF. The infiltration and inflow is added to the PDWF to obtain the peak wet-weather flow (PWWF). The PWWFs for the two phases are summarized in the previous Flow Summary Table.

The pumps should be selected to deliver a flow greater than the PWWF. In addition Title 18 requires that the flow velocity in the force main be between 3 and 7 feet per second (fps). The following table summarizes lift station and force main calculations developed for the site.

Manhole Dia (ft)	Initial Phase					Final Phase				
	Pipes	# Pumps	$Q_1$ (gpm)	$V_1$ (fps)	$\frac{h_1}{100'}$	Pipes	# Pumps	$Q_2$ (gpm)	$V_2$ (fps)	$\frac{h_2}{100'}$
8'	1 – 4"	2	130	3.11	1.21	1 – 4"	3	260	6.22	4.35

This design consists of a 4-inch diameter force main and two 130 *gpm* submersible wastewater pumps for the initial phase. The pump size capacity is driven by the minimum velocity requirement through the 4-inch force main. For the final phase an additional 130 *gpm* pump may

be installed to provide 260 gpm capacity. This arrangement provides one standby pump for each phase. The 260 gpm capacity will exceed the City's suggested ultimate build out capacity of 250 gpm.

This alternative provides 40 percent excess capacity for the initial phase and 20 percent excess capacity for the final phase. It is recommended that the PWWF and lift station capacity be reevaluated during any intermediate or final build out of the area to take into consideration the actual number of lots and population density that the lift station will serve.

Title 18 requires that a standby power source be provided for lift stations receiving an ADFW of more than 10,000 *gpd*. This equates to an ADFW of about 7 *gpm*. Therefore, a generator should be provided for this site.

Applicable values have been used to estimate the pump horsepower and sump volume since this provides a measure of conservatism. For the length of the force main, take  $L \approx 90'$  so  $h_f \approx 90(4.35)/100 = 3.92'$ . Add about 25% for minor losses so  $h \approx 3.92(1.25) = 4.89'$ . Assume  $\Delta z \approx 20'$  so  $H \approx 25'$ . The maximum power requirement is about

$$\dot{W} = \frac{\gamma QH}{550\eta} = \frac{62.4(130)25}{550(0.45)448.831} = 1.8 \text{ hp}. \text{ Therefore the pumps should be equipped with}$$

$\dot{W} = 2 \text{ hp}$ . The generator should be rated at 15 to 20 kilowatts to assure adequate capacity to start the pumps.

The sump volume satisfying Title 18 requirements can be written as  $Vol = \frac{15Q}{N\phi}$ . For the initial

duplex station use  $Q = 130 \text{ gpm}$ ,  $N = 2$  pumps, and  $\phi = 4$  starts per hour per pump. Therefore,

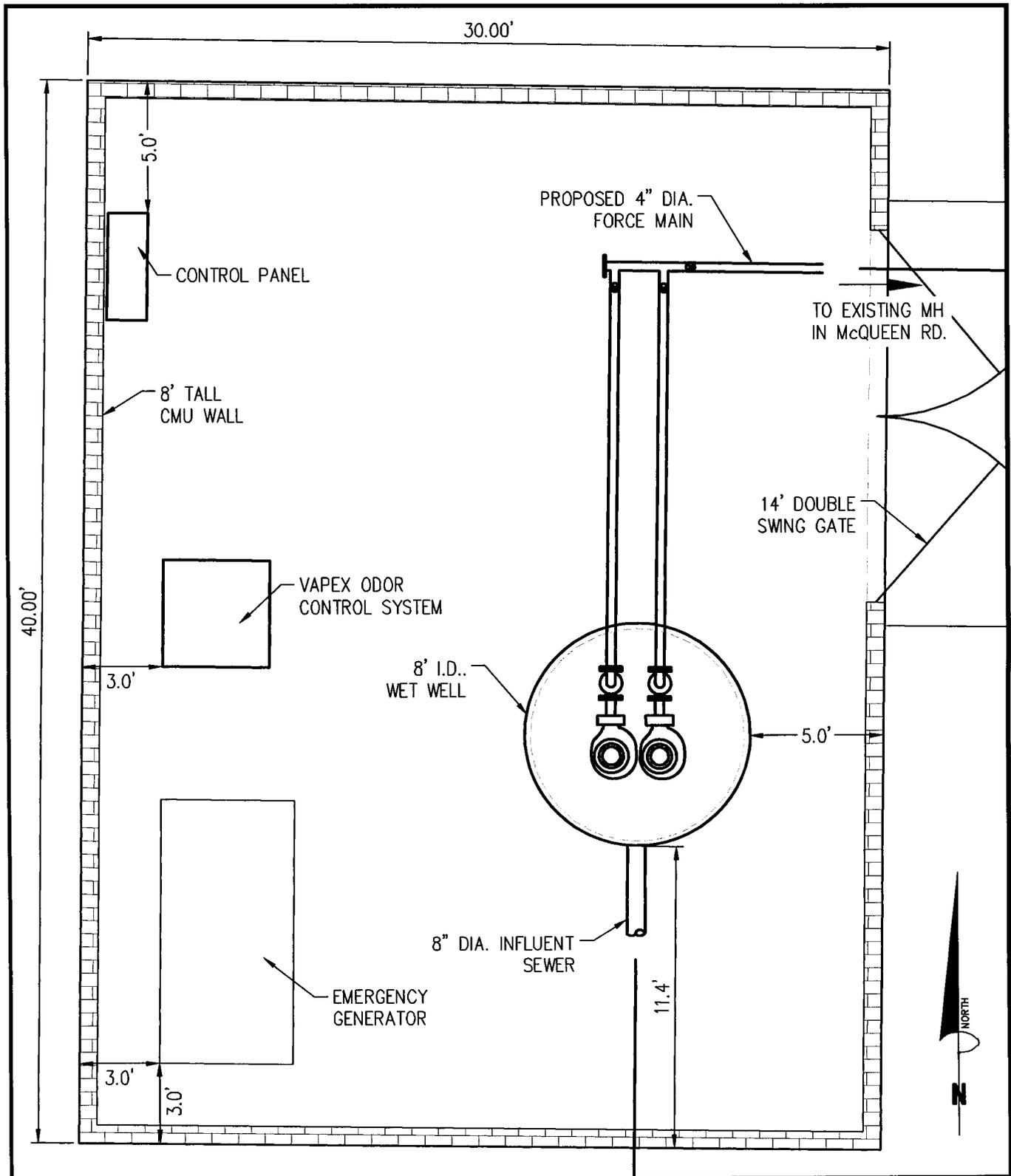
$$Vol = \frac{15(130)}{2(4)} = 243.75 \text{ gal} = 32.58 \text{ ft}^3. \text{ For } 9'' \text{ between the on and off levels, the required}$$

manhole diameter is  $\sqrt{\frac{32.58(4)}{.75\pi}} = 7.44'$ . Assume a 8' diameter manhole will be used. As an

initial estimate, the bottom of the sump should be located about 6' below the invert of the influent sewer. This will allow adequate depth for pump submergence, on-off levels, alarm levels, and a buffer volume to allow for high level reaction time.

Since it is likely that the wastewater residence time within the sump will exceed 30 minutes, Title 18 requires that some means be provided to prevent excessive hydrogen sulfide formation within the sump. Many options are available to accomplish odor control; final design of the odor control system will be provided with subsequent plans.

A preliminary site layout for the lift station and cross section is provided. The layout includes the lift station, a pump control panel, and an emergency generator. The site is to be enclosed within an 8' high block wall with east opening double gates. There is also space allocated for Vapex odor control equipment which will be designed by others.



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**Mission Estates**

Chandler, Arizona

**30% Design Lift Station Site**

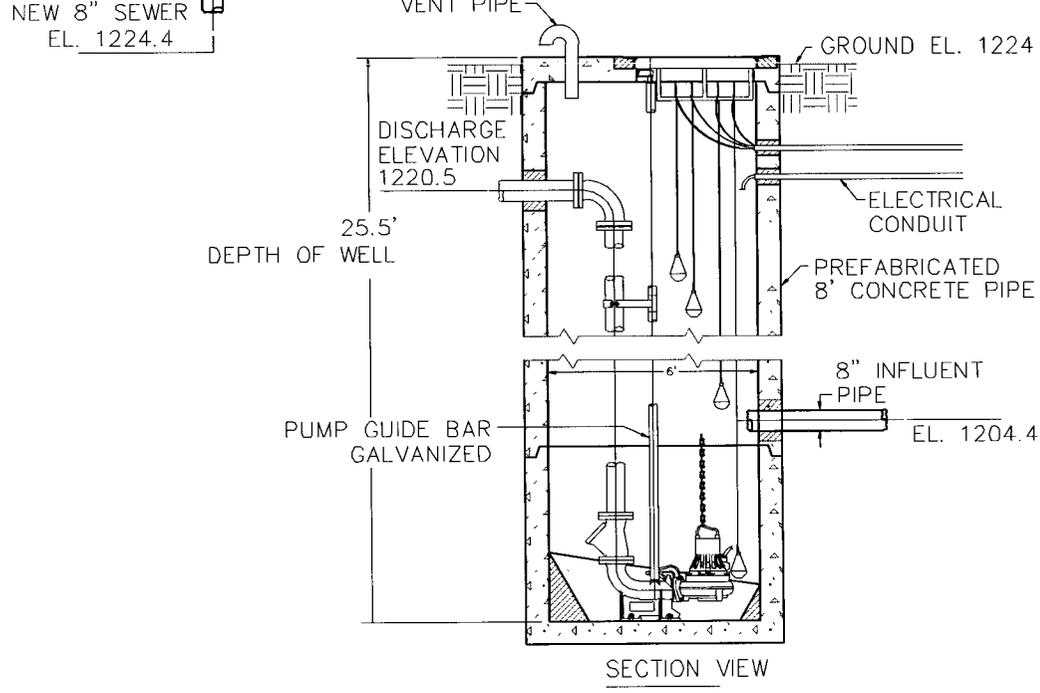
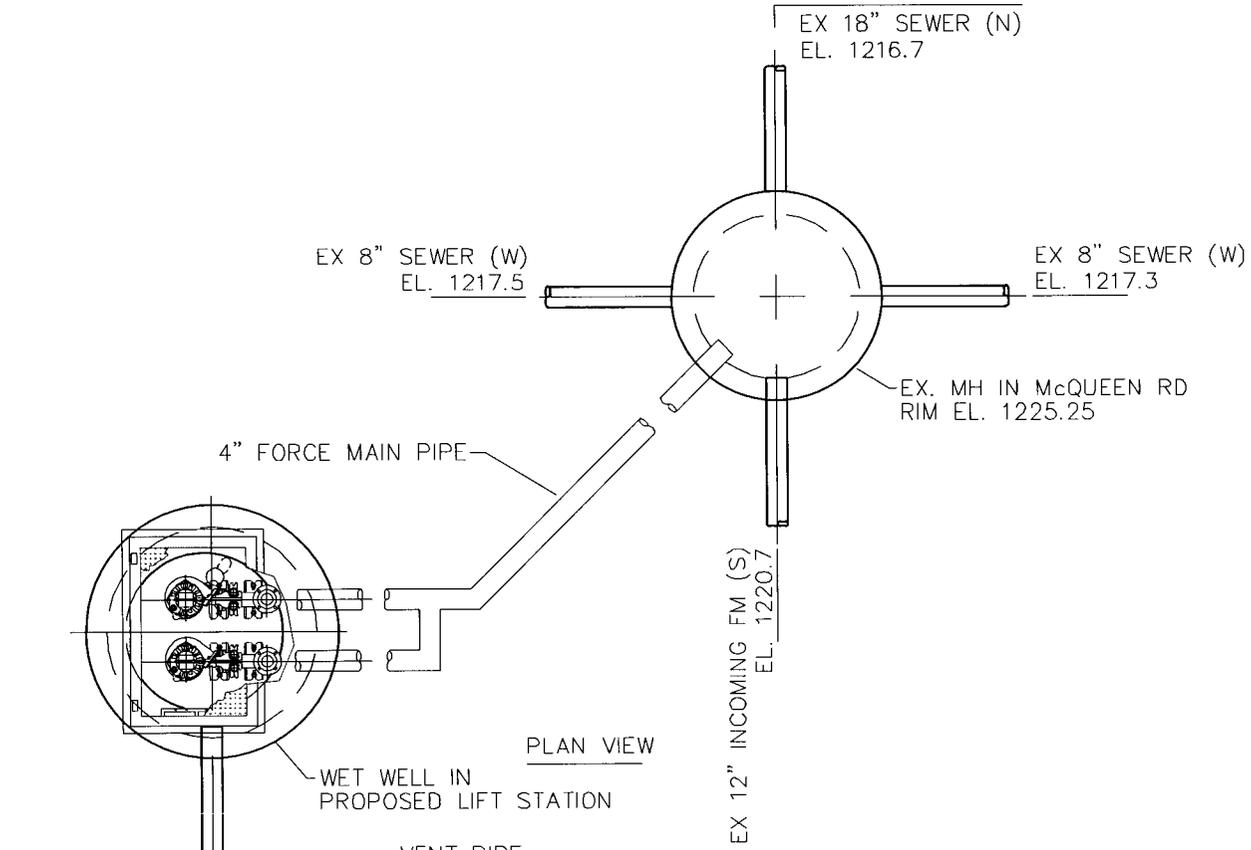
JOB # 050001

DATE 2/20/15

SCALE 1"=5'

DRAWN ski

SHT 1 OF 1



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**Mission Estates**  
 Chandler, Arizona  
**30% Design Lift Station Wet Well**

JOB #	050001
DATE	2/20/15
SCALE	N.T.S.
DRAWN	skt
SHT	1 OF 1

**EXHIBIT "D"**

**AGREEMENT FOR REIMBURSEMENT OF OFFSITE  
CONSTRUCTION COSTS  
AGREEMENT NO. \_\_\_\_\_**

THIS AGREEMENT made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_\_ by and between the CITY OF CHANDLER, a municipal corporation of the State of Arizona, hereafter designated as "City" and \_\_\_\_\_, hereafter designated as "Developer".

**RECITALS:**

A. Developer has paid the costs of constructing offsite sanitary sewer lift station improvements ("Improvements") required by the City in connection with development of certain property in the vicinity of McQueen Road.

B. Developer desires to enter into an agreement with City for reimbursement of costs incurred for construction of the Improvements, the value of which exceeds Developer's improvement obligations.

NOW, THEREFORE, it is agreed as follows:

1. The Improvements have been constructed.
2. Developer has paid all construction costs, including but not limited to right-of-way easement, legal, engineering and energization, which were required to complete the Improvements. The Improvements eligible for cost reimbursement are described on Exhibit "A" attached hereto and incorporated herein by this reference.
3. City has approved, accepted and acquired ownership of the Improvements. All costs for maintenance and power became the responsibility of the City upon such acceptance. The City agrees to provide sewer services to the area. All revenues collected by the City for said service shall belong to the City. All provisions of the City of Chandler Code and Ordinances, and amendments thereto, applicable to sewer services inside and outside the City of Chandler boundaries, including all charges therefore, shall apply to service provided by the sewer main.
4. The Improvements will serve the properties depicted on Exhibit "B", which are divided into "Area 1" and "Area 2". Area 1 consists of Developer's project of approximately ten and seven tenths (10.7) acres as described in Exhibit "A" ("Area 1") and an additional approximately seventy (70) acres representing Area 2 and as described on Exhibit "B" ("Area 2") for a total combined acreage of Area 1 and Area 2 of approximately eighty and seven tenths (80.7) acres.
5. The approved total cost of the Improvements is \$\_\_\_\_\_. The portion of the total costs allocated to Area 1 is \$\_\_\_\_\_.

allocated to Area 2 is \$ \_\_\_\_\_. The Developer's pro rata share of the Area 1 cost is \$ \_\_\_\_\_ of the total cost. The Developers' pro rata share of Area 2 cost is \$ \_\_\_\_\_.

6. After deducting the Developers' pro rata share of the costs, the total cost which is reimbursable to the Developer under the City Code is \$ \_\_\_\_\_. The portion of the reimbursable cost allocated to Area 1 is \$ \_\_\_\_\_. The portion of the reimbursable costs allocated to Area 2 is \$ \_\_\_\_\_.

7. On or before the recordation of a final plat (or issuance of a sanitary sewer construction permit if earlier) for any property in Area 2, City will collect a fee of \$ \_\_\_\_\_ per acre in the development. Acreage shall include property except for any rights of way for McQueen Road, Hunt Highway and any other public rights of way dedicated to the City.

8. In no case shall reimbursement to the Developer exceed \$ \_\_\_\_\_, which is the agreed pro rata share of costs for areas outside of the Developer's Project. The City will pay all money it collects (less the current administrative fee for each transaction which will be retained by the City to cover administrative costs) to Developer as collection agent for Developer and Area 2 owners. Along with each transmittal of funds the City will identify the property acreage, and the recordation number of the final plat to which the payment applies.

9. The areas shown in Exhibits "A" and "B" in no way limit the connections to the Improvements or sewer main, nor is the connection of all parcels within Area 2 guaranteed.

10. Developer may assign its rights under this Agreement upon providing written notification of the assignee's name and address to the Director of Public Works and receipt of his approval. Such approval shall not be unreasonably withheld.

11. This Agreement shall run for a period not to exceed twenty (20) years.

IN WITNESS WHEREOF, we have hereunto set our hand the day and year written above.

City of Chandler

\_\_\_\_\_  
City Engineer

ATTEST:

APPROVED AS TO FORM:

City Clerk

City Attorney