



**CITY OF FAIR OAKS RANCH
AGENDA – CITY COUNCIL REGULAR MEETING**

November 21, 2019, 6:30 PM
City Hall Council Chambers
7286 Dietz Elkhorn, Fair Oaks Ranch

I. OPEN MEETING

- A. Roll Call – Declaration of a Quorum.
- B. Pledge of Allegiance.

II. CITIZENS and GUEST FORUM / PRESENTATIONS

To address the Council, please sign the Attendance Roster located on the table at the entrance of the Council Chamber. In accordance with the Open Meetings Act, Council may not discuss or take action on any item which has not been posted on the agenda. Speakers shall limit their comments to five (5) minutes each.

- A. Citizens to be heard.
- B. Presentation by Studio S Architekts and the City Manager regarding concepts to repurpose the former Police Building and City Hall.

III. CONSENT AGENDA

All of the following items are considered to be routine by the City Council, there will be no separate discussion on these items and will be enacted with one motion. Items may be removed by any Council Member by making such request prior to a motion and vote.

- A. Approval of November 7, 2019 Regular City Council Meeting Minutes. Pgs. 3-5
- B. Approval of a Resolution approving the 2019 Tax Levy Roll. Pgs. 6-9
- C. Approval of changing the December 5, 2019 City Council meeting start time to 6:30 PM to be in compliance with the Home Rule Charter. Pg. 10

IV. DISCUSSION/CONSIDERATION ITEMS

- A. Consideration and possible action authorizing the City Manager to sign a Professional Services Agreement for General Engineering Consultant Services (GEC).
Ron Emmons, P.E., Public Works Director Pgs. 11-31
- B. Consideration and possible action on the approval of site location and style of the Elevated Storage Tank.
Ron Emmons, P.E., Public Works Director Pgs. 32-100
- C. Consideration and possible action establishing an Audit Committee and Charter.
Sarah Buckelew, Director of Finance Pgs. 101-104
- D. Consideration and possible action approving a Resolution approving a depository agreement with Frost Bank.
Sarah Buckelew, Director of Finance Pgs. 105-107
- E. Consideration and possible action approving a Resolution casting votes for candidates for the Board of Directors for Bexar and Comal Appraisal Districts for tax years 2020 and 2021.
Mayor Manitzas and Council Member Koerner Pgs. 108-111

- F. Consideration and possible action on cancelling the January 2, 2020 Council Meeting.
Council Member Patel Pg. 112
- G. Consideration and possible action regarding means and methods for scheduling
Special Called City Council meetings. Tobin Maples, City Manager Pg. 113

V. REPORTS FROM STAFF / COMMITTEES / COUNCIL

- A. Quarterly Financial & Investment Reports. Sarah Buckelew, Director of Finance Pgs. 114-128
- B. Update on Home Rule City Charter Amendment Election Process.
Carole Vanzant, Assistant City Manager Pgs. 129-143

VI. CONVENE INTO EXECUTIVE SESSION

Pursuant to Section 551.101 of the Open Meetings Act, Texas Gov't Code, a quorum of the governing body hereby convenes into closed session:

- A. 551.071 (Consultation with Attorney) - Cause No. 2018-CI-00202; the City of Fair Oaks Ranch, Texas vs Edward I. Hill, Robert E. Heckendorn, Craig M. Luitjen, Roger Fuentes, Wesley A. Pieper, Esther W. Hicks, William A. McDowell, Yolanda D. Ayala, PG Pfeiffer Ranches LLC, Maureen Pfeiffer Stevenson Family Trust.
- B. 551.071 (Consultation with Attorney) - to receive legal advice regarding claims made on behalf of a real property owner against the City's operation of the K-3 Trinity Glen Rose Water Well.
- C. 551.071 (Consultation with Attorney) - to receive legal advice from Special Counsel and the City Attorney regarding the City's ground water rights.

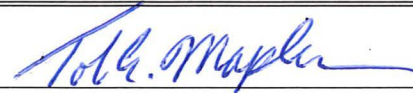
VII. RECONVENE INTO OPEN SESSION

Discussion and possible action on items discussed in Executive Session.

VIII. ADJOURNMENT

Requests for City topic needing additional information/research; or, potential consideration for a future agenda.

Signature of Agenda Approval: _____



I, Christina Picioccio, City Secretary, certify that the above Notice of Meeting was posted on the outside bulletin board at the Fair Oaks Ranch City Hall, 7286 Dietz Elkhorn, Fair Oaks Ranch, Texas, and on the city's website www.fairoaksranchtx.org, both places being convenient and readily accessible to the general public at all times. Said Notice was posted by 6:30 PM, November 18, 2019 and remained so posted continuously for at least 72 hours before said meeting was convened.

The Fair Oaks Ranch City Hall is wheelchair accessible at the side entrance of the building from the parking lot. Requests for special services must be received forty-eight (48) hours prior to the meeting time by calling the City Secretary's office at (210) 698-0900. Braille is not available. The City Council reserves the right to convene into Executive Session at any time regarding an issue on the agenda for which it is legally permissible; pursuant to *Texas Government Code* Chapter 551. Section 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices) and 551.087 (Economic Development).

**CITY OF FAIR OAKS RANCH
CITY COUNCIL MEETING MINUTES
November 7, 2019
7286 Dietz Elkhorn
Fair Oaks Ranch, TX 78015**

I. OPEN MEETING

A. Roll Call – Declaration of a Quorum

Present: Mayor Manitzas, Mayor Pro Tem Elizondo
Council Members: Hartpence, Havard, Koerner, Maxton, and Patel

With a quorum present, the City Council meeting was called to order at 9:30 AM.

B. The Pledge of Allegiance was led by Police Officer Evan Downey.

II. CITIZENS and GUEST FORUM / PRESENTATIONS

A. Citizens to be heard.

1. Rich Nichols, citizen, requested that the council table any action on the agenda item IV G until the next council meeting to allow members of the Home Rule Charter Commission to review recommended changes to the Charter and to provide background regarding the rationale for decision process that went into the creation of the Home Rule Charter.

B. Joanna Merrill, Human Resource Director, introduced the city's newest employee, Joaquin Wilson, Maintenance Worker.

C. Interim Police Chief, Tim Moring, presented Life Saving Awards to Officers Lacey Gonzalez and Allen Paz.

D. Joanna Merrill, Human Resource Director, presented the Employee of the Quarter Award to two Fair Oaks Ranch employees: Summer Fleming, Accountant Manager and Rachel Brown, Building Codes Administrative Assistant.

E. Yvette Reyna, Executive Director of the Boerne Education Foundation & Coordinator of Community Partnerships at Boerne ISD, introduced a new fund raiser that will benefit Boerne schools. The Boerne Education Foundation has partnered with Boerne's Peggy's on the Green Restaurant to donate proceeds from the purchases of slices or whole Chess Pies bought between November 1 and December 20, 2019.

F. Mayor Manitzas and resident committee member, Dan Banks, provided an update on the Transportation Committee joint project between Fair Oaks Ranch, Boerne and Kendall County to develop a regional approach to transportation planning.

III. CONSENT AGENDA

A. Approval of October 10, 2019 Joint City Council and Planning & Zoning Commission Public Hearing Minutes.

B. Approval of October 17, 2019 Regular City Council Meeting Minutes.

C. Approval of October 29, 2019 Special City Council Meeting Minutes.

D. Approval of the second reading of an Ordinance for a Special Use Permit allowing for a commercial equine boarding facility on land currently zoned Neighborhood Residential

(NR) and commonly known as Setterfeld Estates 1A, Lot 1, Comal County Texas (30350 Ralph Fair Road, Fair Oaks Ranch, Texas).

E. Approval of the second reading of an Ordinance amending Chapter 4 “Business Regulations”, Article 4.02 “Solicitors” of the City of Fair Oaks Ranch Code of Ordinances.

The City Secretary noted that corrections had been made to two of the agendas and that these corrections had been provided to Council prior to the meeting and that Council had also been given an updated version of the Special Use Permit Ordinance; the same version approved at the October 17th meeting.

The Mayor presented the Consent Agenda and with no discussion the Consent Agenda was approved with the corrections noted.

IV. DISCUSSION/CONSIDERATION ITEMS

A. Consideration and possible action authorizing the City Manager to sign a Professional Services Agreement with M&S Engineering for engineering design services relative to the emergency generator for the former Police Building

MOTION: Made by Council Member Havard, seconded by Mayor Pro Tem Elizondo to authorize the City Manager to sign a Professional Services Agreement with M&S Engineering for engineering and consulting services at a fee of \$16,000.00.

VOTE: 7-0; Motion Passed.

B. Consideration and possible action to provide input to staff on decision making process for the elevated storage tank site and tank design decision.

After an in depth discussion City Council, by consensus, requested that a table be provided that describes land acquisition considerations and site information to assist in their deliberations. It was further decided that: a decision matrix would not be required and the selection of site location and style of tank would be addressed separately.

C. Consideration and possible action regarding cancelling the December 19, 2019 Council Meeting

MOTION: Made by Council Member Hartpence, seconded by Mayor Pro Tem Elizondo to approve cancelling the December 19, 2019 Council Meeting.

VOTE: 5-1; Motion Passed; Council Member Patel – Nay; Council Member Havard Abstained.

D. Consideration and possible action accepting a private donation of holiday decorations for the purpose of decorating the City Hall Complex.

MOTION: Made by Mayor Pro Tem Elizondo, seconded by Council Member Patel that the City of Fair Oaks Ranch accepts the private donation of holiday decorations for the purpose of decorating the City Hall complex.

VOTE: 7-0; Motion Passed.

E. Consideration and possible action rejecting all bids for the Renovation of the Fair Oaks Ranch Former Police Building

MOTION: Made by Mayor Pro Tem Elizondo, seconded by Council Member Koerner to reject all bids received for the renovation of the Fair Oaks Ranch former police building.

VOTE: 7-0; Motion Passed.

F. Consideration and possible action authorizing the advancement of calling a special election for the re-authorization of the quarter cent local and sales use tax for the maintenance and repair of municipal streets.

MOTION: Made by Council Member Hartpence, seconded by Council Member Havard to authorize the advancement of calling a special election in May 2020 for the reauthorization of the quarter cent local and sales use tax for the maintenance and repair of existing municipal streets.

VOTE: 7-0; Motion Passed.

G. Consideration and possible action on Home Rule Charter amendment submissions.

As requested by Rich Nichols (Section II A 1-Citizens to be Heard) Council was willing to postpone discussion of this item until a future meeting pending a memorandum from legal counsel and any insight/information provided by members of the former Home Rule Charter Commission.

V. REPORTS FROM STAFF/COMMITTEES/COUNCIL

City Secretary, Christina Picioccio, announced that as of the September 19th City Council Meeting, recordings of the meetings are now available on the City website in the agenda center, next to agendas and minutes <http://www.fairoaksranchtx.org/agendacenter>.

VI. CONVENE INTO EXECUTIVE SESSION

City Council did not convene into Executive Session regarding:

- A. 551.071 (Consultation with Attorney) - Cause No. 2018-CI-00202; the City of Fair Oaks Ranch, Texas vs Edward I. Hill, Robert E. Heckendorn, Craig M. Luitjen, Roger Fuentes, Wesley A. Pieper, Esther W. Hicks, William A. McDowell, Yolanda D. Ayala, PG Pfeiffer Ranches LLC, Maureen Pfeiffer Stevenson Family Trust.
- B. 551.071 (Consultation with Attorney) - to receive legal advice regarding claims made on behalf of a real property owner against the City's operation of the K-3 Trinity Glen Rose Water Well.
- C. 551.071 (Consultation with Attorney) - to receive legal advice from Special Counsel and the City Attorney regarding the City's ground water rights.

VII. RECONVENE INTO OPEN SESSION

Not applicable.

VIII. ADJOURNMENT

Council Member Patel requested that a consideration item to cancel the January 2 Council Meeting be placed on the next agenda.

Mayor Manitzas adjourned the meeting at 12:06 PM.

ATTEST:

Garry Manitzas, Mayor

Christina Picioccio, City Secretary



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Approval of a Resolution approving the 2019 property tax levy roll
DATE: November 21, 2019
DEPARTMENT: City Council
PRESENTED BY: Sarah Buckelew, Finance Director

INTRODUCTION/BACKGROUND:

Pursuant to the Texas Property Tax Code, Chapter 26.09(e), after City Council sets the 2019 property tax rate, the levy roll is determined, by the property tax collector, based on said approved property tax rate, and presented to Council for approval: *The assessor shall enter the amount of tax determined as provided by this section in the appraisal roll and **submit it to the governing body of the unit for approval**. The appraisal roll with amounts of tax entered as approved by the governing body constitutes the unit's tax roll.*

City Council, on September 19, set the 2019 property tax rate at \$.3735 on each \$100 taxable valuation of property. See attached 2019 Levy Total report for calculation of Total Levy.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

Compliance with state law.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

M&O Levy @ \$.3395 tax rate:	\$5,620,188*	M&O Tax Revenue Budgeted:	\$5,452,281**
I&S Levy @ \$.0340 tax rate:	<u>562,174*</u>	I&S Tax Revenue Budgeted:	<u>550,931</u>
Total Levy:	\$6,182,362.72	Property Tax Revenue Budgeted:	\$6,003,212

* Levy is calculated at 100% of Total Taxable value without consideration for properties still in dispute with the appraisal review board.

** Based on historical collection rates, the city budgets at 98% collection, and based on a taxable value that accounts for properties still in dispute with the appraisal review board.

LEGAL ANALYSIS:

Approved as to form.

RECOMMENDATION/PROPOSED MOTION:

As approval of the levy roll is required by statute, "I move to approve a resolution approving the City of Fair Oaks Ranch 2019 property tax levy roll of \$6,182,362.72."



Albert Uresti, MPA, PCC
Office of the Tax Assessor - Collector

October 16, 2019

Ms. Sarah Buckelew, Finance Officer
City of Fair Oaks Ranch
7286 Dietz Elkhorn Road
Fair Oaks Ranch, Texas 78015

RE: City of Fair Oaks Ranch – 2019 Tax Roll

Dear Ms. Buckelew:

Enclosed is a summary of values and levies taken from the initial Tax Roll for the City of Fair Oaks Ranch.

Section 26.09(e) of the State Property Tax Code requires the Tax Roll to be approved by the taxing units governing body. Please notify this office, at your earliest convenience, when the tax roll is approved by your governing body.

If you have any question, please contact Mr. Carlos Gutierrez at 210-335-6600.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Uresti", is written over the printed name.

Albert Uresti, MPA, PCC
Tax Assessor-Collector
Bexar County

AU:PH/ea

Handwritten initials "hwp." in black ink are written above the word "Enclosure".

Enclosure

2019 CERTIFIED TAX ROLL AS OF OCTOBER 1, 2019

TAX ASSESSMENT ROLLS OF FAIR OAKS RANCH FOR THE YEAR 2019 SHOW THE FOLLOWING SUMMARIES:

ROLL	NUMBER ACCTS	MARKET VALUE	TAXABLE VALUE	FREEZE LOSS	TOTAL LEVY
REAL PROPERTY	4,275	1,798,381,722	1,644,330,054	.00	6,141,573.55
PERSONAL PROPERTY	194	14,561,670	10,730,249	.00	40,789.17
MOBILE HOME PROPERTY	0	0	0	.00	.00
MINERAL PROPERTY	0	0	0	.00	.00
OTHER PROPERTY	0	0	0	.00	.00
TOTAL	4,469	1,812,943,392	1,655,060,303	.00	6,182,362.72

RATE OF TAXATION ASSESSMENT RATIO 100%

TOTAL TAX RATE 00.373500

ALBERT URESTI, MPA, PCC

TAX ASSESSOR-COLLECTOR BEXAR COUNTY

BY :



A RESOLUTION

APPROVAL OF THE 2019 PROPERTY TAX LEVY ROLL FOR THE CITY OF FAIR OAKS RANCH, TEXAS

WHEREAS, pursuant to Texas Property Tax Code, Vernon's Texas Codes Annotated, Section 26.09(e) the City Council of the City of Fair Oaks Ranch, Texas, must officially approve the tax levy roll of the City of Fair Oaks Ranch, Texas for the year 2019.

NOW, THEREFORE, be it resolved that:

1. The City Council of the City of Fair Oaks Ranch hereby officially approves the 2019 property tax levy roll as required by the Property Tax Code, Vernon's Texas Codes Annotated, Section 26.09(e) in the amount of \$6,182,362.72 based on a tax rate of \$0.3735 per \$100 valuation of a total taxable value of \$1,655,060,303.
2. A signed copy of this Resolution shall be submitted, by the City Secretary, to the city's property tax collector, Bexar County Tax Assessor Collector.
3. This Resolution shall be in full force and effect from and after its passage and approval.

PASSED, APPROVED, AND ADOPTED on this 21st day of November, 2019.

ATTEST:

Garry Manitzas, Mayor

Christina Picioccio, City Secretary



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Approval of changing the December 5, 2019 City Council meeting start time to 6:30 PM to be in compliance with the Home Rule Charter.

DATE: November 21, 2019

DEPARTMENT: Administration

PRESENTED BY: Consent Agenda – Christina Picioccio, City Secretary

INTRODUCTION/BACKGROUND:

The City Council Meeting Rules of Procedure (Resolution 2017-01) indicates City Council shall meet in regular session on each first Thursday in each calendar month beginning at 9:30 AM and the third Thursday in each calendar month beginning at 6:30 PM unless postponed or cancelled for valid reason(s). The City Council, by a majority vote, may reschedule any regular meeting. With this in mind and due to the upcoming holiday season, City Council, on November 7, 2019 cancelled the December 19, 2019 Council Meeting.

After the City Council meeting a review of the City Charter was performed to ensure compliance. Section 3.06 – Meetings states:

The City Council shall hold at least one regular meeting per month at City Hall or other place designated by City Council. *Said meeting to be held no earlier than 6:00 pm local time.*

Upon conferring with the City Attorney, to be in compliance with the City Charter, staff is recommending the December 5, 2019 meeting be changed from 9:30 AM to 6:30 PM.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

1. Compliance with City Charter
2. Allows for the continued cancellation of the December 19, 2019 meeting as previously approved by City Council.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

N/A

LEGAL ANALYSIS:

City Attorney has reviewed the applicable City Charter section and has opined changing the City Council meeting to 6:30 PM on December 5th meets the provision of "*holding one regular meeting a month no earlier than 6:00 pm local time*".

RECOMMENDATION/PROPOSED MOTION:

Consent Agenda – Approval.



CITY COUNCIL CONSIDERATION ITEM
CITY OF FAIR OAKS RANCH, TEXAS
November 21, 2019

AGENDA TOPIC: Consideration and possible action authorizing the City Manager to sign a Professional Services Agreement for General Engineering Consultant Services.

DATE: November 21, 2019

DEPARTMENT: Administration

PRESENTED BY: Tobin Maples, City Manager

INTRODUCTION/BACKGROUND:

The City Council has stated that Responsible Growth Management and Reliable and Sustainable Infrastructure are top priorities in the City's Strategic Plan. Specifically, effective planning, design, and construction of the City's Capital Improvement Program (CIP) and other specialty projects are key elements when it comes to managing the growth and physical development of the community over a defined planning horizon. To address this risk, Council programmed funding in the FY 19-20 budget for General Engineering Consultant Services (GEC). The Professional Services Agreement attached is for a new engagement with Legacy Engineering Group.

As the GEC for the City, Legacy Engineering Group will report directly to the Director of Public Works and will oversee the planning, design, and construction of the adopted Capital Improvement Program and other specialty projects as assigned by the City, inclusive of the framing the criticality and sequencing of projects. Further, the GEC will perform overall program management and administration of the agreement and invoicing. Projects included in the scope of this Agreement will be based on the issuance of Work Authorizations by the City to authorize the GEC to perform the services described in the Work Authorization. The basis of compensation will be as defined in the Agreement or amended by specific Work Authorizations.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

Provides the City with the tools necessary to make informed policy decisions relative to the physical development of the City and the scheduled programming necessary to proactively plan, finance, and maintain reliable and efficient public services.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

Funding for the attached scope of services was approved in the adopted FY 2019-2020 budget.

LEGAL ANALYSIS:

The Professional Services Agreement was written by the City Attorney's office and is the standard contract utilized by the City for contracting professional services with consultants.

RECOMMENDATION/PROPOSED MOTION:

I move to authorize the City Manager to sign a Professional Services Agreement with Legacy Engineering Group for GEC services.

CITY OF FAIR OAKS RANCH
STANDARD PROFESSIONAL SERVICES AGREEMENT

THE STATE OF TEXAS §
 §
BEXAR COUNTY §

This Professional Services Agreement ("Agreement") is made and entered by and between the City of Fair Oaks Ranch, Texas, (the "City") a Texas municipality, and Legacy Engineering Group ("Professional").

Section 1. Duration. This Agreement shall become effective upon execution by the City and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

Section 2. Scope of Work.

(A) Professional shall perform the Services as more particularly described in the Scope of Work attached hereto as Exhibit "A". The work as described in the Scope of Work constitutes the "Project". Unless otherwise provided in the Scope of Work, the anticipated submittal of all Project deliverables is immediately upon completion of the Project.

(B) The Quality of Services provided under this Agreement shall be performed with the professional skill and care ordinarily provided by competent Professionals practicing in the same or similar locality and under the same or similar circumstances and professional license, and as expeditiously as is prudent considering the ordinary professional skill and care of a competent Professional holding the same professional license.

(C) The Professional shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.

(D) The Professional may rely upon the accuracy of reports and surveys provided to it by the City except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

Section 3. Compensation.

(A) The Professional shall be paid in the manner set forth in Exhibit "B" and as provided herein.

(B) *Billing Period:* The Professional may submit monthly, or less frequently, an invoice for payment based on the estimated completion of the described tasks and approved work schedule. Subject to Chapter 2251, Texas Government Code (the "Prompt Payment Act"), payment is due within thirty (30) days of the City's receipt of the Professional's invoice. Interest on overdue payments shall be calculated in accordance with the Prompt Payment Act.

(C) *Reimbursable Expenses:* Any and all reimbursable expenses related to the Project shall be included in the scope of services (Exhibit A) and accounted for in the total contract amount in Exhibit "B". If these items are not specifically accounted for in Exhibit A they shall be considered subsidiary to the total contract amount.

Section 4. Changes to the Project Work; Additional Work.

(A) *Changes to Work:* Professional shall make such revisions to any work that has been completed as are necessary to correct any errors or omissions as may appear in such work. If the City finds it necessary to make changes to previously satisfactorily completed work or parts thereof, the Professional shall make such revisions if requested and as directed by the City and such services will be considered as additional work and paid for as specified under following paragraph.

(B) *Additional Work:* The City retains the right to make changes to the Scope of Work at any time by a written order. Work that is clearly not within the general description of the Scope of Work and does not otherwise constitute special services under this Agreement must be approved in writing by the City by supplemental agreement before the additional work is undertaken by the Professional. If the Professional is of the opinion that any work is beyond that contemplated in this Agreement and the Scope of Work governing the project and therefore constitutes additional work, the Professional shall promptly notify the City of that opinion, in writing. If the City agrees that such work does constitute additional work, then the City and the Professional shall execute a supplemental agreement for the additional work and the City shall compensate the Professional for the additional work on the basis of the rates contained in the Scope of Work. If the changes deduct from the extent of the Scope of Work, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement. Any work undertaken by Professional not previously approved as additional work shall be at risk of the Professional.

Section 5. Time of Completion.

The prompt completion of the services under the Scope of Work is critical to the City. Unnecessary delays in providing services under a Scope of Work shall be grounds for dismissal of the Professional and termination of this Agreement without any or further liability to the City other than a prorated payment for necessary, timely, and conforming work done by Professional prior to the time of termination. The Scope of Work shall provide, in either calendar days or by providing a final date, a time of completion prior to which the Professional shall have completed all tasks and services described in the Scope of Work.

Section 6. Insurance.

Before commencing work under this Agreement, Professional shall obtain and maintain the liability insurance provided for in attached Exhibit C throughout the term of this Agreement and thereafter as required herein.

In addition to the insurance provided for in Exhibit C, Professional shall maintain the following limits and types of insurance:

Professional Liability Insurance: professional errors and omissions liability insurance with limits of liability not less than \$1,000,000 per occurrence covering all work performed by the Professional, its employees, sub-contractors, or independent contractors. If this coverage can only be obtained on a "claims made" basis, the certificate of insurance must clearly state coverage is on a "claims made" basis and coverage must remain in effect for at least two years after final payment with the Professional continuing to furnish the City certificates of insurance.

Workers Compensation Insurance: The Professional shall carry and maintain during the term of this Agreement, workers compensation and employers liability insurance meeting the requirements of the State of Texas on all the Professional's employees carrying out the work involved in this contract.

General Liability Insurance: The Professional shall carry and maintain during the term of this Agreement, general liability insurance on a per occurrence basis with limits of liability not less than \$1,000,000 for each occurrence and for fire damage. For Bodily Injury and Property Damage, coverage shall be no less than \$1,000,000. As a minimum, coverage for Premises, Operations, Products and Completed Operations shall be \$2,000,000. This coverage shall protect the public or any person from injury or property damages sustained

by reason of the Professional or its employees carrying out the work involved in this Agreement. The general aggregate shall be no less than \$2,000,000.

Automobile Liability Insurance: Professional shall carry and maintain during the term of this Agreement, automobile liability insurance with either a combined limit of at least \$1,000,000 per occurrence for bodily injury and property damage or split limits of at least \$1,000,000 for bodily injury per person per occurrence and \$1,000,000 for property damage per occurrence. Coverage shall include all owned, hired, and non-owned motor vehicles used in the performance of this contract by the Professional or its employees.

Subcontractor: In the case of any work sublet, the Professional shall require subcontractor and independent contractors working under the direction of either the Professional or a subcontractor to carry and maintain the same workers compensation and liability insurance required of the Professional.

Qualifying Insurance: The insurance required by this Agreement shall be written by non-assessable insurance company licensed to do business in the State of Texas and currently rated "B+" or better by the A.M. Best Companies. All policies shall be written on a "per occurrence basis" and not a "claims made" form.

Evidence of such insurance shall be attached as Exhibit "C".

Section 7. Miscellaneous Provisions.

(A) *Subletting.* The Professional shall not sublet or transfer any portion of the work under this Agreement or any Scope of Work issued pursuant to this Agreement unless specifically approved in writing by the City, which approval shall not be unreasonably withheld. Subcontractors shall comply with all provisions of this Agreement and the applicable Scope of Work. The approval or acquiescence of the City in the subletting of any work shall not relieve the Professional of any responsibility for work done by such subcontractor.

(B) *Ownership of Documents.* Upon completion or termination of this Agreement, all documents prepared by the Professional or furnished to the Professional by the City shall be delivered to and become the property of the City. All drawings, charts, calculations, plans, specifications and other data, including electronic files and raw data, prepared under or pursuant to this Agreement shall be made available, upon request, to the City without restriction or limitation on the further use of such materials PROVIDED, HOWEVER, THAT SUCH MATERIALS ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY THE CITY OR OTHERS. ANY REUSE WITHOUT PRIOR VERIFICATION OR ADAPTATION BY THE PROFESSIONAL FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE CITY'S SOLE RISK AND WITHOUT LIABILITY TO THE

PROFESSIONAL. Where applicable, Professional shall retain all pre-existing proprietary rights in the materials provided to the City but shall grant to the City a non-exclusive, perpetual, royalty-free license to use such proprietary information solely for the purposes for which the information was provided. The Professional may, at Professional's expense, have copies made of the documents or any other data furnished to the City under or pursuant to this Agreement.

(C) *Professional's Seal.* To the extent that the Professional has a professional seal it shall placed on all documents and data furnished by the Professional to the City. All work and services provided under this Agreement will be performed in a good and workmanlike fashion and shall conform to the accepted standards and practices of the Professional's industry. The plans, specifications and data provided by Professional shall be adequate and sufficient to enable those performing the actual work to perform the work as and within the time contemplated by the City and Professional. The City acknowledges that Professional has no control over the methods or means of work nor the costs of labor, materials or equipment. Unless otherwise agreed in writing, any estimates of costs by the Professional are for informational purposes only and are not guarantees.

(D) *Compliance with Laws.* The Professional shall comply with all federal, state and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts, administrative, or regulatory bodies in any matter affecting the performance of this Agreement, including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Professional shall furnish the City with satisfactory proof of compliance.

(E) *Independent Contractor.* Professional acknowledges that Professional is an independent contractor of the City and is not an employee, agent, or official of the City. Professional shall not represent, either expressly or through implication, that Professional is an employee, agent, official or representative of the City. Income taxes, self-employment taxes, social security taxes and the like are the sole responsibility of the Professional.

(F) *Non-Collusion.* Professional represents and warrants that Professional has not given, made, promised or paid, nor offered to give, make, promise or pay any gift, bonus, commission, money or other consideration to any person as an inducement to or in order to obtain the work to be provided to the City under this Agreement. Professional further agrees that Professional shall not accept any gift, bonus, commission, money, or other consideration from any person (other than from the City pursuant to this Agreement) for any of the services performed by Professional under or related to this Agreement. If any such gift, bonus, commission, money, or other consideration is received by or offered to Professional, Professional shall immediately report that fact to the City and, at the sole option of the City, the City may elect to accept the consideration for itself or to take the

value of such consideration as a credit against the compensation otherwise owing to Professional under or pursuant to this Agreement.

(G) *Force Majeure*. If the performance of any covenant or obligation to be performed hereunder by any party is delayed as a result of circumstances which are beyond the reasonable control of such party (which circumstances may include, without limitation, pending litigation, acts of God, war, acts of civil disobedience, fire or other casualty, shortage of materials, adverse weather conditions [such as, by way of illustration and not of limitation, severe rain storms or below freezing temperatures, or tornados] labor action, strikes or similar acts, moratoriums or regulations or actions by governmental authorities), the time for such performance shall be extended by the amount of time of such delay, but no longer than the amount of time reasonably occasioned by the delay. The party claiming delay of performance as a result of any of the foregoing force majeure events shall deliver written notice of the commencement of any such delay resulting from such force majeure event not later than seven (7) days after the claiming party becomes aware of the same, and if the claiming party fails to so notify the other party of the occurrence of a force majeure event causing such delay and the other party shall not otherwise be aware of such force majeure event, the claiming party shall not be entitled to avail itself of the provisions for the extension of performance contained in this subsection.

(H) In the case of any conflicts between the terms of this Agreement and wording contained within the Scope of Services, this Agreement shall govern. The Scope of Services is intended to detail the technical scope of services, fee schedule, and contract time only and shall not dictate Agreement terms.

Section 8. Termination.

(A) This Agreement may be terminated:

- (1) By the mutual agreement and consent of both Professional and City;
- (2) By either party, upon the failure of the other party to fulfill its obligations as set forth in either this Agreement or a Scope of Work issued under this Agreement;
- (3) By the City, immediately upon notice in writing to the Professional, as consequence of the failure of Professional to perform the services contemplated by this Agreement in a timely or satisfactory manner;
- (4) By the City, at will and without cause upon not less than thirty (30) days written notice to the Professional.

(B) If the City terminates this Agreement pursuant to Section 5 or subsection 8(A)(2) or

(3), above, the Professional shall not be entitled to any fees or reimbursable expenses other than the fees and reimbursable expenses then due and payable as of the time of termination and only then for those services that have been timely and adequately performed by the Professional considering the actual costs incurred by the Professional in performing work to date of termination, the value of the work that is nonetheless usable to the City, the cost to the City of employing another Professional to complete the work required and the time required to do so, and other factors that affect the value to the City of the work performed at time of termination. In the event of termination that is not the fault of the Professional, the Professional shall be compensated for all basic, special, and additional services actually performed prior to termination, together with any reimbursable expenses then due.

Section 9. Indemnification. Professional shall indemnify, defend and hold harmless the City of Fair Oaks Ranch, Texas and its officials, employees and agents (collectively referred to as "Indemnitees") and each of them from and against all loss, costs, penalties, fines, damages, claims, expenses (including reasonable attorney's fees) or liabilities (collectively referred to as "Liabilities") by reason of any injury to or death of any person or damage to or destruction or loss of any property arising out of, resulting from, or in connection with (i) the performance or non-performance of Services contemplated by this Agreement but only to the extent caused by the negligent acts, errors or omissions, intentional torts, intellectual property infringement, or a failure to pay a sub-contractor or supplier committed by Professional or Professional's agent, consultant under contract, or another entity over which Professional exercises control (whether active or passive) of Professional or its employees, agents or sub-contractors (collectively referred to as "Professional") (ii) the failure of Professional to comply with any of the paragraphs herein or the failure of Professional to conform to statutes, ordinances, or other regulations or requirements of any governmental authority, federal, state or local, in connection with the performance of this Agreement. Professional expressly agrees to indemnify and hold harmless the Indemnitees, or any one of them, from and against all liabilities which may be asserted by an employee or former employee of Professional, or any of its sub-contractors, as provided above, for which Professional's liability to such employee or former employee would otherwise be limited to payments under State Workers' Compensation or similar laws. Nothing herein shall require Professional to indemnify, defend, or hold harmless any Indemnitee for the Indemnitee's own negligence or willful misconduct. Any and all indemnity provided for in this Agreement shall survive the expiration of this Agreement and the discharge of all other obligations owed by the parties to each other hereunder and shall apply prospectively not only during the term of this Agreement but thereafter so long as any liability could be asserted in regard to any acts or omissions of Professional in performing Services under this Agreement.

For Professional Liability Claims, Professional shall be liable for reasonable defense costs incurred by Indemnitees but only after final adjudication and to the extent and percent that Professional or Professional's agents are found negligent or otherwise at fault. As used in this Agreement, final adjudication includes any negotiated settlement and release of claims, without limitation as to when a negotiated settlement and release of claims occurs.

Section 10. Notices. Any notice required or desired to be given from one party to the other party to this Agreement shall be in writing and shall be given and shall be deemed to have been served and received (whether actually received or not) if (i) delivered in person to the address set forth below; (ii) deposited in an official depository under the regular care and custody of the United States Postal Service located within the confines of the United States of America and sent by certified mail, return receipt requested, and addressed to such party at the address hereinafter specified; or (iii) delivered to such party by courier receipted delivery. Either party may designate another address within the confines of the continental United States of America for notice, but until written notice of such change is actually received by the other party, the last address of such party designated for notice shall remain such party's address for notice.

Section 11. No Assignment. Neither party shall have the right to assign that party's interest in this Agreement without the prior written consent of the other party.

Section 12. Severability. If any term or provision of this Agreement is held to be illegal, invalid or unenforceable, the legality, validity or enforceability of the remaining terms or provisions of this Agreement shall not be affected thereby, and in lieu of each such illegal, invalid or unenforceable term or provision, there shall be added automatically to this Agreement a legal, valid or enforceable term or provision as similar as possible to the term or provision declared illegal, invalid or unenforceable.

Section 13. Waiver. Either City or the Professional shall have the right to waive any requirement contained in this Agreement that is intended for the waiving party's benefit, but, except as otherwise provided herein, such waiver shall be effective only if in writing executed by the party for whose benefit such requirement is intended. No waiver of any breach or violation of any term of this Agreement shall be deemed or construed to constitute a waiver of any other breach or violation, whether concurrent or subsequent, and whether of the same or of a different type of breach or violation.

Section 14. Governing Law; Venue. This Agreement and all of the transactions contemplated herein shall be governed by and construed in accordance with the laws of the State of Texas. The provisions and obligations of this Agreement are performable in Bexar

County, Texas such that exclusive venue for any action arising out of this Agreement shall be in Bexar County, Texas.

Section 15. Paragraph Headings; Construction. The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraphs hereof. Both parties have participated in the negotiation and preparation of this Agreement and this Agreement shall not be construed either more or less strongly against or for either party.

Section 16. Binding Effect. Except as limited herein, the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, devisees, personal and legal representatives, successors and assigns.

Section 17. Gender. Within this Agreement, words of any gender shall be held and construed to include any other gender, and words in the singular number shall be held and construed to include the plural, unless the context otherwise requires.

Section 18. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.

Section 19. Exhibits. All exhibits to this Agreement are incorporated herein by reference for all purposes wherever reference is made to the same.

Section 20. Entire Agreement. It is understood and agreed that this Agreement contains the entire agreement between the parties and supersedes any and all prior agreements, arrangements or understandings between the parties relating to the subject matter. No oral understandings, statements, promises or inducements contrary to the terms of this Agreement exist. This Agreement cannot be changed or terminated orally.

Section 21. Relationship of Parties. Nothing contained in this Agreement shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent or of partnership or of joint venture or of any association whatsoever between the parties, it being expressly understood and agreed that no provision contained in this Agreement nor any act or acts of the parties hereto shall be deemed to create any relationship between the parties other than the relationship of independent parties contracting with each other solely for the purpose of effecting the provisions of this Agreement.

Section 22. Right To Audit. City shall have the right to examine and audit the books and records of Professional with regards to the work described in Exhibit A, or any subsequent

changes, at any reasonable time. Such books and records will be maintained in accordance with generally accepted principles of accounting and will be adequate to enable determination of: (1) the substantiation and accuracy of any payments required to be made under this Agreement; and (2) compliance with the provisions of this Agreement.

23. Dispute Resolution. In accordance with the provisions of Subchapter I, Chapter 271, TEX. LOCAL GOV'T CODE, the parties agree that, prior to instituting any lawsuit or other proceeding arising from a dispute under this agreement, the parties will first attempt to resolve the dispute by taking the following steps: (1) A written notice substantially describing the nature of the dispute shall be delivered by the dissatisfied party to the other party, which notice shall request a written response to be delivered to the dissatisfied party not less than 5 days after receipt of the notice of dispute. (2) If the response does not reasonably resolve the dispute, in the opinion of the dissatisfied party, the dissatisfied party shall give notice to that effect to the other party whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in an effort to resolve the dispute. (3) If those persons cannot or do not resolve the dispute, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the dispute.

24. Disclosure of Business Relationships/Affiliations; Conflict of Interest Questionnaire. Professional represents that it is in compliance with the applicable filing and disclosure requirements of Chapter 176 of the Texas Local Government Code.

25. Boycott Israel. The City may not enter into a contract with a company for goods and services unless the contract contains a written verification from the company; (i) it does not Boycott Israel; and (ii) will not Boycott Israel during the term of the contract. Texas Government Code 2270 by entering this agreement, Professional verifies that it does not Boycott Israel, and agrees that during the term of the agreement will not Boycott Israel as that term is defined in the Texas Government Coded Section 808.001, as amended.

EXECUTED, by the City on this the _____ day of _____, 20_____.

CITY:

By: _____
Name: _____
Title: _____

PROFESSIONAL:

By: _____
Name: _____
Title: _____

ADDRESS FOR NOTICE:

CITY

Tobin E. Maples, AICP
City Manager
City of Fair Oaks Ranch
7286 Dietz Elkhorn
Fair Oaks Ranch, TX 78015

PROFESSIONAL

Oscar Michael Garza, P.E, PTOE
President
Legacy Engineering Group
14603 Huebner Rd., Bldg. 11
San Antonio, Texas 78230

with a copy to:

City Attorney
City of Fair Oaks Ranch, Texas
Attn: Dan Santee
2517 N. Main Avenue
San Antonio, Texas 78212

Exhibit A
Fair Oaks Ranch
General Engineering Consultant Services

Scope of Work

General Description

As the General Engineering Consultant (GEC) for the City of Fair Oaks Ranch (FOR), the Professional will report directly to the Director of Public Works and will oversee the planning, design, and construction of the City's Capital Improvement Program (CIP) and other specialty projects as assigned by the City. The work to be performed under this Agreement includes managing, directing, and coordinating engineering, construction, and specialty firms selected by the City for individual projects within the program. Unless specifically authorized by the City, the GEC is excluded from serving as the Engineer of Record (Prime Firm) or as a sub-consultant to a professional service design firm (Prime Firm) contracted by the City. The intent is for the GEC to serve as the City's owners' representative.

The Professional will perform overall program management and administration of the Agreement and invoicing. Projects included in the scope of this Agreement will be based on the issuance of Work Authorizations by the City to authorize the Professional to perform the services described in the Work Authorization. The basis of compensation will be as defined in the Agreement or amended by specific Work Authorizations.

Scope of Services

I. Program Administration (As Directed by the City)

- a. Professional will participate in planning and defining projects (criticality & sequencing), which are deemed appropriate to meet City project needs over the life of the Agreement. Professional will work with City staff in preparation of project scopes, estimated project costs, including soft costs such as easements, licenses and other miscellaneous fees.
- b. Professional will assist the City with efforts to identify and secure project funding, inclusive of qualifying projects for Federal, State, and Local funding programs.
- c. Professional will prepare and maintain an overall project schedule (including planning, preliminary design, final design, and construction activities) of all assigned projects/work authorizations. The schedule will be interfaced with other City Department (Finance, Purchasing, Communications, etc.) project schedules as deemed necessary for total coordination of CIP activities.
- d. Professional will prepare and maintain an overall Project Budget Tracker for all assigned projects/work authorizations to track project costs for budget purposes. The Budget Tracker will be used to forecast budgetary requirements to provide assurance that funds are available at specified times to cover project cost.
- e. Professional will assist in the recommendation of professional service firms.

- f. Professional will participate in Community meetings to provide clarifications and details regarding specific CIP projects.
- g. Professional will attend a monthly City Council meeting to report on project specifics such as budget forecast, timing, status, and other pertinent matters.
- h. Professional will coordinate with the City's Communications Director to provide project specific information to the citizens and other interested parties regarding project status, potential disruptions to traffic, service, and other information.
- i. Professional will participate in the assessment of Alternative Project Delivery methods, which may be considered appropriate for specific projects.
- j. Professional will make recommendations to the City regarding Value Engineering concepts by assessing all projects before design assignment to determine the viability of combining similar projects and during the design phase to assess construction methods and materials which may result in reduced over-all cost to the City.

II. Management of Design Consultants (As Directed by the City)

- a. Professional will receive and review design consultant proposals and make recommendations to the City as appropriate. The review shall include adequacy of the proposal to meet the needs of the project, including but not limited to Preliminary and Final Engineering, Geotechnical, Environmental, Survey, and other areas deemed necessary for competent project definition, design, implementation, and other ancillary services.
- b. Professional will coordinate and manage the preparation of design plans, specifications and project cost estimates prepared by professional service firms retained by the City, inclusive of review for compliance with established City design criteria.
- c. Professional will provide review of reports submitted by professional service firms and respective sub-consultants.
- d. Professional will coordinate survey and legal description activities necessary for the City to evaluate and obtain easements, rights-of-way and other properties required to advance/construct projects.
- e. Professional will assist the City in preparing each project for advertising, bidding and award.

III. Coordination with Agencies, Utilities, Pipelines, Railroads, Military, etc. (As Directed by the City)

- a. Professional will coordinate with applicable entities on behalf of the City to provide appropriate information to assigned professional service firms to provide consistency among designs which are similarly impacted by the above entities.

IV. Construction Administration Services (As Directed by the City)

- a. Professional will provide overall construction Administration Services on assigned projects/work authorizations. These services shall include overseeing construction management and observations services provided by assigned City personnel or a professional service firm. These services shall include, but are not limited to the following:
 - i. Coordination of project management status reporting
 - ii. Coordination of field observation daily reporting methods and procedures
 - iii. Coordination of on-site and off-site laboratory activities by independent laboratories placed under contract.
 - iv. Review and make recommendations to the City regarding change orders
 - v. Review and make recommendation to the City regarding contractor pay estimates, make assessments on contractor performance and progress toward milestones, and submit recommend remedial measures to the City for underperforming projects, contractors, and professional service teams.
 - vi. Coordination of shop drawing submittal logs and as-built review, warranty items, final job documents, final pay applications through the appropriate professional service firm
 - vii. Provide consultation to the City Regarding contractor claims associated with the project.

V. Traffic and Transportation (As Directed by the City)

- a. Professional will review Traffic Impact Analysis (TIA's) submitted to the City during the development process. The City's Unified Development Code (UDC) prescribes the components required in all TIA's. The Professional shall review and make recommendations relative to compliance with established TIA standards adopted by the City.
- b. As requested by the City, the Professional will provide traffic and transportation engineering services to City. Traffic and transportation engineering services include but are not limited to City initiated traffic counts, warrant studies, Master Thoroughfare Planning, road geometry research, sidewalk and crosswalk improvements, traffic signs, traffic lights, road surface markings, and development of complete street and multimodal concepts and opportunities.

VI. FM 3351 - Ralph Fair Road (As Directed by the City)

Project:

- TxDOT has initiated a process for input under its delegated authority from the Federal Highway Administration to redesign and reconstruct FM 3351 to serve both regional mobility needs as well as local traffic management and safety needs. The process has included encouraging comprehensive and ongoing input from Fair Oaks Ranch and the Department of the Army in coordination with Joint Base San Antonio. The designed outcome of the initiative is dependent on securing right-of-

way through fiscal participation by Fair Oaks Ranch and a transfer of right-of-way from the United States.

- Fair Oaks Ranch seeks to support a design and reconstruction of FM 3351 through its city limits that reduces traffic accidents and encourages quality, limited growth that is context sensitive and likely results in village-like commercial rather than “strip” box retail typically resulting after capacity improvements on state farm-to-market and state highway facilities in high growth areas.
- The project partners have acknowledged the need for and will jointly initiate the development of Context Sensitive design concepts for the Corridor within the city limits to refine input for the FM 3351 project that provides additional effective input for the design concept options that ultimately will result in a schematic design for environmental clearance, final design and funding.

Owner's Representative:

- The Professional shall serve as the City's Owner's Representative and undertake the tasks and provide the deliverables as directed by the City including but not limited to the following:
 - a. Meeting with the City to receive general insight and direction and to provide professional recommendations and advice to Staff and the City Council.
 - b. Representing the City at TxDOT meetings or other meetings as necessary, facilitating the City's position on the reinvention of the TxDOT facility so that it is context sensitive and facilitates multimodal transportation and community linkages.
 - c. Developing and reviewing proposed design options for the Corridor and the TxDOT facility.
 - d. Representing the City during the NEPA environmental/design process.
 - e. Develop and frame funding partnerships.
 - f. Facilitating engagement with community stakeholders.
 - g. Other tasks as directed

Exhibit "B"

Compensation



November 4, 2019

Tobin E. Maples, AICP
City Manager
City of Fair Oaks Ranch
7286 Dietz Elkhorn
Fair Oaks Ranch, TX 78015

SUB: Legacy Engineering Group Proposed 2020 Billing Rate Schedule

Dear Mr. Maples:

Per your request, please see our proposed 2020 Billing Rate Schedule for potential work authorizations as the General Engineering Consultant (GEC) for the City of Fair Oaks Ranch.

Billing Rates

Personnel labor is billed at the following hourly rates:

Rate Category

Principal	\$200.00
Senior Project Manager	\$150.00 - \$200.00
Project Manager	\$145.00 - \$185.00
Senior Engineer I	\$125.00 - \$175.00
Engineer II	\$120.00 - \$150.00
Engineer I	\$100.00 - \$120.00
Engineer in Training	\$85.00 - \$110.00
Senior CADD Technician	\$85.00 - \$100.00
CADD Technician	\$65.00 - \$80.00
Administrative Assistant	\$50.00 - \$65.00
Contract Specialist	\$80.00 - \$95.00

Sub-Consultants

Sub-consultants are billed at cost with no mark-up applied.

Travel and Subsistence

Mileage will be charged at the current rate/mile issued by the IRS.

Reimbursable Costs

Reimbursable costs include "out of pocket" expenses, the cost of which shall be charged at actual costs plus any administrative charge, as described in the contract, and shall be itemized and included in the invoice.

We greatly appreciate your time in reviewing our proposed Billing Rate Schedule. Please do not hesitate to contact our office should you have any questions or comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Oscar Michael Garza".

Oscar Michael Garza, PE, PTOE
Legacy Engineering Group, PLLC

Exhibit "C"

Evidence of Insurance

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/11/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Southwest 9811 Katy Freeway, Suite 500 Houston, TX 77024 713 490-4600		CONTACT NAME: PHONE (A/C, No, Ext): 713 490-4600 FAX (A/C, No): 713-490-4700 E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A : Twin City Fire Insurance Company	
		INSURER B : Trumbull Insurance Company	
		INSURER C : Berkley Insurance Company	
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:			61SBABE3578	03/12/2019	03/12/2020	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY ☐ ANY AUTO OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS NON-OWNED AUTOS ONLY			61SBABE3578	03/12/2019	03/12/2020	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☒ RETENTION \$10000			61SBABE3578	03/12/2019	03/12/2020	EACH OCCURRENCE \$3,000,000 AGGREGATE \$3,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☒ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	61WECAD5PWZ	06/27/2019	06/27/2020	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
C	Professional Liab Claims Made Pol			AES903197800 Retro: 05/16/19	05/16/2019	05/16/2020	\$1,000,000 per claim \$1,000,000 annl aggr.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: The General Liability and Auto Liability policy(s) includes an automatic Additional Insured endorsement that provides Additional Insured status to the Certificate Holder only when there is a written contract that requires such status, and only with regard to work performed on behalf of the named insured. All policies provide a Blanket Waiver of Subrogation when required by written contract, except as prohibited by law.
(See Attached Descriptions)

CERTIFICATE HOLDER H-E-B, LP 646 South Flores Street San Antonio, TX 78204-1210	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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DESCRIPTIONS (Continued from Page 1)

Additional Insureds: H-E-B, LP, H-E-Bs Partners, Affiliated Companies of H-E-B, and their respective officers, directors, shareholders, employees and agents.



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Consideration and possible action on the approval of site location and style of the Elevated Storage Tank

DATE: November 21, 2019

DEPARTMENT: Public Works

PRESENTED BY: Ronald C. Emmons, P.E.

INTRODUCTION/BACKGROUND:

The City of Fair Oaks Ranch is currently working with Kimley-Horn and Associates, Inc. for engineering consulting services including design and construction documents for an elevated storage tank. As a function of that process, Kimley-Horn has produced a Technical Memorandum (see attached) during the initial 30% design phase that summarizes various sites, analyzes select tank styles, engage in public outreach, perform a hydraulic analysis, coordination with stakeholders, opinion of probable construction costs, and report findings.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

There are several items that citizens will note regarding the elevated storage tank:

- The elevated storage tank can be a branding element of the City, and the proposed style of the tank will be a portion of that character.
- Functionally, the elevated storage tank will provide significantly improved fire flow in the northern section of the City, as well as some areas in the central pressure zone.
- There will be reduced pumping demands in Zone A. For clarification, zones without elevated storage must have two or more pumps delivering water at 2.0 gallons per minute per connection. The elevated storage tank must deliver that same water at 0.6 gallons per minute per connection. This saves the utility (and consequently the customers) on energy costs.
- The elevated storage tank also saves energy costs to meet part of the peak hour demand; whereas, without the elevated storage tank the utility would be pumping during the entire peak hour demand.
- The elevated tank lowers the risk on lack of water delivery during power outages.
- Elevated storage meets TCEQ preferred method of pressure maintenance for water systems over 2,500 connections, which keeps the utility in compliance with TCEQ rules and regulations.

LONG-TERM FINANCIAL & BUDGETARY IMPACT:

Each site location of the tank holds a different capital cost, regardless of the selected tank style. The consultant analyzed five sites in the northern portion of the City. Each site offers varying levels of obstacles and challenges, but none that prevent the construction of the elevated tank. Kimley-Horn has developed a summary of each site with an opinion of probable construction cost. The sites ranked in order from lowest to most expensive as follows: D, A, C, E, and B. Table 17 was added to the Technical Memorandum summarizing Land Acquisition considerations.

Each style tank holds a different capital cost, regardless of the selected site. Generally, the Multi-Column style tank was the lowest cost, with the Spheroid style tank in the middle, and the Composite style tank with the highest cost. When the life cycle analysis is considered, these tables flip with the Composite style tank the lowest maintenance cost, the Spheroid style tank in the middle, and the Multi-Column style tank with the highest maintenance cost.

LEGAL ANALYSIS:

Not applicable.

RECOMMENDATION/PROPOSED MOTION:

City Council recommended at the November 7, 2019 regular meeting regarding the decision between the tank site location and the tank style that they be two distinct and separate motions. The following are programmed separate motions for each deliberation. The Council member making the initial motion is requested to fill in the blank appropriately.

Tank Site Location Motion:

I move to authorize staff to proceed with the design of an elevated storage tank located at Site ____.

Tank Style Motion:

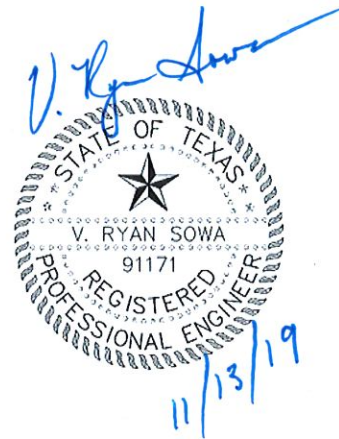
I move to authorize staff to proceed with the design of a _____ style elevated storage tank.

**CITY OF FAIR OAKS RANCH
ELEVATED STORAGE TANK**

30% Preliminary Design Technical Memorandum

Prepared for:

CITY OF FAIR OAKS RANCH



November 2019

Prepared by:

Kimley»Horn

Texas Board of Professional Engineers Firm Registration No. F-928

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INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) was contracted by the City of Fair Oaks Ranch (the City) for the design of a 0.5 million gallon (MG) water elevated storage tank. The proposed tank will serve the City's upper pressure plane (Zone A) and provide elevated water storage, additional fire flow, and relief to existing pumps. Potential tank sites being evaluated are located in the northeastern part of the City and extraterritorial jurisdiction (ETJ) along Ammann Road, shown in **Figure 1** below.

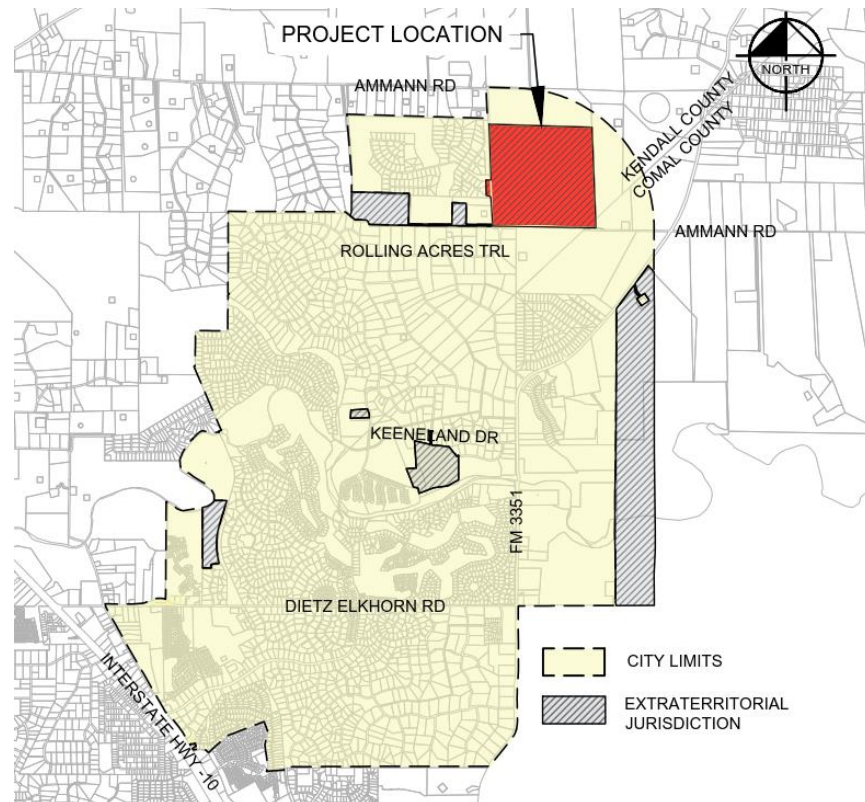


Figure 1. Project Location Map.

This Technical Memorandum represents a 30% design by Kimley-Horn. The information will be subject to change through the final design process.

PROJECT BACKGROUND

The City of Fair Oaks Ranch water distribution system consists of three independent pressure zones, with water supplied from the Trinity Aquifer and Guadalupe-Blanco River Authority (GBRA). As stated in the *City of Fair Oaks Ranch Water, Wastewater, and Reuse System Master Plan* (Water Master Plan) prepared by Freese and Nichols, Inc. on February 2019, the City was notified in 2017 by the Texas Commission on Environmental Quality (TCEQ) of reaching 91% of its hydropneumatic tank capacity in Zone A, confirming the need for additional storage as water demands increase due to development. In addition, the following benefits were identified for an elevated storage tank:

- Maintains a constant water supply and pressure for public demands for Zone A
- Improves fire flow for Zone A

- Reduction in firm pumping capacity and requirements to Zone A resulting in operational and long-term cost savings
- Operational flexibility during emergencies and provides additional water storage during peak water demands and droughts
- Improves fire flow to the northeast region of Zone B with installation of System PRV #2 at Meadow Creek Trail until Plant #6 Zone B Pump Station and additional waterlines are installed per Water Master Plan

For these reasons, an elevated storage tank in the northern region of the city was identified as a near-term (2023 planning period) capital improvement project and need for the City.

SITE LOCATIONS

Five (5) tank site locations were chosen to be evaluated, as seen in **Figure 2**. These potential tank sites were selected based on the following criteria.

- Availability of Land
- Developer Input
- Site Topography/Ground Elevation
- Proximity to Existing Utilities (Water and Electric) and Roads
- Conformance with the City's Water Master Plan

Additional information about each potential tank site can be found in the Technical Analysis section of this report.

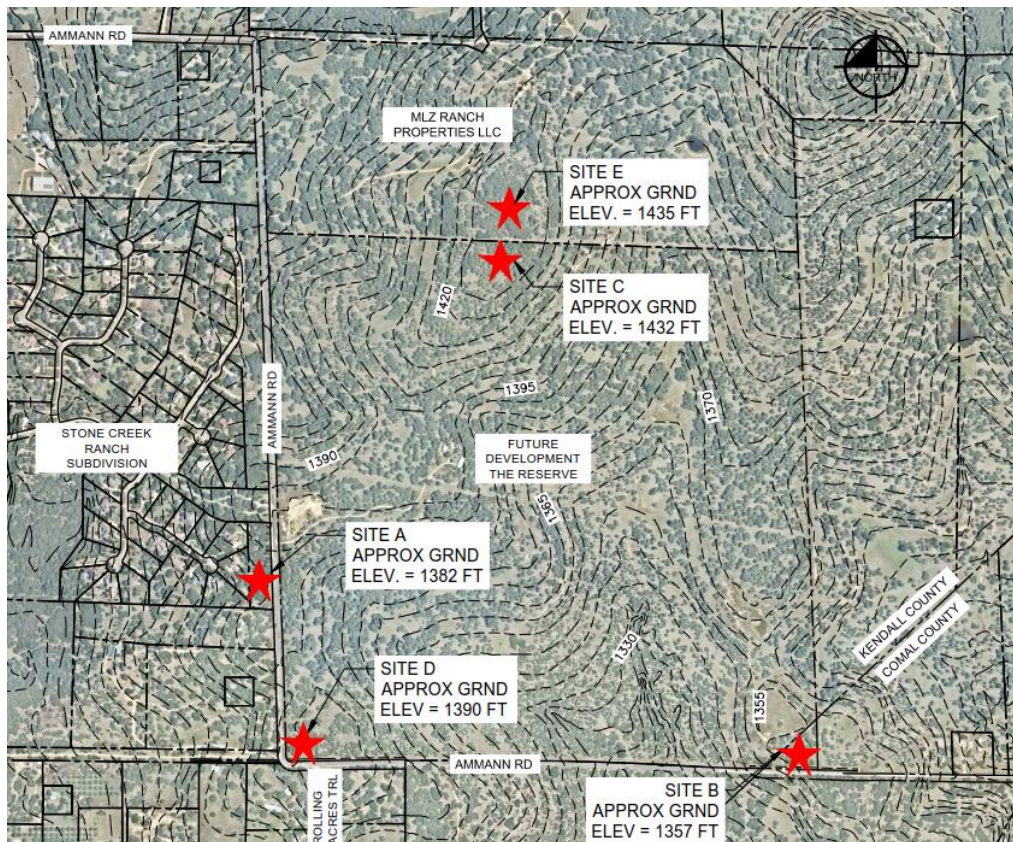


Figure 2. Potential Tank Locations.

SCOPE OF WORK

The following services were performed by Kimley-Horn during the 30% design phase of this project:

- Conducted an initial project kick-off meeting on May 1, 2019 with the City to discuss the project overview, stakeholder and utility coordination, project schedule, and other items relevant to the current project phase.
- Conducted meetings with Green Land Ventures, LTD and the owners of Boerne Ranch Estates, LLC (see Figure 2).
- Conducted Community Workshop #1 on June 18, 2019 with City staff for the residents of the City to receive feedback regarding the potential tank sites, tank aesthetics, and other design considerations.
- Conducted meetings with Camp Bullis and Camp Stanley to discuss potential concerns regarding the proposed tank sites on July 10, 2019 and July 11, 2019, respectively.
- Submitted Obstruction Evaluation/Airport Airspace Analysis form 7460 for four (4) tank sites A through D to the Federal Aviation Administration (FAA).
- Attended a City Council meeting on July 18, 2019 and presented community feedback received from Community Workshop #1.
- Performed tank analyses for five (5) tank sites and three (3) tank styles.
- Performed hydraulic analyses using the Innovyze Infowater hydraulic model provided by the City.
- Coordinated with Pedernales Electric to obtain existing utility information.
- Conducted a meeting with GBRA on August 13, 2019 with City staff to discuss the addition of a second delivery point.
- Coordinated with Kendall and Comal County to determine applicable permitting requirements.
- Developed an Opinion of Probable Construction Cost (OPCC) for five (5) tank sites and three (3) tank styles.
- Conducted 30% design workshop on August 30, 2019 with City staff to discuss the draft Technical Memorandum.
- Conducted a meeting with owners of MLZ Ranch Properties, LLC (see Figure 2).
- Conducted Community Workshop 30% on September 10, 2019 with City staff to update the residents on site analysis and receive feedback regarding the potential tank sites, tank aesthetics, and other design considerations.
- Obtained Bexar County Lidar 2010 contour data from Texas Natural Resources Information System.

TECHNICAL ANALYSES

SITE ANALYSIS

Each potential tank site was analyzed based on the following criteria:

- Proximity to Existing Utilities (Water and Electric) and Roads
- Site Civil Considerations (Terrain, Grading, Drainage, Topography/Ground Elevation)
- Site Access
- Existing Easements

Each tank site will have an area of approximately 0.5-acres. Detailed exhibits for each site can be found in **Appendix A**.

The expected impact of an elevated storage tank to residents within close proximity are the following:

- Light pollution – tank site lighting
- Weekly tank checks and/or maintenance
- Repainting and sandblasting every 15 years
- Alarm and other associated noise pollution in the event of a tank overflow and associated valves and piping

Chlorine boosting will be included regardless of the tank site and is reflected in the cost analysis.

The tank site will have the same electrical/SCADA system regardless of the location. Standard 240/120V single phase electric service will be used with distribution via a power panel. SCADA Panel with air-conditioned enclosure (if desired) will contain all control and communication equipment. The security system equipment will be connected to a dedicated panel. Layouts and equipment for the security system will need to be further developed with input from the City during design. Communications for both SCADA and Security data will be handled by a cellular based system that is compatible with the City's existing system. Instrumentation will include flow, pressure and level transmitters and chlorine analyzer. Controls for the motorized valves will be located in the SCADA Panel or dedicated panel. All site lighting will meet the requirements of the Camp Bullis and other applicable ordinances. Tank obstruction lighting will be installed per FAA guidelines. Interior lighting (for composite or spheroid options) will be provided at floor level and along the ladder and the roof access tube.

SITE A

Site A is located on a 2.17-acre tract owned by Green Land Ventures, LTD in Kendall County within Fair Oaks Ranch city limits, located directly off Ammann Road and adjacent to three residential properties of Stone Creek Ranch subdivision. The tank footprint is approximately 150 feet from the closest residential structure. Due to the close proximity to residences, containment has been included per TCEQ 111.137 containment requirements for blasting and coating operations and the additional cost associated with containment is reflected in the Opinion of Probable Construction Cost (refer to **Appendix B**). The site is directly accessible via Ammann Road, as shown in **Figure 3**. Site A currently has a berm that runs parallel to Ammann Road with an existing drainage easement located along the west property line. Site A, if chosen, may require significant grading due to the berm and a drainage analysis would need to be performed during final design to verify the extent of re-grading required. The terrain is largely forested and would require significant site clearing. The ground elevation of the site is approximately 1382 feet and the tank overflow elevation would be 148 feet above the ground.

A portion of this tract is currently reserved for the site of a future well. There is a 50-foot well access easement located at the southern border of the property, as well as an 18-foot drainage easement running longitudinally along the west side of the property.

There is an existing City 12-inch water line located south of the site along Ammann Road. The existing 12-inch water line would need to be extended approximately 225 feet to Site A. Electric service can be obtained from the three-phase overhead primary line running on the west side of Ammann Road. The recommended service type is 240/120V single phase delivered by a pole mounted transformer. Existing utility maps and record drawings can be found in **Appendix D**.

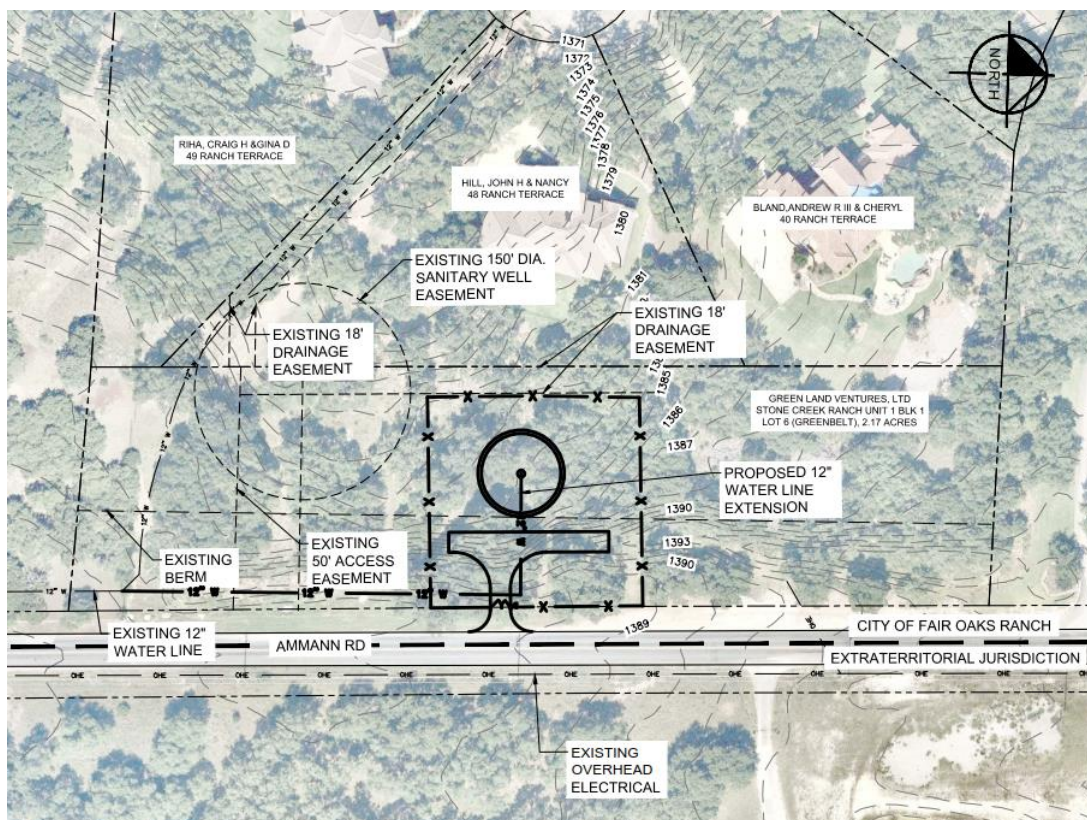


Figure 3. Tank Site A.

SITE B

Site B is in Comal County, on a 5.3-acre plot of land owned by Boerne Ranch Estates, LLC. The site is in the City's ETJ and is directly accessible via Ammann Road (see **Figure 4**). There are no existing residences adjacent to the site or across Ammann Road. The closest residential structure is approximately 2,600 feet from the site. Due to the location of this site within 500 feet of public right-of-way, containment has been included per TCEQ 111.137 containment requirements for blasting and coating operations. The additional cost associated with containment is reflected in the Opinion of Probable Construction Cost (refer to **Appendix B**). The site is located within the Edwards Aquifer Contributing Zone and would require an Exception Request Plan be submitted to the TCEQ for the access road/driveway. The site currently drains to the south, towards Ammann Road. The site would continue to drain towards Ammann Road and minimal site grading would be required. The terrain is forested, and moderate clearing would be required. The ground elevation of the site is 1357 feet and the tank height to overflow would be 173 feet. Due to having the lowest ground elevation, this site would require the tallest tank.

There is an existing 24-inch GBRA water line within a 15-foot water easement located along the southern border of the site, which would facilitate an additional GBRA delivery point to the site. Additional equipment would be required to fill the proposed elevated storage tank to the overflow elevation of 173 feet. More information about an additional delivery point can be found in the GBRA section of this Technical Memorandum. A portion of this tract is identified in the Water Master Plan as the future site of Plant #6 Pump Station. The elevated storage tank and pump station could be located within the same site, eliminating the need for the City to acquire and maintain an additional site for Plant #6. See

Appendix A for the site layout with Plant #6 accommodations. Inclusion of the pump station within the site layout would result in additional costs due to the increased site footprint and thus is not included in the Opinion of Probable Construction Cost for Site B. If Site B were selected, additional coordination will be required to implement an additional GBRA delivery point and include potential ground water storage at the site.

Three-phase electric power is available at the site. Electric service can be obtained from the three-phase overhead primary line running on the north side of Ammann Road. The recommended service type is 240/120V single phase delivered by a pole mounted transformer. The City's existing 12-inch water line along Ammann Road would need to be extended approximately 3,650 feet, along Ammann Road to Site B. This water line extension is included in the 5 Year Improvement section of the City's Water Master Plan (2023 planning period). Existing utility maps and record drawings can be found in **Appendix D**.

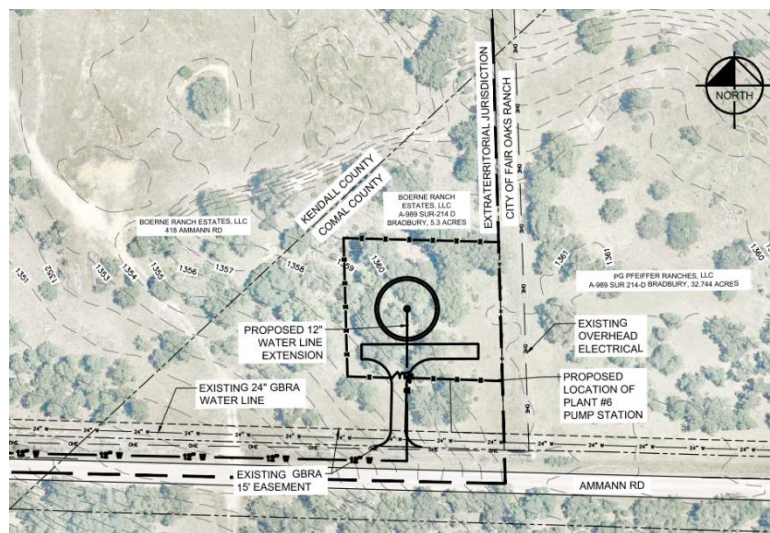


Figure 4. Tank Site B.

SITE C

Site C is in Kendall County, on the north central border of the 339.297-acre plot of land owned by Boerne Ranch Estates, LLC. The site is in the City's ETJ, approximately 1/3 of a mile east of Ammann Road (see **Figure 5**). There are currently no residences directly adjacent to the site. The closest residential structure is approximately 1,100 feet from the site. Currently, containment is not required for this site. As the City develops, containment may be required for tank maintenance. During design, a drainage swale would be added parallel to the access road, requiring moderate grading and draining west towards Ammann Road. The terrain is forested and would require significant land clearing. Presently, there is no direct vehicle access to the site and approximately 2,600 SY of flexible pavement would need to be provided to the site. Additional land clearing would be required to add vehicle access. The ground elevation of the site is 1432 feet and the tank height to overflow would be 98 feet.

There is no existing electric service at the site. Electric service might be obtained from the single-phase overhead line that is tapped off the three-phase line running along the east side of Ammann Road, approximately 350 feet of extension would be required. An easement might be required from the electric utility. In addition, the utility may need to obtain easements from other property owners in order to extend the line. The recommended service type is 240/120V single phase delivered by a pole mounted transformer. Three-phase service is an option if required for motorized valves or other site equipment

however this would require an upgrade of the single-phase line that extends approximately 1,700 feet from Ammann Road. Similar to overhead electric, no existing water infrastructure extends to Site C. Approximately 1,950 feet of 12-inch water line extension would be required to tie into the existing 8-inch water line on Woodland View. There is potential for the extended water line to conflict with the Boerne Ranch Estates' development layout, and further coordination would be required with the developer were this site selected. The extension of the 12-inch water line is included in the 5 Year Improvement section of the City's Water Master Plan (2023 planning period). Existing utility maps and record drawings can be found in **Appendix D**.

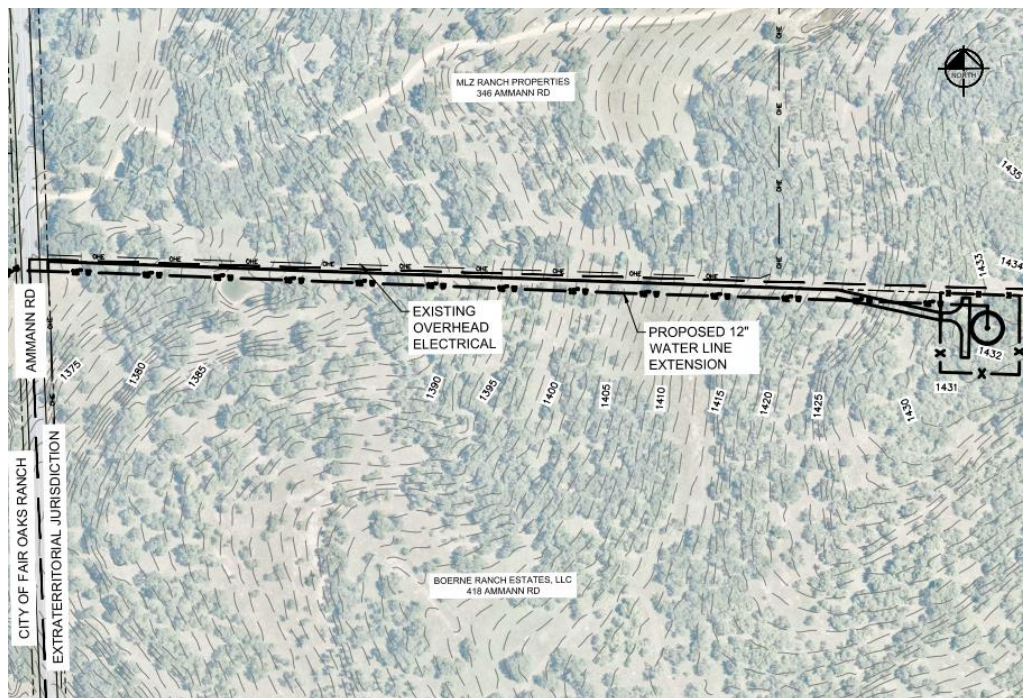


Figure 5. Tank Site C.

SITE D

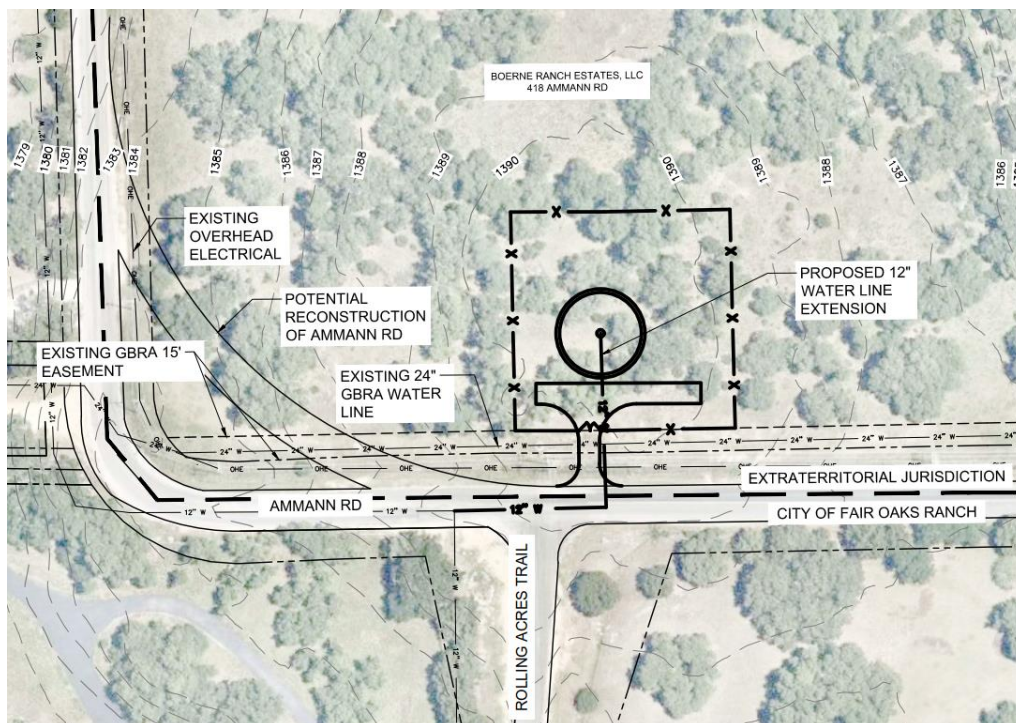
Site D is in Kendall County, located in the southwest corner of the 339.297-acre plot of land owned by Boerne Ranch Estates, LLC. The site is in the City's ETJ and is directly accessible via Ammann Road, as shown in **Figure 6**. There are no existing residences directly adjacent to the site, but there are residences to the south and west that are within close proximity. The closest residential structure is approximately 380 feet from the site. Due to the close proximity to existing residences and public right-of-way, containment has been included as a construction cost, per TCEQ 111.137 containment requirements for blasting and coating operations. The additional cost associated with containment is reflected in the Opinion of Probable Construction Cost (refer to **Appendix B**). The site currently drains to the south, towards Ammann Road and would continue to drain towards the road during design, requiring minimal grading. The area is forested and would require moderate land clearing. The ground elevation of the site is 1390 feet and the tank height to overflow would be 140 feet.

Based on coordination with the developer of Boerne Ranch Estates property, Ammann Road may be re-aligned and widened at a future date as shown in **Figure 6**. Further coordination with the developer during the design phase would be required to determine the final location of an elevated storage tank at

Site D and ensure that there would be a safe site distance for the maintenance and construction crew to access the site.

An exercise was conducted to determine how far Site D could be moved to the east or west while remaining the most cost-effective site. For the purpose of this exercise, a cost of \$2,500/foot was used for increasing or decreasing the height of the tank due to the change in ground elevation when moving the site east or west. The change in cost for this site due to the variation in off-site water line extension was also accounted for during this exercise. Site D could be moved 200 feet east before the cost of a spheroid or multi-column tank is equivalent to Site A. Site D could be moved 550 feet east before the cost of a composite tank would be greater than Site A. The site could be moved west to the existing right-of-way and remain the most cost-effective site.

There is three-phase electric power available at the site and an existing Fair Oaks Ranch 12-inch water line running along Ammann Road. The existing water line would need to be extended approximately 200 feet to the site. There is also an existing 24-inch water line supplied by GBRA running along Ammann Road. Electric service can be obtained from the three-phase overhead primary line running on the north side of Ammann Road. The recommended service type is 240/120V single phase delivered by a pole mounted transformer. Existing utility maps and record drawings can be found in **Appendix D**.



requirements for blasting and coating operations. The additional cost associated with containment is reflected in the Opinion of Probable Construction Cost (refer to **Appendix B**). During design, a drainage swale would be added parallel to the access road, requiring moderate grading and directing drainage west towards Ammann Road. The terrain is forested and would require significant land clearing. Currently there is no direct vehicle access to the site, so approximately 3,000 SY of flexible pavement would need to be provided to the site. Additional land clearing would be required to add vehicle access. The ground elevation of the site is 1435 feet and the tank height to overflow would be 95 feet. Site E would require the shortest tank due to having the highest ground elevation.

Electric service might be obtained from the single-phase overhead line that is tapped off the three-phase line running along the east side of Ammann Road, requiring approximately 550 feet of extension. An easement may be required from the electric utility. In addition, the utility may need to obtain an additional easement from the property owner to extend the line. The recommended service type is 240/120V single phase delivered by a pole mounted transformer. Three-phase service is an option if required for motorized valves or other site equipment however this would require an upgrade of the single-phase line that extends approximately 1,900 feet from Ammann Road. Similar to overhead electric, no existing water infrastructure extends to Site C. Approximately 2,250 feet of 12-inch water line extension would be required to tie into the existing 8-inch water line on Woodland View. The extension of the 12-inch water line is included in the 5 Year Improvement section of the City's Water Master Plan (2023 planning period). Existing utility maps and record drawings can be found in **Appendix D**.

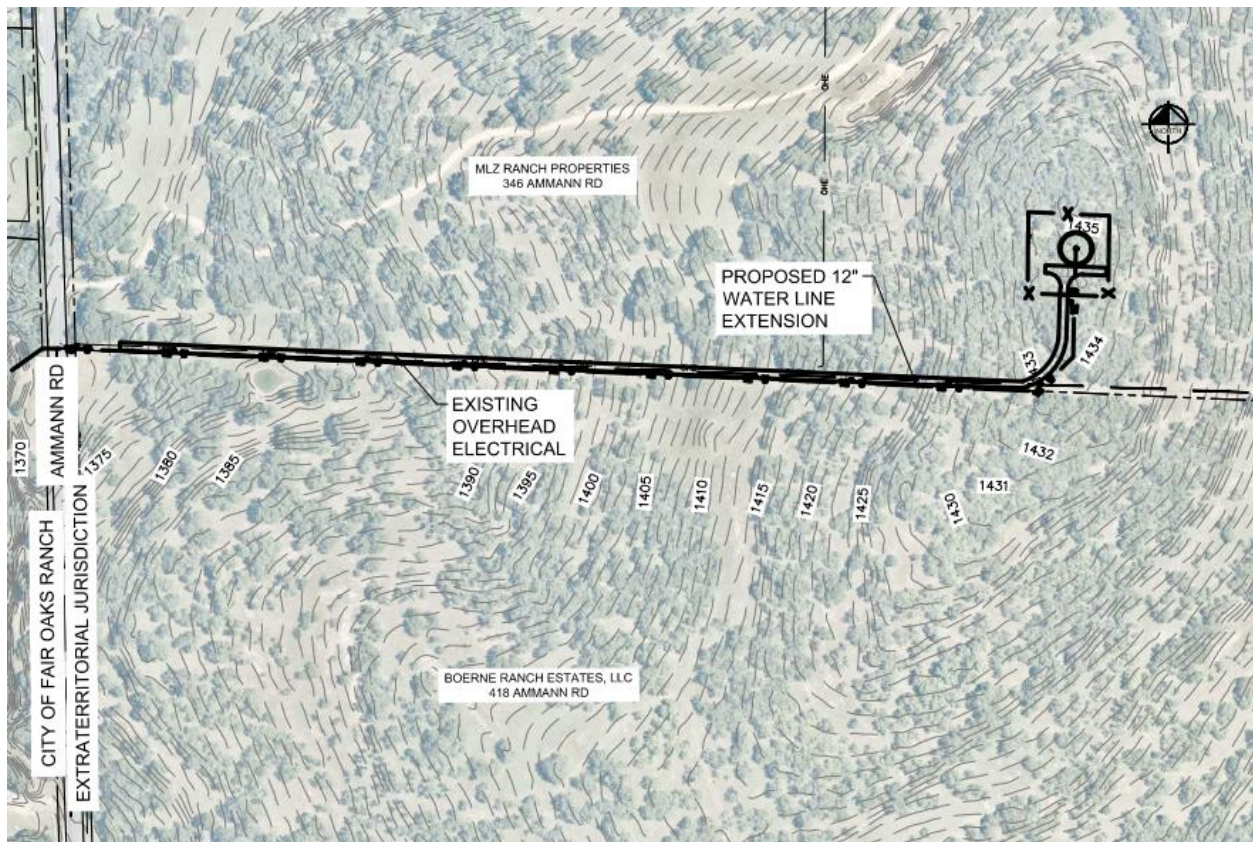


Figure 7. Tank Site E.

SITE ANALYSIS SUMMARY

Table 1 provides a summary of the Site Analysis according to the criteria used to evaluate each potential tank site location.

Table 1. Summary of Site Analysis.

Site	Ground Elevation (ft)	Tank Height to Overflow (ft)	Site Access	Electric Power	Existing Water Line	Site Civil Considerations
A	1382	148	Immediately adjacent to Ammann Rd.	Three-phase east side of Ammann Rd.	Approximately 225 feet of extension required.	- Significant grading due to berm running along the site - Drains to the west - Forested terrain, significant land clearing required
B	1357	173	Immediately adjacent to Ammann Rd.	Three-phase immediately adjacent to Ammann Rd.	Approximately 3,650 feet of extension required. Included in City's Water Master Plan.	- Proposed location of Plant #6 Pump Station per Water Master Plan - Minimal grading - Drains to the south, towards Ammann Road - Forested terrain, moderate land clearing required
C	1432	98	Approximately 2,600 SY of access road required.	Approximately 350 feet of single-phase electrical line extension required.	Approximately 1,950 feet of extension required. Included in City's Water Master Plan.	- Moderate grading - Runoff would be routed towards Ammann Road - Forested terrain, significant land clearing required
D	1390	140	Immediately adjacent to Ammann Rd.	Three-phase immediately adjacent to Ammann Rd.	Approximately 200 feet of extension required.	- Minimal grading - Drains to the south, towards Ammann Road - Forested terrain, land clearing required
E	1435	95	Approximately 3,000 SY of access road required.	Approximately 550 feet of single-phase electrical line extension required.	Approximately 2,250 feet of extension required. Included in City's Water Master Plan.	- Moderate grading - Runoff would be routed towards Ammann Road - Forested terrain, significant land clearing required

TANK STYLE ANALYSIS

Kimley-Horn analyzed three different tank styles (composite, spheroid, and multi-column) with regards to both capital and maintenance costs.

If a composite tank is used all mechanical and electrical equipment could be located inside the tank pedestal for both security and protection from inclement weather. A drain for the chlorine analyzer would be required and could be placed either inside the pedestal or installed outdoors.

The spheroid tank would allow for a majority of the mechanical and electrical equipment to be mounted in the base, but some equipment would need to be mounted outdoors. The equipment mounted outdoors would be located in a canopy or enclosure. The multi-column option would require that all electrical equipment would be mounted outdoors. In such a case, a canopy or enclosure could be installed over the equipment and control panels.

INITIAL CAPITAL AND MAINTENANCE COST

In coordination with multiple tank builders, initial capital costs and 60-year life cycle costs were developed (Refer to **Table 2** and **Table 3**). The costs presented in the tables are rounded averages of the cost estimates obtained from several tank builders. The initial capital cost includes tank fabrication, tank assembly and coatings, standard accessories, and foundation at reasonable depth. Site work is not included in these tables. The tank estimates given are based on the current market price of steel. The cost of steel fluctuates and could result in variations in the tank's actual capital cost. When evaluating raising or lowering the operating range of the tank, a cost of \$2,500/foot was used, and the tank initial capital costs were rounded accordingly.

Table 2. Tank Initial Capital Cost.

Site Location	Tank Height to Overflow	Composite	Spheroid	Multi-Column
Site A	148	\$1,575,000.00	\$1,375,000.00	\$1,050,000.00
Site B	173	\$1,650,000.00	\$1,450,000.00	\$1,100,000.00
Site C	98	\$1,450,000.00	\$1,250,000.00	\$975,000.00
Site D	140	\$1,550,000.00	\$1,350,000.00	\$1,025,000.00
Site E	95	\$1,450,000.00	\$1,250,000.00	\$975,000.00

Table 3 displays the 60-year life cycle costs for an assumption of 3 repaints (every 15 years) at a 3% inflation rate. Containment was included for life cycle costs at every site, due to the predicted development in the City. Due to having the lowest square footage of steel to be repainted, the composite tank has the lowest life cycle cost.

Table 3. Tank Life Cycle Cost.

Site Location	Tank Height to Overflow	Composite	Spheroid	Multi-Column
Site A	148	\$650,000.00	\$900,000.00	\$1,000,000.00
Site B	173	\$650,000.00	\$950,000.00	\$1,050,000.00
Site C	98	\$650,000.00	\$770,000.00	\$850,000.00
Site D	140	\$650,000.00	\$850,000.00	\$950,000.00
Site E	95	\$650,000.00	\$770,000.00	\$850,000.00

The total cost of ownership (TCO) for each tank site and style is provided in **Table 4**. The TCO includes both the tank initial capital cost and life cycle cost. Multi-Column tanks have the lowest TCO for all site locations when evaluated for a 60-year life cycle. The TCO does not include any costs associated with the tank site.

Table 4. Tank Total Cost of Ownership for 60-yr Life Cycle.

Site Location	Tank Height to Overflow	Composite	Spheroid	Multi-Column
Site A	148	\$2,225,000.00	\$2,275,000.00	\$2,050,000.00
Site B	173	\$2,300,000.00	\$2,400,000.00	\$2,150,000.00
Site C	98	\$2,100,000.00	\$2,020,000.00	\$1,825,000.00
Site D	140	\$2,200,000.00	\$2,200,000.00	\$1,975,000.00
Site E	95	\$2,100,000.00	\$2,020,000.00	\$1,825,000.00

COMPOSITE TANK STORAGE

An option when constructing a composite elevated storage tank is to utilize the pedestal for additional storage. When evaluating pricing for composite tank storage, the following scenarios were considered:

- Provisions for storage: \$10,000 per floor
 - Storage provisions would include additional rebar in the wall with beam sets.
- Storage floor: \$200,000 per floor
 - Storage floor would include a bare concrete second floor, stairs with railings, and a crane.
- Full buildout office space: \$300,000 per floor
 - Office space would have the standard number of windows for a 500,000-gallon tank, be in conformance with ADA requirements and include an elevator.

The estimates presented in this section for composite tank storage were not included in the Opinion for Probable Construction cost, initial capital cost, or tank life cycle costs.

HYDRAULIC ANALYSIS

This section of the Technical Memorandum evaluates the hydraulic impact of an elevated storage tank at each potential site on the City's existing water system.

The hydraulic scenarios that were performed and their objectives are the following:

1. Tank siting
 - Determine the connection to the existing pipe network.
 - Ability of a tank at each site to provide adequate pressures to different areas of Zone A.
 - Determine potential system upgrades.
 - Determine the effect on available fire flow to Zone A.
2. Raised tank operating range
 - Determine the optimal elevation for the tank and the area of Zone A that can be serviced at that elevation.
3. Lowered tank operating range
 - Determine the optimal elevation for the tank and the area of Zone A that can be serviced at that elevation.

At the onset of the 30% design phase, the City provided a hydraulic model of the water distribution system in Innowyze InfoWater software. Minor modifications to the existing model were made by Kimley-Horn to simulate the addition of an elevated storage tank to the system.

The existing model contained the following scenarios:

- 2017 Calibration
- 2018 Max Day, Peak Hour
- 2023 Max Day, Peak Hour
- 2028 Peak Hour
- 2040 Max Day, Peak Hour, Max Day Fire Flow

A Max Day scenario simulates the day in a one-year period in which the largest quantity of water is used. Peak hour simulates the hour within the Max Day scenario in which the largest quantity of water is used. A Fire Flow scenario simulates a pressure of 20 psi to all junctions within the system, then determines the amount of available water to a single junction. Throughout the Hydraulic Analysis section of this Technical Memorandum (TM), junctions are used to refer to points throughout the existing system where there is a connection to the water pipeline. Steady State and Diurnal patterns are also discussed throughout this section. A steady state pattern represents a constant demand over a 24-hour period. A diurnal pattern simulates the fluctuations in demand throughout a 24-hour period within the system.

The existing model is divided into three separate pressure zones. Since the elevated storage tank will provide elevated storage for Zone A, modeling efforts were focused on this pressure plane. For the purposes of this TM, the following scenarios were used for modeling at each potential tank site location:

- 2023 Max Day, Peak Hour, Fire Flow
- 2040 Max Day, Peak Hour, Fire Flow

The 2023 scenario was selected for modeling as it represents the closest scenario to existing conditions when the tank will be put into operation. The 2040 scenario was used as it represents buildout conditions in the model provided by the City.

WATER DEMAND – ZONE A

The Water Master Plan includes projected water demands for the continued development of the City's Zone A through full buildout conditions. **Table 5** identifies the projected demands in Zone A for 2023 and buildout conditions.

Table 5. Projected Water Demands.

Year	Number of Water Connections	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
2023	781	0.39	0.98	1.95
2040 Buildout	1,376	0.69	1.72	3.44

ELEVATED STORAGE – ZONE A

The diagram in **Figure 8** displays the breakdown of storage in the modeled elevated storage tank.

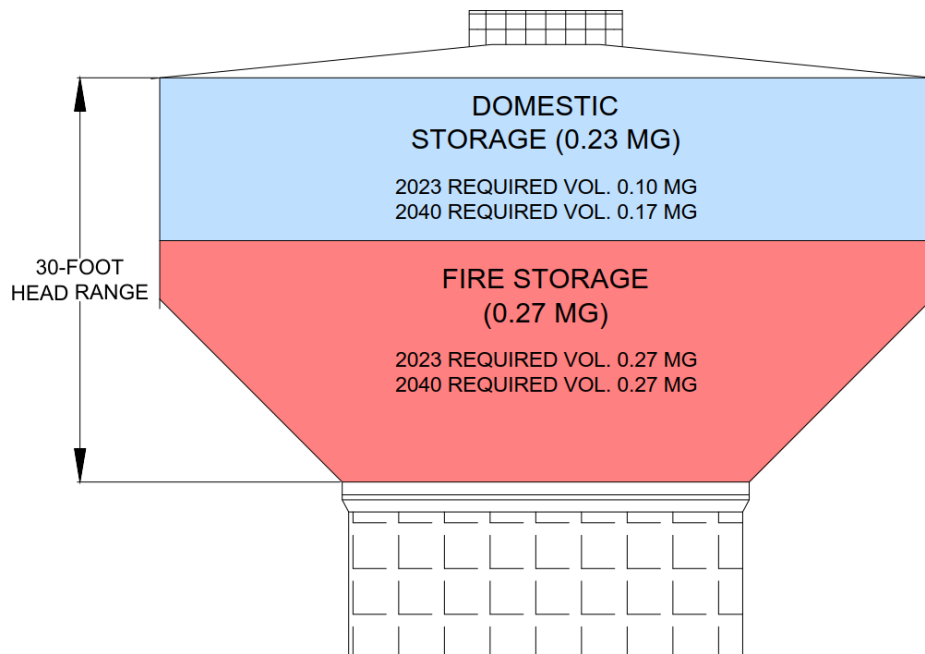


Figure 8. Elevated Storage Tank Diagram.

According to the Water Master Plan, the requirement for domestic storage is equivalent to the volume required to supply peak demand for 3 hours. The fire flow volume requirement, also from the Water Master Plan, is based on an assumption of 1,500 gpm for a 3-hour duration.

MODEL RESULTS – TANK SITES

Hydraulic analysis objectives for each tank site are the following:

- Evaluate the connection of the tank to the City's existing water system
- Evaluate pipe diameters for the tank's connection to the system
- Determine effects on the system operation
- Determine effects on system's available fire flow

Each potential tank site was hydraulically modeled at an elevation of 1500 feet, with a water level between 1500-1530 feet, by creating modifications to the existing model provided by the City. Tank water levels were created in accordance with the requirements for domestic and fire flow storage displayed in **Figure 8**. A water level of 30 feet was used to simulate the top of domestic storage and a water level of 18 feet was used as the bottom of domestic storage. The remainder of the water in the tank below the domestic storage level was modeled as fire flow storage. Due to the similarity in location and elevation, Site E was considered to have hydraulic modeling results similar to that of Site C.

2023 SCENARIO

Modeling of the Peak Hour, Steady State scenario revealed minor variations in junction pressures within Zone A for the four modeled tank sites when the tank level was set to the bottom of domestic storage.

The number of junctions below the TCEQ requirement of 35 psi did not vary from the original model for the different site locations. The junctions that were below the TCEQ requirement of 35 psi were located on the suction side of the pumps, and so are not in violation of TCEQ standards. For the purpose of this Technical Memorandum, the junctions located on the suction side of the pumps are not included in the junction pressure tables within this hydraulic analysis section. **Table 6** provides a summary of the data obtained and displays the number of junctions by pressure category for each tank site. **Figure 9** provides a graphic representation of the junction pressures for Zone A when modeling Site B. Additional junction pressure exhibits can be found in **Appendix F**.

When the water level in the tank was below the domestic storage range, the pressures fell below the minimum desired level of 35 psi. However, this should not be an issue during a fire flow event since the minimum pressure requirement for fire flow conditions is 20 psi, which was met in the model.

Table 6. Zone A Junction Pressures at Bottom of Domestic Storage – 2023.

Tank Site	Total Number of Junctions	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
Site A	154	0	2	81	56	11
Site B*	153	0	2	80	56	11
Site C/E**	154	0	2	81	56	11
Site D	153	0	2	80	56	11

* Site B was included in the model provided by the City as the original elevated storage tank site in the Water Master Plan.

** Due to the similarity in location and elevation, Site E was considered to have hydraulic modeling results similar to that of Site C.

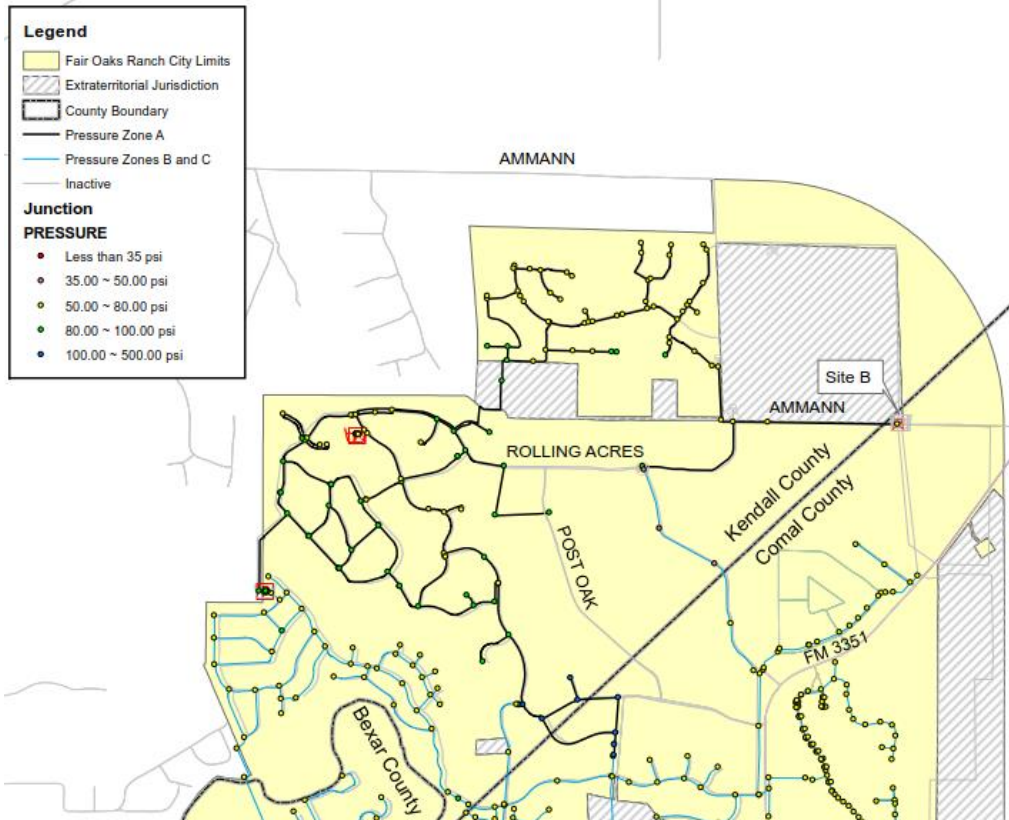


Figure 9. Zone A 2023 Pipe Network Junction Pressures at Bottom of Domestic Storage – Site B.

The pumps in the model were evaluated using the pump curves from the existing Plant #3 Pumps provided by the City. **Figure 10** contains the pump curve for the Plant #3 Pump station with annotations displaying the pump efficiencies for different hydraulic scenarios. The pump's optimal operating range is 66% efficiency or higher, as outlined in yellow on the pump curve.

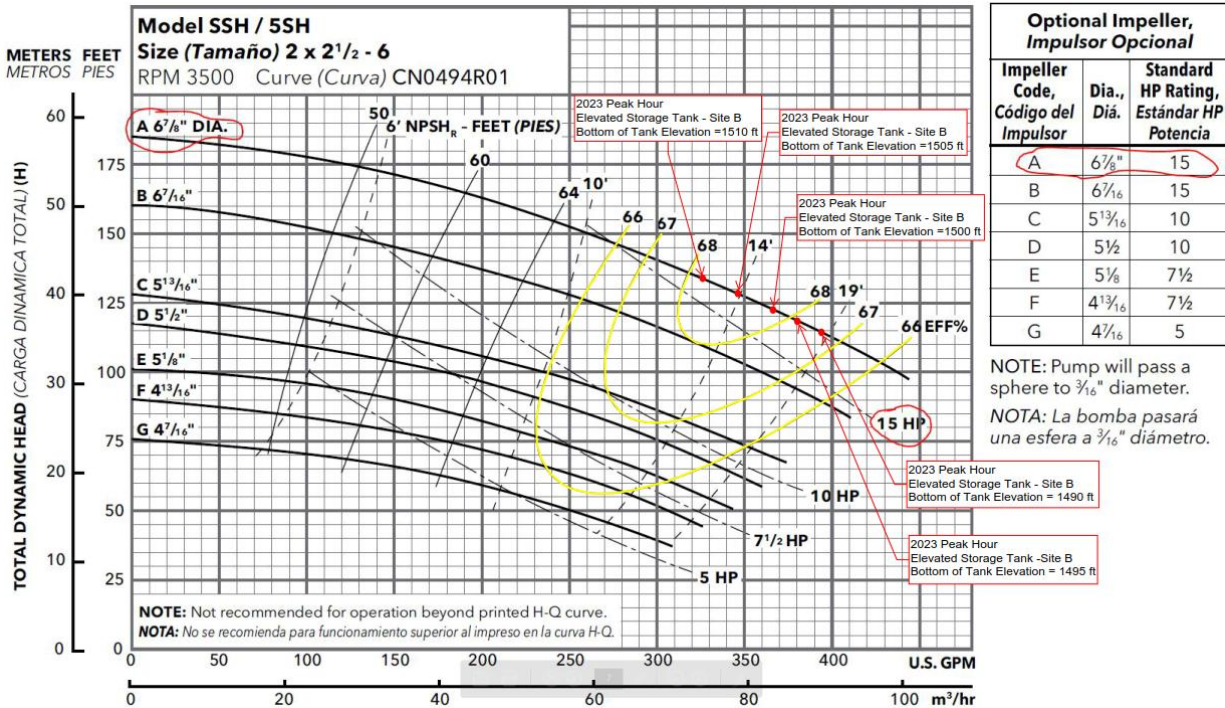


Figure 10. Plant #3 Pump Curve with Modeled Elevated Storage Tank - Site B.

It was determined that the City's existing pump stations alone could not support 2023 peak hour demands identified in the Water Master Plan due to system pressure within Zone A falling below the 35 psi minimum pressure requirement of TCEQ. An elevated storage tank or additional pump station would be required to maintain pressures above 35 psi throughout Zone A during 2023 peak hour demands. The elevated storage tank and Plant #3 pumps (without Plant #5) were able to meet peak hour demands and deliver sufficient pressure to the highest junctions within the City. The pumps were able to fill the modeled elevated storage tank.

Refer to the Higher Tank Operating Range and Lower Tank Operating Range sections for additional information regarding the pump analysis. Pump curves for the existing City system can be found in **Appendix D**. Refer to **Appendix F** for information about the pumps in the hydraulic model.

2040 BUILDOUT SCENARIO

Modeling of the Peak Hour, Steady State scenario revealed minimal variations in junction pressures between the tank sites for buildout conditions. The junctions that were unable to meet the TCEQ requirement of 35 psi were located on the highest terrain in the City and are just below the requirement at approximately 34 psi. The additional junction below 35 psi for Site B was located near the highest terrain in the City. Due to the increase of demands for buildout conditions, there was a decrease in the number of junctions with pressures greater than 80 psi in the 2040 scenario for all tank sites. When compared to the existing model, Sites A and D resulted in a greater number of junctions with pressures exceeding 80 psi. Junctions with a pressure greater than 80 psi may require pressure reducing valves on services to protect plumbing. **Table 7** provides a summary of the data obtained and displays the number of junctions by pressure category for each site. **Figure 11** provides a graphic representation of the junction pressures for Zone A when modeling Site B.

Table 7. Zone A Junction Pressures at Bottom of Domestic Storage – 2040.

Tank Site	Total Number of Junctions	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
Site A	162	1	3	99	54	1
Site B*	162	2	4	106	46	1
Site C/E**	162	1	6	109	42	0
Site D	162	1	2	96	56	3

* Site B was included in the model provided by the City as the original elevated storage tank site in the Water Master Plan.

** Due to the similarity in location and elevation, Site E was considered to have hydraulic modeling results similar to that of Site C.

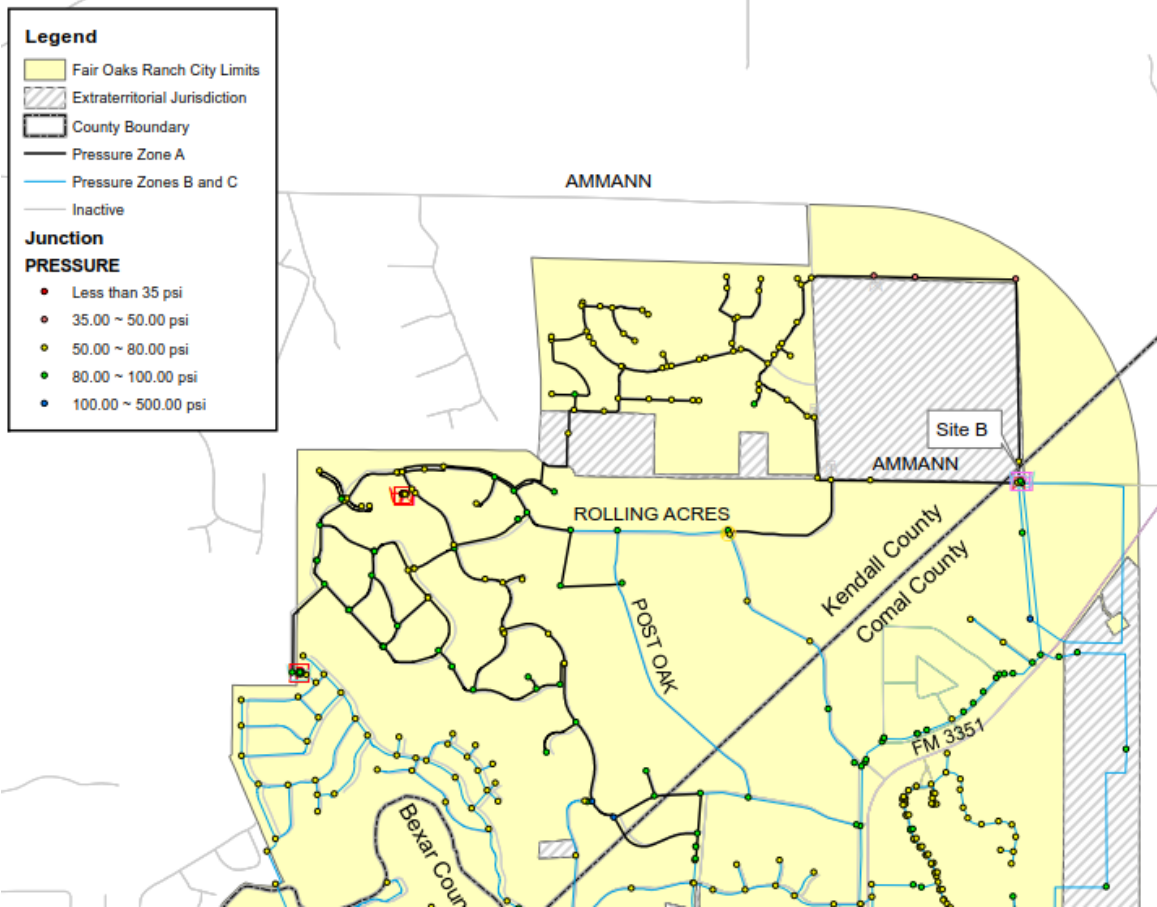


Figure 11. Zone A 2040 Pipe Network Junction Pressures at Bottom of Domestic Storage - Site B.

Additional modeling of the Max Day scenario was conducted by applying the diurnal pattern provided in the Water Master Plan for a period of 48 hours. Max Day simulations did not identify any concerns for tank site locations. Tank water level and pump operation graphs for Max Day simulations can be found in **Appendix F**.

PRESSURE REDUCING VALVE

The addition of a system pressure reducing valve (PRV) was evaluated for both 2023 and 2040 scenarios. An in-line PRV at the location displayed in **Figure 12** would be able to provide pressures within the desired range for approximately 48 parcels in Zone A. Additional junctions with pressures greater than 80 psi may require individual PRVs to protect plumbing.

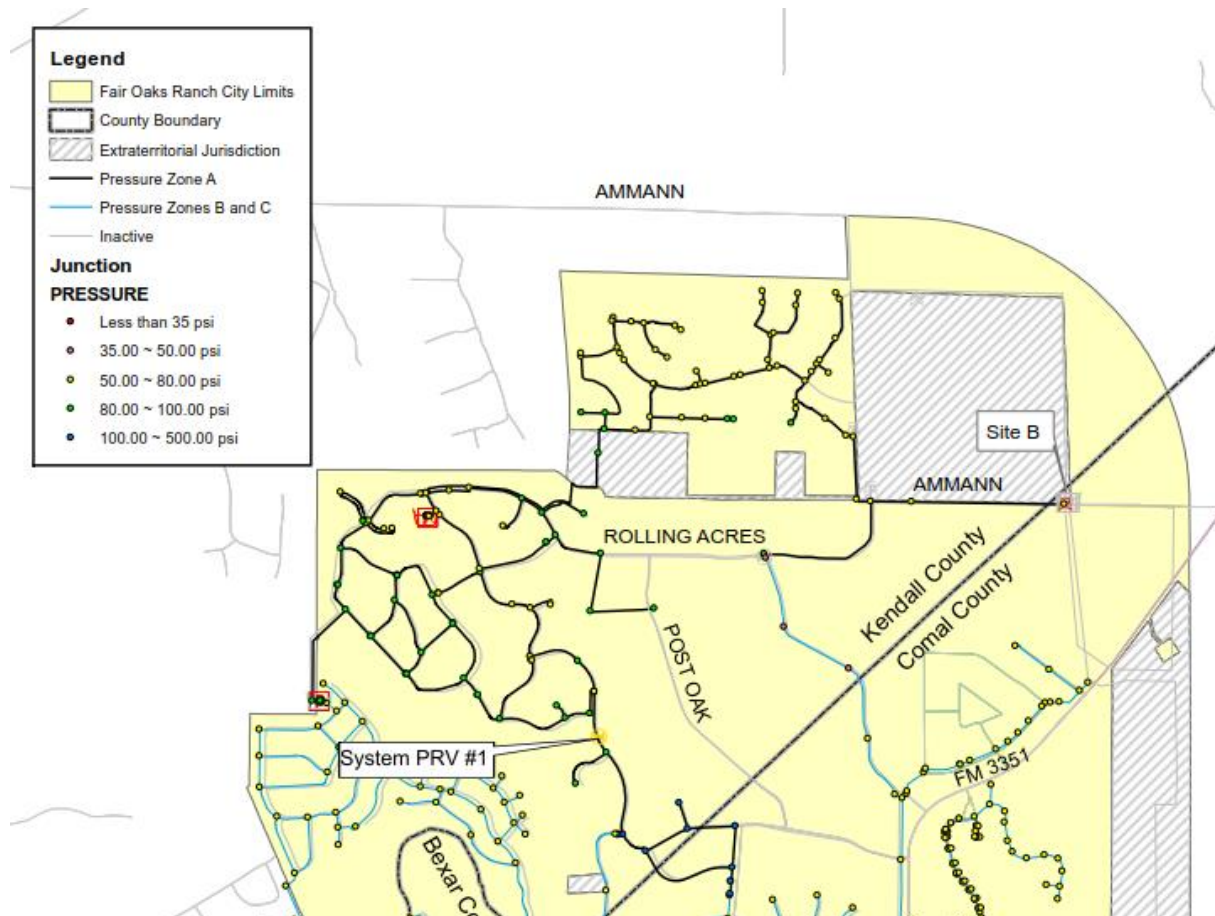


Figure 12. 2023 Site B Junction Pressures with Recommended Location of PRV.

The pressures throughout Zone A in the 2040 scenario are reduced, but a system PRV is still recommended in the same location as the 2023 scenario since the pressures in that area are greater than 80 psi. Refer to **Figure 13** to view the 2040 scenario with the recommended PRV location.

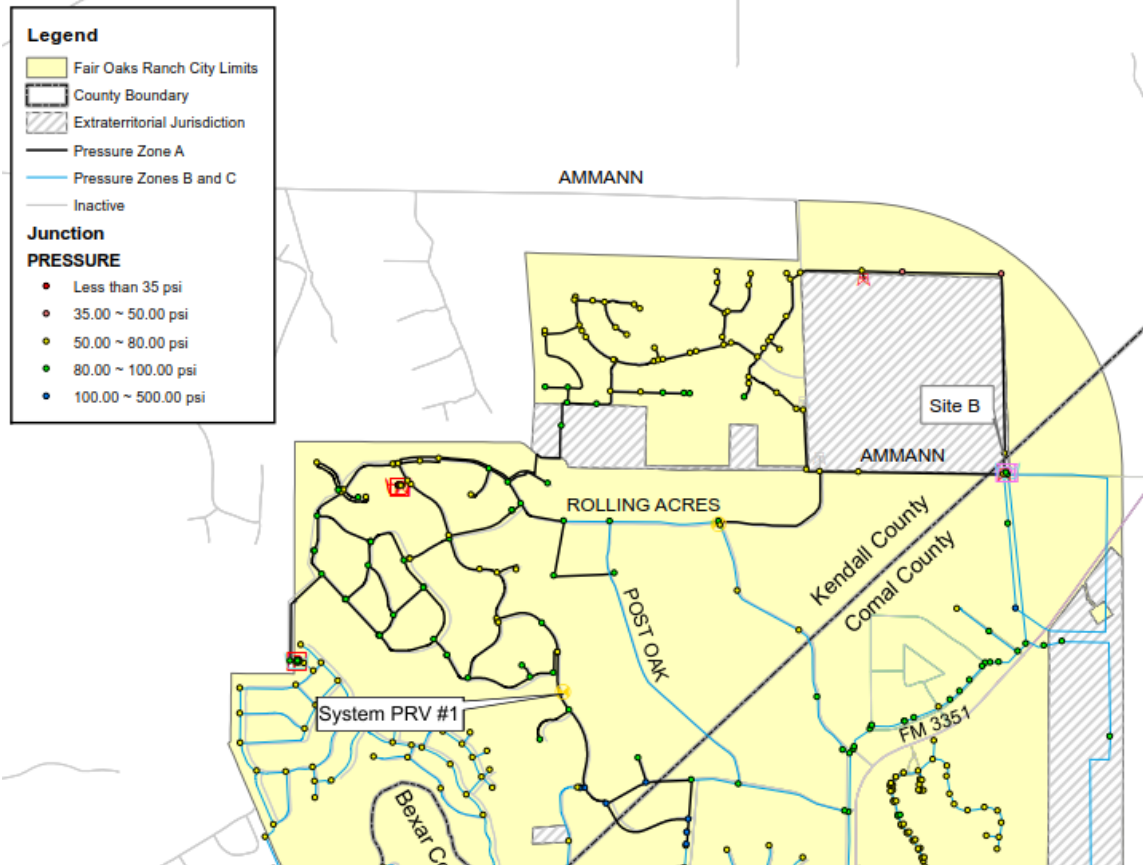


Figure 13. 2040 Site B Junction Pressures with Recommended Location of PRV.

An in-line PRV was also used to evaluate the effects on available fire flow in the northeast region of Pressure Zone B. Refer to the Fire Flow Scenario section for more information.

FIRE FLOW SCENARIO

The effects on available fire flow elevated storage tank site were evaluated in comparison to the model from the Water Master Plan. The Water Master Plan shows that the entirety of the existing system (2018 model) in Zone A has an available fire flow below 1,500 gpm. Modeling of the fire flow scenario in 2018 conditions for each potential tank site confirmed that none of the nodes in Zone A were able to provide a sufficient fire flow of 1,500 gpm. Refer to **Appendix D** for an exhibit of the existing system's available fire flow. The existing model did not contain a 2023 fire flow scenario, so Kimley-Horn added fire flow demands to the Max Day scenario for this analysis in accordance with the 2040 fire flow scenario provided in the existing model.

For both 2023 and buildout conditions, Sites A and D resulted in the greatest improvement in available fire flow. Sites C and E showed similar results to the originally modeled site, Site B. Lower available fire flow for Sites C and E was identified as a concern in the 2023 scenario due to the proposed 12-inch water line from the tank tying into the existing 8-inch water line along Woodland View. The effects of the constriction of fire flow are short term and are resolved in 2040 due to improvements in the system. Modeling of buildout conditions resulted in a notable increase in available fire flow versus the 2023 model, due to the addition of an elevated storage tank in conjunction with other improvements to the system.

Table 8 summarizes the modeling data and displays the number of junctions by pressure category for each potential tank site location for 2023 and 2040.

Table 8. Zone A Junction Available Fire Flow.

Year	Site Location	< 1,500 gpm	1,500-3,000 gpm	>3,000 gpm
2023	Site A	24	100	28
	Site B*	25	105	23
	Site C/E**	29	119	5
	Site D	24	101	26
2040	Site A	21	78	63
	Site B*	21	76	66
	Site C/E**	24	103	36
	Site D	24	64	79

* Site B was included in the model provided by the City as the original Water Master Plan elevated storage tank site.

** Due to the similarity in location and elevation, Site E was considered to have hydraulic modeling results similar to that of Site C.

All the potential tank site locations create significant improvements in available fire flow. However, not all of Zone A has an available fire flow of 1,500 gpm or greater once the elevated storage tank is in operation. The Water Master Plan includes a new pump station (Plant 6) as an Intermediate Project (2023 planning period) in their Capital Improvement Plan to provide additional fire flow to Zone A.

The effects of the addition of an elevated storage tank on available fire flow for the northeast region of Zone B were also evaluated. A PRV in the model provided by the City was utilized to add the northeast region of Zone B to Zone A for the fire flow simulation. The PRV was modeled at a setting of 62 psi, which was the original setting in the model provided by the City. **Figure 14** displays the fire flow to the region of Zone B with the PRV closed and **Figure 15** displays the improvement in fire flow to the region of Zone B with the utilization of System PRV #2.

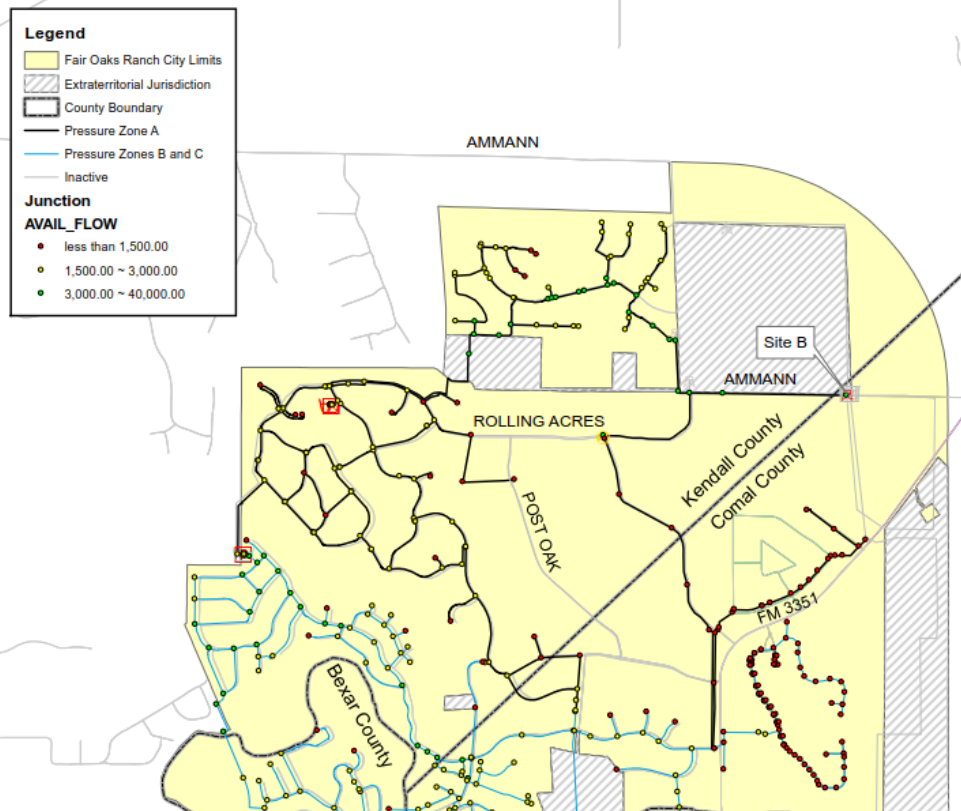


Figure 14. 2023 Fire Flow to Zone A and northeast region of Zone B, PRV closed.

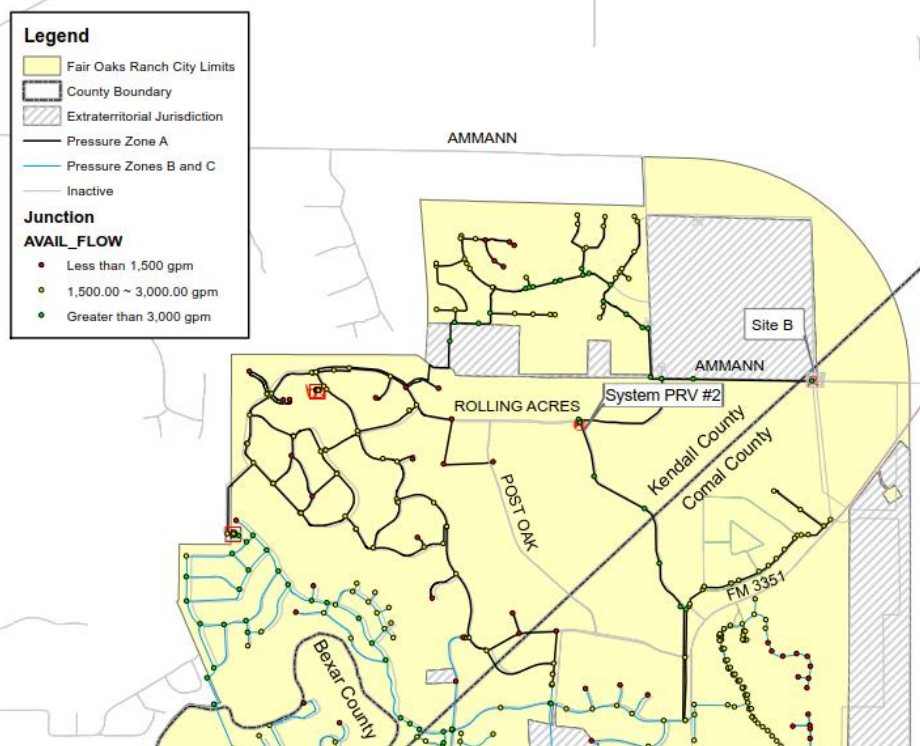


Figure 15. 2023 Fire Flow to Zone A and northeast region of Zone B, utilizing a PRV.

When the northeast region of Zone B was added to Zone A for the fire flow scenario, all 29 junctions from Zone B were able to provide an available fire flow greater than 1,500 gpm. If the northeast region of Zone B were to be added to Zone A, a PRV would be required in the location shown in **Figure 15** for System PRV #2.

MODEL RESULTS – HIGHER TANK OPERATING RANGE

Hydraulic analysis included evaluating the effects on Zone A of raising the elevated storage tank's operating range based on the following:

- Junction pressures at the top of domestic storage to determine impacts to junctions with pressures above 80 psi within Zone A.
- Junction pressures at the bottom of domestic storage to determine junctions with less than minimum TCEQ pressure requirements within Zone A and impacts to service area.
- Increase in available fire flow.

The model from the Water Master Plan included an elevated storage tank at Site B with a bottom of tank elevation of 1500 feet. Kimley-Horn modified the existing model and increased tank elevations by increments of 5 feet. As discussed previously, there were no significant changes in results between tank sites, so this model simulation was only evaluated at Site B, the originally modeled site. Modeling was conducted using the 2023 and 2040 Steady State, Peak Hour scenarios.

As shown in the **Table 9** and **Table 10**, increasing the tank elevation results in a greater number of junctions with pressures above 80 psi. Junctions with pressures above 80 psi may require pressure reducing valves on services to protect plumbing. There is a decrease in the number of junctions with pressures greater than 80 psi in the 2040 scenario for all tank elevations due to the increase in demand throughout Zone A.

The originally modeled site (Site B) in the Water Master Plan is at a bottom of tank elevation of 1500 feet, with a water level of 18 feet to the bottom of domestic storage. For this analysis, the operating range was raised and the resulting effects to the service area are the following:

Bottom of Tank Elevation = 1500 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1438 feet or lower.
- Able to provide services to the entire City and ETJ.
- Highest ground elevation within City jurisdiction is 1435 feet.

Bottom of Tank Elevation = 1505 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1443 feet or lower.
- Able to provide services to the entire City and ETJ.

Bottom of Tank Elevation = 1510 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1448 feet or lower.
- Able to provide services to the entire City and ETJ.

Table 9 displays a summary of the junction pressures obtained when the water level was at the bottom of domestic storage for Site B for the different elevations.

Table 9. Higher Tank Operating Range Junction Pressures at Bottom of Domestic Storage - Site B.

Year	Bottom of Tank Elevation (ft)	Water Level in Tank	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
2023	1500*	18	0	0	82	56	11
	1505	18	0	0	76	61	12
	1510	18	0	0	72	65	12
2040	1500*	18	0	5	106	46	0
	1505	18	0	2	105	49	1
	1510	18	0	2	91	61	3

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Raising the operating range of the elevated storage tank does not result in significant improvements for low pressure junctions within Zone A when the water level in the tank is at the bottom of domestic storage. The junctions in the second lowest pressure category are located on the highest terrain in Zone A.

Table 10 displays a summary of the junction pressures obtained when the water level was at the top of domestic storage for Site B for the different elevations.

Table 10. Higher Tank Operating Range Junction Pressures at Top of Domestic Storage - Site B.

Year	Bottom of Tank Elevation (ft)	Water Level in Tank	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
2023	1500*	30	0	0	69	67	13
	1505	30	0	0	60	73	16
	1510	30	0	0	54	77	18
2040	1500*	30	0	2	89	60	6
	1505	30	0	2	81	65	9
	1510	30	0	2	78	67	10

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Raising the operating range of the elevated storage tank does not result in significant improvements for low pressure junctions within Zone A when the water level in the tank is at the top of domestic storage. The junctions in the second lowest pressure category are located on the highest terrain in Zone A.

The efficiency and flow of the existing pumps in the system were also evaluated when raising the operating range. Refer to **Figure 10** to view the pump curve for the Plant #3 Pumps with annotations displaying the pump efficiencies for the different hydraulic scenarios. When raising the operating range of the tank, the pumps efficiencies were within the optimal operating range. Peak hour demands were met, and sufficient pressure was delivered to the highest junctions within the City.

FIRE FLOW SCENARIO

The effects of raising the elevated storage tank's operating range on available fire flow were also evaluated at Site B. The existing model did not contain a 2023 fire flow scenario, so Kimley-Horn added fire flow demands to the Max Day scenario for this analysis in accordance with the 2040 fire flow scenario provided in the existing model.

Raising the operating range of the tank did not result in significant improvements in available fire flow to the junctions unable to provide sufficient fire flow at the originally modeled bottom of water elevation. The junctions within the lowest category of available fire flow received constricted fire flow due to the smaller pipes (2-inch to 6-inch lines) connecting them to the network. **Table 11** displays the number of junctions by range of available fire flow for the different elevations and 2023 and 2040 demands.

Table 11. Higher Tank Operating Range Junction Available Fire Flow – Site B.

Year	Bottom of Tank Elevation (ft)	<1,500 gpm	1,500-3,000 gpm	>3,000 gpm
2023	1500*	25	105	23
	1505	24	105	24
	1510	24	103	26
2040	1500*	21	74	66
	1505	20	72	69
	1510	20	70	71

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Increasing the tank's operating range is advantageous when modeling fire flow scenarios. However, not all the junctions in Zone A were able to provide a fire flow of 1,500 gpm when the tank elevation was raised 10 feet. The resulting increase in junction pressure throughout Zone A may cause junctions with a pressure greater than 80 psi to require meter pressure reducing valves. Raising the operating range results in variations in pump efficiency, but the pumps are still within the optimal operating range. Increasing the tank operating range would increase the tank initial cost by approximately \$2,500/foot.

MODEL RESULTS – LOWER TANK OPERATING RANGE

Hydraulic analysis included evaluating the effects of lowering the elevated storage tank's operating range based on the following:

- Junction pressures at the top of domestic storage to determine impacts to junctions with pressures above 80 psi within Zone A.
- Junction pressures at the bottom of domestic storage to determine junctions with less than minimum TCEQ pressure requirements within Zone A and impacts to service area.
- Available fire flow.

The original model from the Water Master Plan contained an elevated storage tank at Site B with a bottom of tank elevation of 1500 feet. The existing model was modified by Kimley-Horn, lowering tank elevations by increments of 5 feet. As discussed in the Model Results – Tank Sites section of this TM, there were no significant differences between each of the tank sites, so this simulation was evaluated using Site B. Modeling was conducted using 2023 and 2040 Steady State, Peak Hour scenarios.

As shown in **Table 12** and **Table 13**, decreasing the tank elevation results in fewer junctions with pressures above 80 psi. There is a decrease in the number of junctions with pressures greater than 80 psi in the 2040 scenario for all tank elevations.

The originally modeled site (Site B) in the Water Master Plan is at a bottom of tank elevation of 1500 feet, with a water level of 18 feet to the bottom of domestic storage. For this analysis, the operating range was lowered and the resulting effects to the service area are the following:

Bottom of Tank Elevation = 1500 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1438 feet or lower.
- Able to provide services to the entire City and ETJ.

Bottom of Tank Elevation = 1495 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1433 feet or lower.
- Inability to provide services to an area of approximately 2 acres.

Bottom of Tank Elevation = 1490 feet

- Elevated storage tank could provide service to all areas within Zone A at an elevation of 1428 feet or lower.
- Inability to provide services to an area of approximately 8 acres.

Figure 16 displays the area within Pressure Zone A that cannot be served when the operating range of the tank is lowered. The area that could not be served would become an additional pressure plane within the City's system and would need to be served by a separate booster pump station to meet TCEQ pressure requirements.

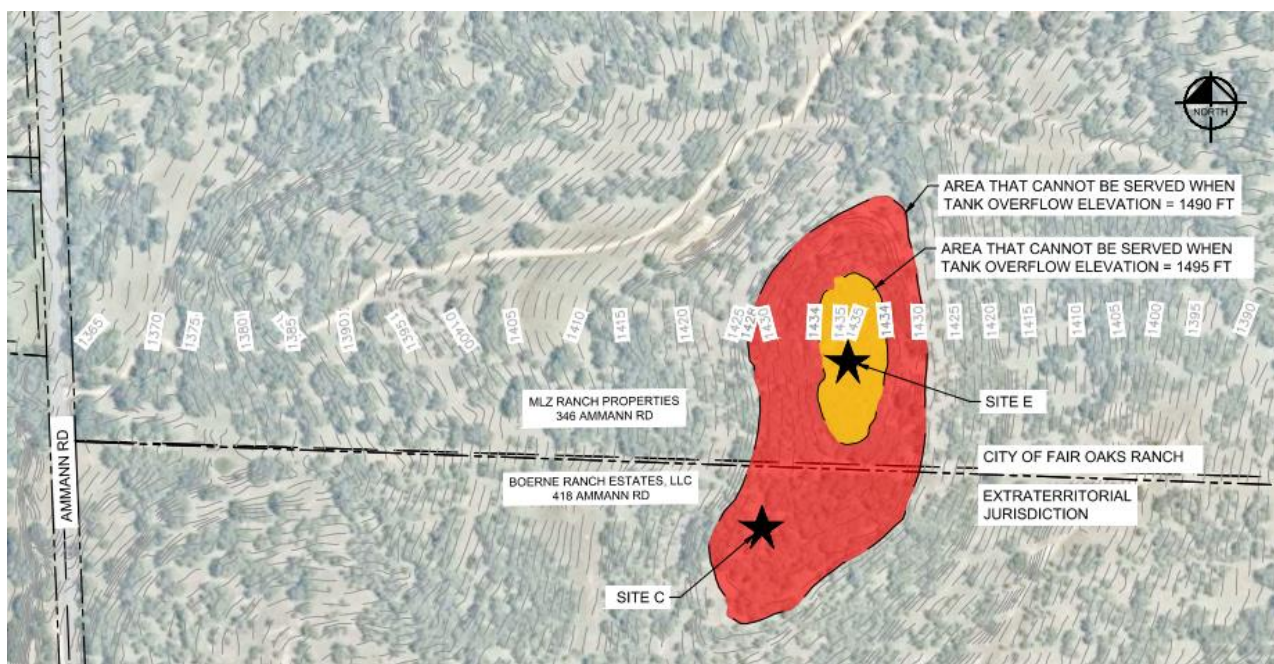


Figure 16. Lower Operating Range Service Area Exhibit.

Table 12 displays a summary of the junction pressures obtained when the water level was at the top of domestic storage for Site B for the different elevations.

Table 12. Lower Tank Operating Range Junction Pressures at Bottom of Domestic Storage -Site B.

Year	Bottom of Tank Elevation (ft)	Water Level in Tank	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
2023	1490	18	0	2	102	41	4
	1495	18	0	0	91	51	7
	1500*	18	0	0	82	56	11
2040	1490	18	0	7	109	41	0
	1495	18	0	7	106	44	0
	1500*	18	0	5	106	46	0

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Lowering the operating range of the elevated storage tank does not result in a significant difference in the number of junctions within the second lowest pressure category when the water level in the tank is at the bottom of domestic storage. The junctions in the second lowest pressure category are located on the highest terrain in Zone A.

Table 13 displays a summary of the junction pressures obtained when the water level was at the top of domestic storage for Site B for the different elevations.

Table 13. Lower Tank Operating Range Junction Pressures at Top of Domestic Storage - Site B.

Year	Bottom of Tank Elevation (ft)	Water Level in Tank	<35 psi	35-50 psi	50-80 psi	80-100 psi	>100 psi
2023	1490	30	0	0	80	58	11
	1495	30	0	0	72	65	12
	1500*	30	0	0	69	67	13
2040	1490	30	0	4	106	47	0
	1495	30	0	2	98	55	2
	1500*	30	0	2	89	60	6

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Lowering the operating range of the elevated storage tank does not result in a difference in the number of junctions within the lowest pressure category when the water level in the tank is at the top of domestic storage. The junctions in the second lowest pressure category are located on the highest terrain in Zone A.

The efficiency and flow of the existing pumps in the system were also evaluated when raising the operating range. Refer to **Figure 10** to view the pump curve for the Plant #3 Pumps with annotations displaying the pump efficiencies for the different hydraulic scenarios. When lowering the operating range

of the tank, the pumps efficiencies were within the optimal operating range. Refer to **Figure 16** to view the areas within the City that would not be serviced if the operating range was lowered.

FIRE FLOW SCENARIO

The effects of lowering the elevated storage tank's operating range on available fire flow were also evaluated at Site B. The existing model did not contain a 2023 fire flow scenario, so Kimley-Horn added fire flow demands to the Max Day scenario for this analysis in accordance with the 2040 fire flow scenario provided in the existing model.

Lowering the operating range of the resulted in a greater number of junctions unable to provide sufficient fire flow. The junctions within the lowest category of available fire flow received constricted fire flow due to the smaller pipes (2-inch to 6-inch lines) connecting them to the network. **Table 14** displays the number of junctions by range of available fire flow for the different elevations and 2023 and 2040 demands.

Table 14. Lower Tank Operating Range Available Fire Flow – Site B.

Year	Bottom of Tank Elevation (ft)	<1,500 gpm	1,500-3,000 gpm	>3,000 gpm
2023	1490	26	106	21
	1495	26	105	22
	1500*	25	105	23
2040	1490	22	77	62
	1495	21	77	63
	1500*	21	74	66

* 1500 feet was included in the model provided by the City as the original Water Master Plan bottom of tank elevation.

Lowering the tank's operating range results in fewer junctions with pressures greater than 100 psi and an additional junction unable to provide sufficient fire flow. The pumps within the system saw minor variations in efficiency with a lower operating range but were still within the optimal operating range. Lowering the operating range would also reduce the tank initial cost by approximately \$2,500/foot.

SUMMARY HYDRAULIC ANALYSIS AND SYSTEM IMPROVEMENTS

Hydraulic modeling of the potential site locations included evaluation of tank levels, junction pressures, and pump controls. When evaluated in comparison to the tank site established in the Water Master Plan, there was little variation in system performance between tank sites. **Table 15** contains a summary of the tank operating range hydraulic analysis.

Table 15. Summary Tank Operating Range Results.

Bottom of Tank Elevation (ft)	Benefits	Concerns	Infrastructure Required
1490	• Reduced number of junctions with pressures greater than 100 psi. • Initial tank cost approximately \$25,000 less. • Minor increase in pump efficiency.	• An additional junction is unable to provide sufficient fire flow. • Minor reduction in pump efficiency during 2023 peak hour.	• Booster pump station or individual in line booster to service areas at an elevation of 1428 feet or higher. • System pressure reducing valve.
1495	• Reduced number of junctions with pressures greater than 100 psi. • Initial tank cost approximately \$12,500 less. • Minor increase in pump efficiency.	• An additional junction is unable to provide sufficient fire flow in the 2023 scenario. • Minor reduction in pump efficiency during 2023 peak hour.	• Booster pump station or individual in line booster to service areas at an elevation of 1433 feet or higher. • System pressure reducing valve.
1500	• Originally modeled bottom of tank elevation in Water Master Plan.		• System pressure reducing valve.
1505	• An additional junction is able to provide sufficient fire flow.	• Initial tank cost approximately \$12,500 more.	• System pressure reducing valve.
1510	• An additional junction is able to provide sufficient fire flow.	• Initial tank cost approximately \$25,000 more.	• System pressure reducing valve.

COMMUNITY INPUT/FEEDBACK

City staff identified that community input was desired throughout the design of the elevated storage tank, with emphasis on input during the 30% design phase. This section documents the process as well as feedback received. **Figure 17** illustrates the approach to community engagement that is being taken during the 30% design phase.



Figure 17. 30% Design Phase Flow Diagram.

Public outreach provided during the 30% design phase included sharing information about the project to community members through community workshops while also creating the opportunity for residents to provide their feedback or voice a concern. Community members were informed about potential tank site locations, tank styles to be evaluated, and the project's evaluation criteria.

COMMUNITY WORKSHOP #1

Community Workshop #1 was hosted by the City and Kimley-Horn at the Spring Creek United Methodist Church on June 18, 2019. The objective of the first workshop was to obtain public input and inform the public of the following:

- Function and benefits of elevated storage tanks
- City's history of elevated storage tank project
- Project's schedule overview
- Potential tank site locations and tank styles to be evaluated
- Project's evaluation criteria

Thirty-one (31) out of the thirty-four (34) attendees were residents of Fair Oaks Ranch. Of those, nine (9) residents were identified as living within 1-mile radius of any four potential tank sites shown in **Figure 2**. The workshop consisted of a 15-minute presentation followed by an open-forum where two exhibit stations were set up for residents. Additional information about Community Workshop #1 can be found in **Appendix C**.

STATION 1

Station 1 consisted of an exhibit that identified the four potential tank sites. At this station the community expressed a strong preference for avoiding tank sites immediately adjacent to existing residences, and as such Sites B and C were favored (refer to **Figure 18**). Although Site B and C received all the votes from residents, Site C was favored due to the higher ground elevation that would reduce the overall height of the tank and possibly result in a lower potential construction cost.

Potential Tank Site Results

Option A	0 votes
Option B	8 votes 
Option C	20 votes 
Option D	0 votes

Figure 18. Community Workshop #1 - Station 1 Results.

STATION 2

Station 2 consisted of an exhibit showing three tank styles (Composite, Spheroid, Multi-Column) and a list of evaluation criteria. Feedback received at this station included strong concerns expressed with tank costs (initial capital cost and maintenance costs). An additional concern was the aesthetics of the tank. The composite and spheroid tank were favored over the multi-column tank. Refer to **Figure 19** to view a summary of feedback received at Station 2.

Tank Design Results

Multi-Column Tank	0 votes
Composite Tank	10 votes 
Spheroid Tank	12 votes 

Figure 19. Community Workshop #1 - Station 2 Results.

COMMUNITY WORKSHOP #2

Community Workshop #2 was hosted by the City and Kimley-Horn at Cibolo Creek Community Church on September 10, 2019. The objective of the second workshop was to update the public on the project progress, obtain public input, and inform the public of the following:

- Function and benefits of elevated storage tanks
- City's history of elevated storage tank project
- Community Workshop #1
- Project's schedule overview
- Potential tank site locations and tank styles evaluated
- Site and tank style cost analysis
- Stakeholder update
- Project's evaluation criteria

Forty-three (43) residents of Fair Oaks Ranch attended the workshop. Of those residents, thirty-two (32) were identified as living within a 1-mile radius of any of the five potential tank sites shown in **Figure 2**. The workshop consisted of a 30-minute presentation followed by an open-forum where two exhibit stations were set up for residents. Additional information about Community Workshop #2 can be found in **Appendix C**.

STATION 1

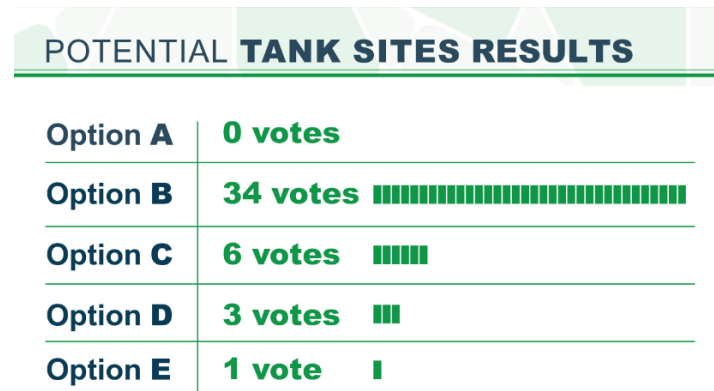


Figure 20. Community Workshop #2 - Station 1 Results.

STATION 2

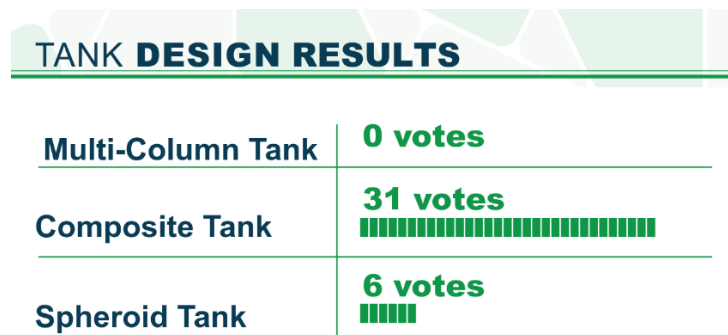


Figure 21. Community Workshop #2 - Station 2 Results.

HOME OWNERS ASSOCIATION (HOA) – STONE CREEK RANCH
SUBDIVISION

- Function and benefits of elevated storage tanks

- City's history of elevated storage tank project
- Potential tank site locations and tank styles to be evaluated
- Project's evaluation criteria

Twenty-four (24) residents attended the meeting. The meeting consisted of a brief 10-minute presentation followed by questions from residents. One of the major concerns received during the meeting was the potential impact of resident's property value depreciating due to the elevated storage tank being built in close proximity to the subdivision. Additional feedback/concerns received during the meeting can be found in **Appendix C**.

STAKEHOLDER COORDINATION

Coordination with project stakeholders consisted of face-to-face meetings and/or conference calls. Below is a list of stakeholders that were coordinated with during 30% design phase:

- Federal Aviation Administration (FAA)
- Pedernales Electric Cooperative, Inc
- Kendall and Comal County
- Guadalupe-Blanco River Authority (GBRA)
- Camp Bullis and Camp Stanley Military Installations
- Private Developers (Green Land Ventures, LTD and Boerne Ranch Estates, LLC)
- Property Owner – MLZ Ranch Estates, LLC

Table 16 includes a list of the anticipated permits for each site location.

Table 16. Site Permits.

Permitting Entity	Sites				
	A	B	C	D	E
Federal Aviation Administration 7460	X	X	X	X	X
TCEQ – Plan Review	X	X	X	X	X
TCEQ – Edwards Aquifer Exception Request		X			

KENDALL AND COMAL COUNTY

Kimley-Horn researched the required driveway and right-of-way permits for the potential tank sites. It was determined that no permits for driveway or right-of-way would need to be obtained from Kendall or Comal County.

If voluntary lighting was selected for the tank, a Camp Bullis Dark Skies Zone Outdoor Lighting Permit would be required by Kendall (Sites A, C, D, and E) and Comal County (Site B).

PRIVATE DEVELOPERS

Kimley-Horn met with the private developers for both the Stone Creek Ranch Subdivision (Green Land Ventures, LTD) and Boerne Ranch Estates property. Both currently have development agreements in place with the City. For additional information regarding the development agreements, refer to the Developer Agreements section of this Technical Memorandum.

Green Land Ventures, LTD developer has an agreement with the City to provide a 0.5-acre tract to the City for the construction of an elevated storage tank within a half-mile from the subdivision property. In discussion with the developer, the preference was to select a site away from the subdivision given the current development within Stone Creek Ranch and feedback received from residents.

Boerne Ranch Estates, LLC developer also has an agreement in place with the City to provide a contribution in financial aid for the construction of the elevated storage tank. Although the developer would prefer for the elevated storage tank to be located outside the property, developer mentioned that the current subdivision layout was accounting for an elevated storage tank at Site C based on prior conversations with the City. No specific concerns were expressed with potential site location of Site B and Site D as well.

CAMP BULLIS

Kimley-Horn met with officials from Joint Base San Antonio (JBSA) to discuss potential concerns for the installation of an elevated storage tank within the Camp Bullis buffer zone (refer to **Figure 22**). No specific concerns regarding light or noise influences were identified at the meeting, apart from ensuring that the applicable light ordinances are followed. The primary concern for JBSA was the proximity of Site B to the Combat Assault Landing Strip (CALS), with the approximate tank height of 1545 feet. Sites A and C were preferred by JBSA, but an official study conducted by the FAA would be required to determine how these potential tank sites could impact the use of the CALS. Kimley-Horn submitted a permit application to the FAA to determine if any of the potential tank sites pose an air space hazard.

After submitting a formal request to the FAA for evaluation of Sites A, B, C, and D, it was determined that the sites were not a hazard to air navigation. Due to similarity in location and elevation to Site C, Site E was not submitted. Regardless of site selection, the final tank location will be updated during the design phase in form 7460 OE/AAA, as required. Similarly, if Site E were selected the OE/AAA form 7460 would be updated for Site C, due to the close proximity to Site E, indicating final tank location."

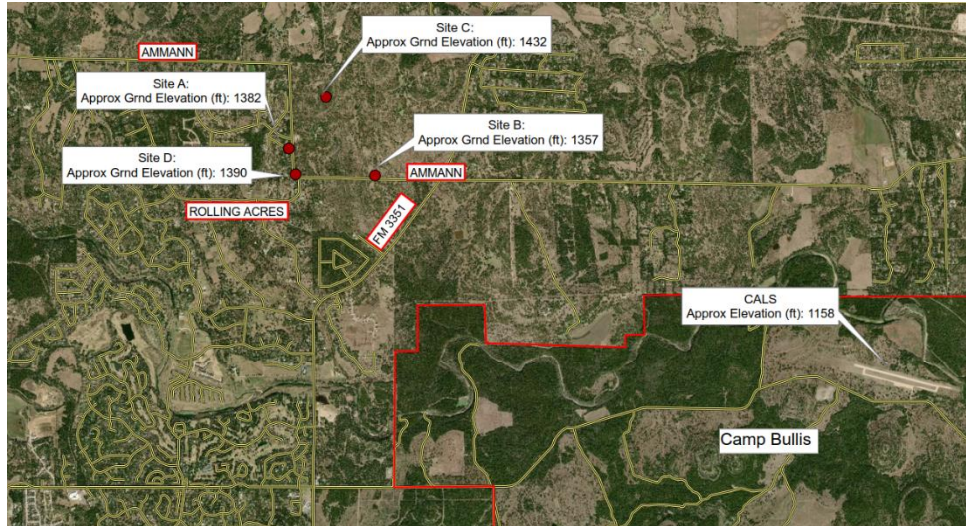


Figure 22. Site Locations in Relation to CALS.

CAMP STANLEY

Kimley-Horn and City staff met with representatives from Camp Stanley to discuss potential concerns for the development of an elevated storage tank. Camp Stanley is used primarily for ammunition storage and testing. Representatives of Camp Stanley indicated that all the potential tank site locations are outside the range of testing that Camp Stanley performs. Therefore, none of the potential tank site locations are of concern to Camp Stanley.



Figure 23. Project Location in Relation to Camp Stanley.

GBRA

Kimley-Horn and City staff met with GBRA staff on August 13, 2019 to discuss the addition of a second GBRA delivery point from the existing 24-inch GBRA transmission line to City of Fair Oaks Ranch water distribution system. GBRA indicated that requirements for an additional delivery point would be identical to the existing Plant #5 delivery point. The standard installation would include a fiberglass encased meter and valve. GBRA water will be provided to customer's water tank with an air gap. GBRA mentioned that the 24-inch transmission line along Ammann Road has a pressure of 80 to 90 psi. GBRA system pressure would not be able to supply water to an overflow elevation of 1530 feet. A booster pump would be required for the water to be pumped into the tank. The City noted that a ground storage tank would likely be added at the site of the second delivery point for GBRA water in addition to a booster pump. GBRA indicated that the customer would be responsible for the extension of the transmission line from the delivery point to the elevated storage tank. The extension of the transmission line would result in additional costs for Sites A, C, and E.

FAA

Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) form 7460 was submitted to the FAA for four potential tank sites, Sites A, B, C, and D. Due to similarity in location and elevation to Site C, Site E was not submitted. Regardless of site selection, the final tank location will be updated during the design phase in form 7460 OE/AAA, as required. Similarly, if Site E were selected the OE/AAA form 7460 would be updated for Site C due to the close proximity to Site E indicating final tank location. FAA aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation for the four tank sites that were submitted. Additionally, marking and lighting of the water elevated storage tank for aviation safety is not required by the FAA. Voluntary installation of lighting would be in accordance with FAA Advisory Circular 70/7460-1L Change 2, as stated in the OE/AAA. The recommended voluntary nighttime lighting is flashing red lights, referred to as Aviation Red Obstruction Lights in the FAA Advisory Circular. The number of lights would be determined once a tank style is selected. No marking or lighting is recommended for the daytime. OE/AAA form 7460 results can be found in **Appendix E**.

MLZ RANCH PROPERTIES

Kimley-Horn and City staff met with the owner of MLZ Ranch Properties to discuss the potential tank location, Site E, on the southern border of their property. The owner indicated a strong preference for the tank site to be located away from their property. No concerns were expressed with the potential tank site location for Sites A, B, or D.

LAND ACQUISITION CONSIDERATIONS

Table 17 provides a summary of the existing agreements between the City and developers where each of the potential tank sites is located. Existing developer agreements can be found in **Appendix G**.

Table 17. Land Acquisition Considerations.

Entity	Potential Tank Site Location	Developer Agreement	Requirements	Land Acquisition Impact
Green Land Ventures, LTD	A	Yes	Water Supply Agreement Section III. L. "The Owner shall, at the Owner's sole cost and expense, secure a suitable one-half acre tract of land within one-half mile of the Property for the future location and construction of an elevated water storage tank. Owner agrees to donate this elevated storage tank site and surrounding sanitary easement to the City at no cost."	Purchase of up to one-half acre of land to be funded by Green Land Ventures, LTD.
Boerne Ranch Estates, LLC	B, C, D	Yes	Development Agreement. "Provide for infrastructure for the Land including: (i) streets and roads, (ii) street and road drainage, (iii) land drainage, (iv) internal water storage and distribution, wastewater collection, treatment and disposal and other utility systems."	Developer agreement does not specifically define whether the land would be donated by developer. Further coordination with developer will be required. The cost up to one-half acre would be the responsibility of Green Land Ventures, LTD.
MLZ Ranch Properties, LLC	E	None	Requirements for the site are to be determined if Site E were selected.	Site E is located within one-half mile of Green Land Ventures, LTD property. The cost of up to one-half acre of land acquisition would be the responsibility of Green Land Ventures, LTD.

OPINION OF PROBABLE CONSTRUCTION COST

Table 18 provides a summary of the Opinion of Probable Construction Cost (OPCC) for each tank site and style. The OPCC contains projected costs for a water elevated storage tank, site work, electrical and controls, mobilization, and off-site work including access roads, extension of existing utilities, and drainage. Cost of land acquisition is not included. Detailed breakdowns of cost projections can be found in **Appendix B**. In addition, opinion of probable construction costs were developed for system pressure reducing valves discussed in this TM. OPCC can be found in **Appendix B**.

Table 18. Opinion of Probable Construction Cost.

Site Locations	Composite	Spheroid	Multi-Column
Site A	\$2,700,000	\$2,600,000	\$2,200,000
Site B	\$3,500,000	\$3,300,000	\$2,900,000
Site C	\$3,000,000	\$2,700,000	\$2,400,000
Site D	\$2,700,000	\$2,400,000	\$2,100,000
Site E	\$3,100,000	\$3,000,000	\$2,700,000

CONCLUSION

After evaluation of each tank site location and hydraulic analyses, Kimley-Horn developed preliminary conclusions according to the criteria outlined in the following summary sections.

SITE EVALUATION SUMMARY

Each tank site was evaluated based on the following criteria: tank height, site access, proximity to existing utilities, community input, and tank maintenance. After analyzing each potential tank site for the aforementioned criteria, Kimley-Horn developed the following conclusions:

- Sites C and E, Multi-Column tank has the lowest initial capital cost (refer to **Table 2**). Initial capital cost includes tank fabrication, tank assembly and coatings, standard accessories, and foundation at a reasonable depth. Site work is not included.
- Sites C and E, Multi-Column tank has the lowest TCO (refer to **Table 4**). TCO includes both the tank initial capital cost and the 60-year life cycle cost of the tank. Site work is not included.
- Site D, Multi-Column tank has the lowest overall construction cost (refer to **Table 16**). The OPCC includes site work, controls and electrical components, access road, utility extensions, and tank initial capital cost. Land acquisition costs are not included.
- The most recent community input received at Community Workshop #2 indicated strongest preferences for Site B and a composite style tank.

HYDRAULIC SUMMARY

Hydraulic analysis included evaluation of the following in Zone A: junction pressures, available fire flow, higher tank operating ranges, and lower tank operating ranges. After analyzing each potential tank site for the previously listed criteria, Kimley-Horn developed the following conclusions:

- None of the potential tank sites displayed a significant change in system performance when compared to the originally modeled site (Site B).
- Sites A and D provided an available fire flow similar to Site B. Sites C and E had a lower available fire flow due to proposed 12-inch water line connecting to existing system at the existing 8-inch water line off Woodland View.
- The pumps located in the existing system were not able to meet 2023 peak hour demands given in the Water Master Plan.
- The City's existing pumps were able to meet 2023 peak hour demands when an elevated storage tank was modeled. The pump efficiencies were within the optimal operating range. Refer to **Figure 10** to view the pump curve. An additional pump station would be required for buildout conditions.
- A system PRV at the location shown in **Figure 12** and **Figure 13** would result in pressures within an acceptable range for approximately 48 parcels within Zone A. Additional junctions with pressures greater than 80 psi may require individual PRVs.
- When the northeast region of Zone B was added to Zone A for the fire flow scenario, 29 junctions within Zone B were able to provide an available fire flow greater than 1,500 gpm. A pressure reducing valve would be required for this scenario, in the location shown in **Figure 14**.
- Raising the tank's operating range did not result in significant improvements for low pressure junctions (<50 psi) or junctions unable to provide fire flow greater than 1,500 gpm within Zone A.
- Lowering the tank's operating range did not result in a significant difference in the number of junctions within the lowest pressure category. There was a minor increase in the number of junctions unable to provide fire flow greater than 1,500 gpm.

APPENDIX

Appendix A. Site Layouts.

Appendix B. Opinion of Probable Construction Costs.

Appendix C. Meeting Minutes.

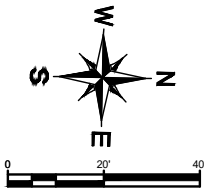
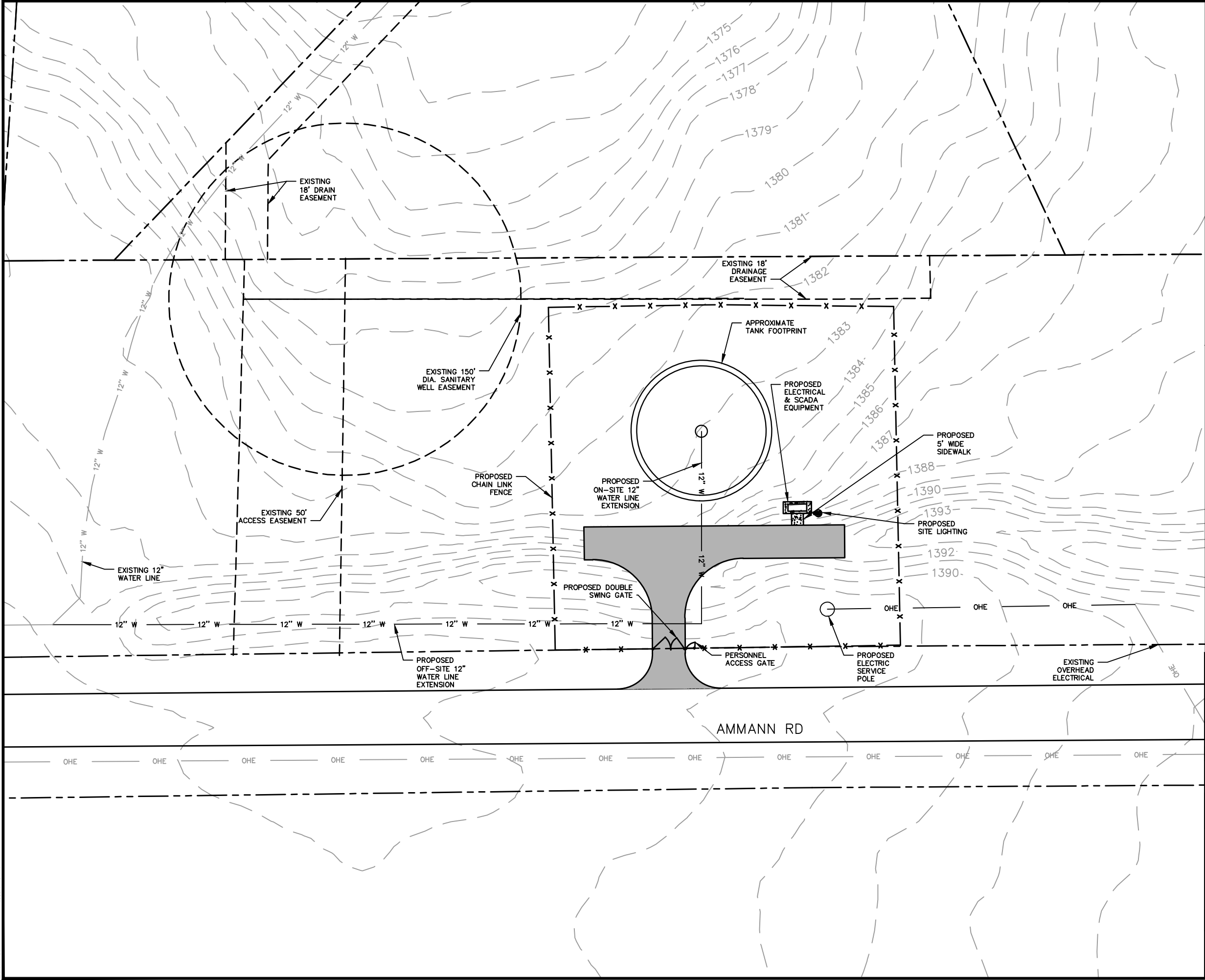
Appendix D. Existing Utility Information.

Appendix E. Federal Aviation Administration Form 7460 Results.

Appendix F. Hydraulic Modeling Data.

Appendix G. Existing Developer Agreements.

APPENDIX A: SITE LAYOUTS



Kimley»Horn

Texas Registered Firm, No. F-928

601 NW Loop 410 Suite 350 Tel No. 210-541-9166
San Antonio, TX 78216 Fax No. 210-541-8699

No.	Revision	By	Date

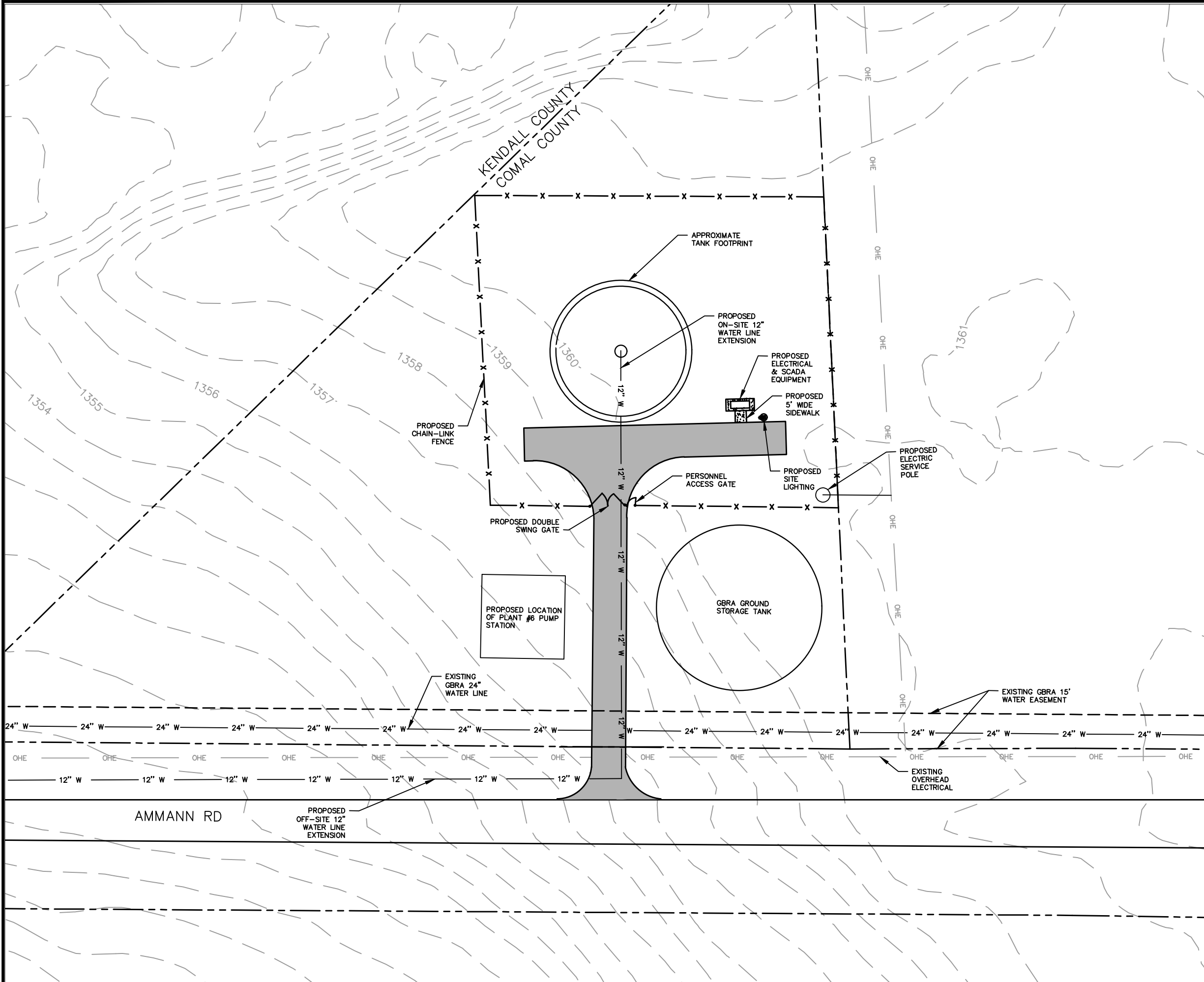
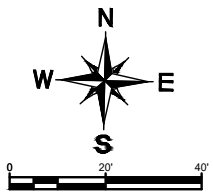


**CITY OF FAIR OAKS RANCH
ELEVATED STORAGE TANK
SITE A
EXHIBIT**

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CHECKED: VRS	068686901	

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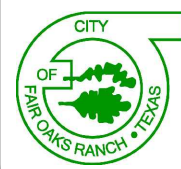
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Kimley»Horn

Texas Registered Firm, No. F-928

601 NW Loop 410 Suite 350 Tel No. 210-541-9166
San Antonio, TX 78216 Fax No. 210-541-8699

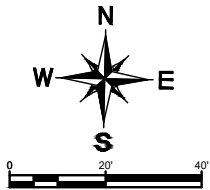
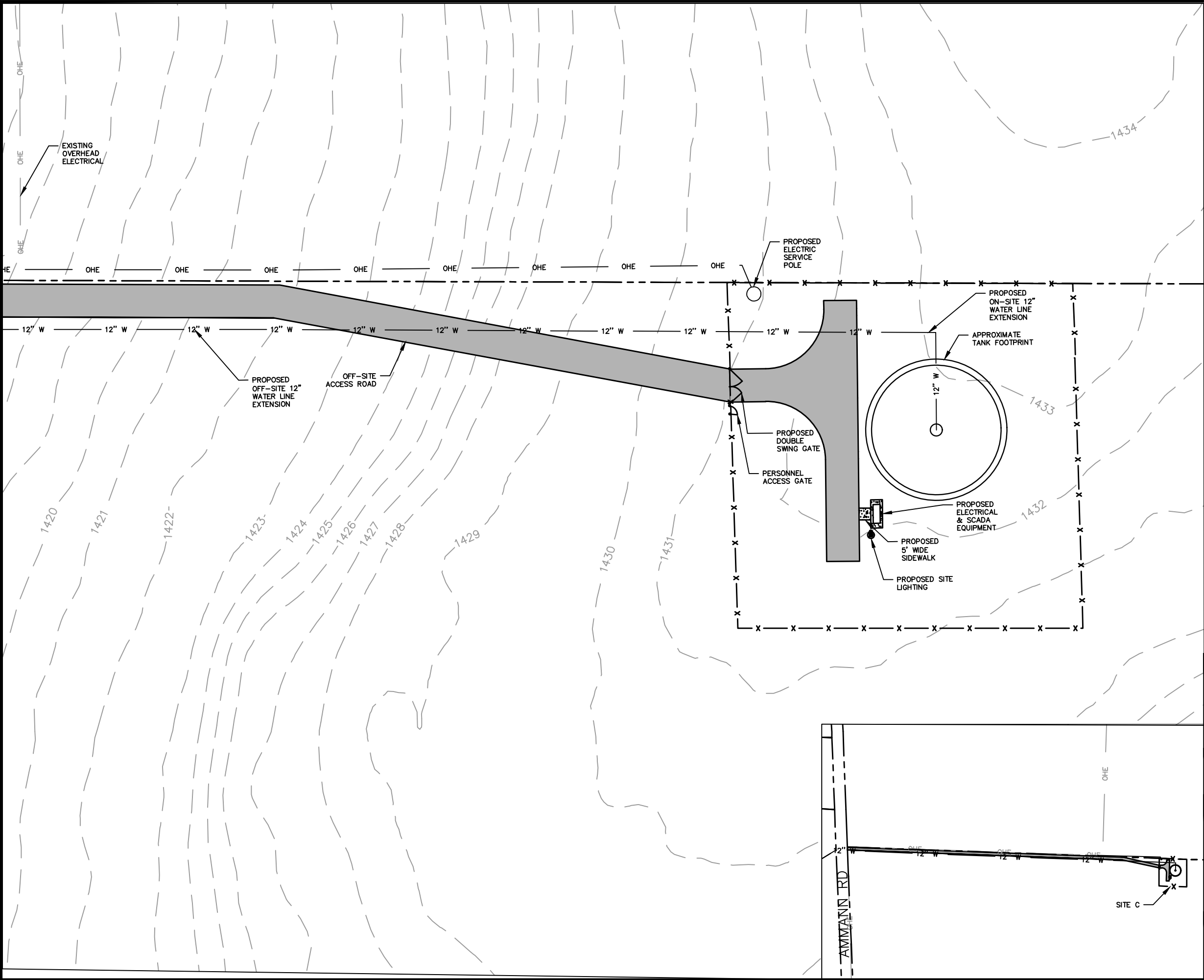
No.	Revision	By	Date



**CITY OF FAIR OAKS RANCH
ELEVATED STORAGE TANK
SITE B
EXHIBIT**

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CHECKED: VRS	068686901	

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Kimley»Horn
 Texas Registered Firm, No. F-928

601 NW Loop 410 Suite 350 Tel No. 210-541-9166
 San Antonio, TX 78216 Fax No. 210-541-8699

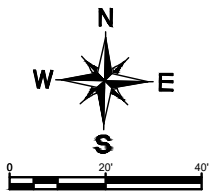
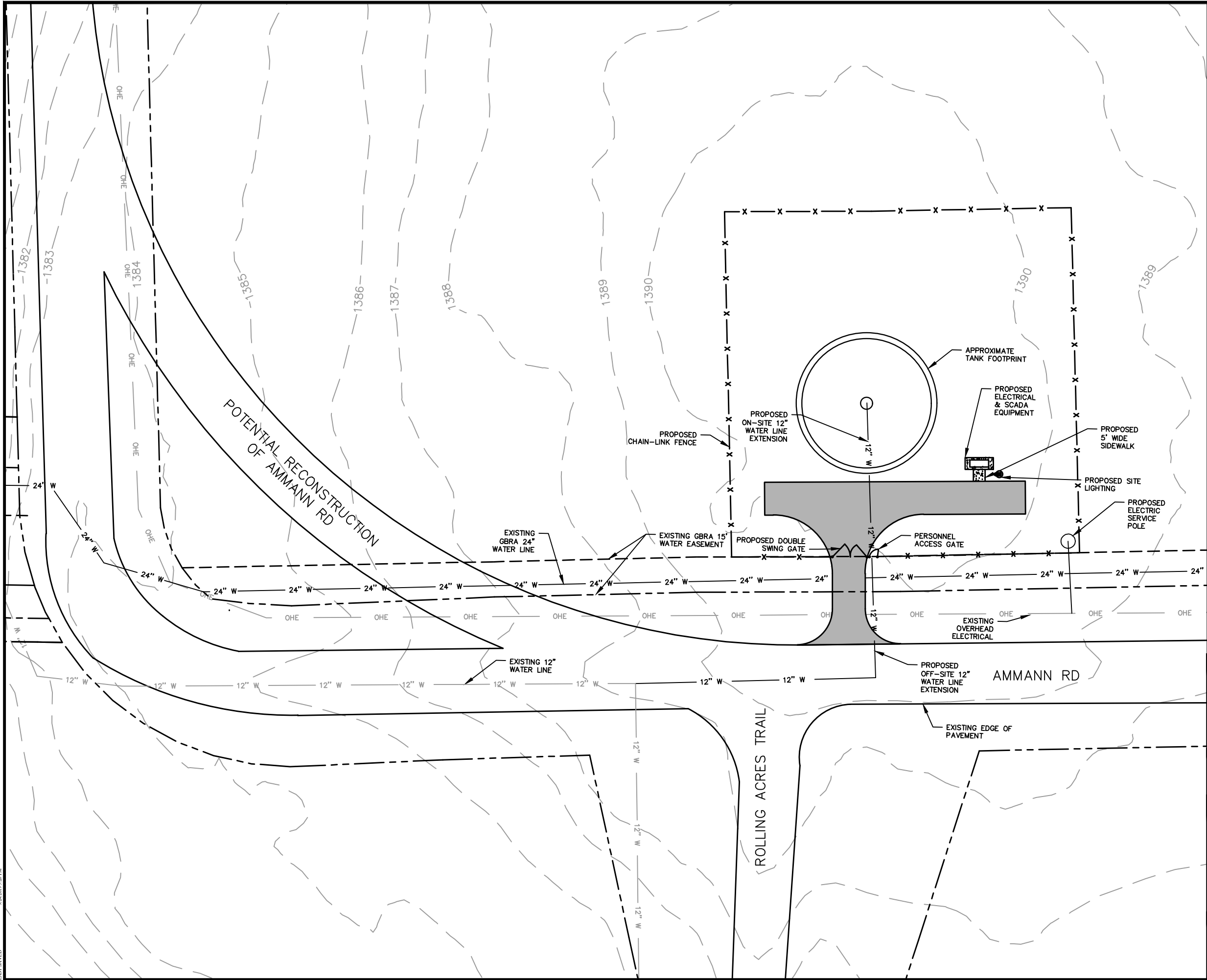
No.	Revision	By	Date



CITY OF FAIR OAKS RANCH
ELEVATED STORAGE TANK
SITE C
EXHIBIT

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DESIGN: MAV		
DRAWN: MMV	KHA PROJECT NO.	
CHECKED: VRS	068686901	

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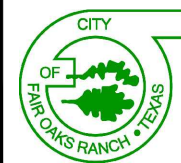


Kimley»Horn

Texas Registered Firm, No. F-928

601 NW Loop 410 Suite 350 Tel No. 210-541-9166
San Antonio, TX 78216 Fax No. 210-541-8699

No.	Revision	By	Date



**CITY OF FAIR OAKS RANCH
ELEVATED STORAGE TANK
SITE D
EXHIBIT**

DATE: AUGUST 2019		SHEET NO. EX 4
DESIGN: MAV		
DRAWN: MMV	KHA PROJECT NO.	
CHECKED: VRS	068686901	

APPENDIX B: OPINION OF PROBABLE CONSTRUCTION COSTS

Client:	City of Fair Oaks Ranch	Date:	10/30/2019
Project:	0.5 MG Elevated Storage Tank	Prepared By:	MMV/MAV
KHA No.:	68686901	Checked By:	VRS

Title:	Water Elevated Storage Tank - Summary	Sheet:	1 of 6
--------	---------------------------------------	--------	--------

Item No.	Description	Projected Costs
1	Site A	
	Composite	\$ 2,700,000
	Spheroid	\$ 2,600,000
	Multi-Column	\$ 2,200,000
2	Site B	
	Composite	\$ 3,500,000
	Spheroid	\$ 3,300,000
	Multi-Column	\$ 2,900,000
3	Site C	
	Composite	\$ 3,000,000
	Spheroid	\$ 2,700,000
	Multi-Column	\$ 2,400,000
4	Site D	
	Composite	\$ 2,700,000
	Spheroid	\$ 2,400,000
	Multi-Column	\$ 2,100,000
5	Site E	
	Composite	\$ 3,100,000
	Spheroid	\$ 3,000,000
	Multi-Column	\$ 2,700,000

This total does not reflect engineering or technical services.

The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - SITE A

Sheet: 2 of 6

Item No.	Description	Quantity	Unit	Unit Cost	Item Cost
1	WATER ELEVATED STORAGE TANK (Approx. Tank Height to Overflow 148-feet)				
	Composite Elevated Storage Tank	1	EA	\$ 1,575,000.00	\$ 1,575,000.00
	Spheroid Elevated Storage Tank	1	EA	\$ 1,375,000.00	\$ 1,375,000.00
	Multi-Column Elevated Storage Tank	1	EA	\$ 1,050,000.00	\$ 1,050,000.00
1a	Site Work				
	8-inch Flex Base Paving (TXDOT ITEM 247, Type A, Grade 2)	250	SY	\$ 30.00	\$ 7,500.00
	Chain-link fence (#9 gauge, 3 strand barbed wire)	600	LF	\$ 50.00	\$ 30,000.00
	Onsite 12-inch Water Main and Fittings	150	LF	\$ 200.00	\$ 30,000.00
	Erosion Control/SWPPP/Site Restoration	1	LS	\$ 25,000.00	\$ 25,000.00
	Site Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
	Site Grading (Including Berm)	1	LS	\$ 25,000.00	\$ 25,000.00
	Containment for Sandblasting/Coating (Spheroid and Multi-Column)	1	LS	\$ 100,000.00	\$ 100,000.00
	Containment for Sandblasting/Coating (Composite)	1	LS	\$ 50,000.00	\$ 50,000.00
	Chlorine Boosting	1	EA	\$ 10,000.00	\$ 10,000.00
1b	Elevated Storage Tank				
	Tank Control Valve Assembly	1	LS	\$ 80,000.00	\$ 80,000.00
	Tank Valves and Piping	1	LS	\$ 40,000.00	\$ 40,000.00
	Slab/Valve Vault (Multi-Column EST Only)	1	LS	\$ 20,000.00	\$ 20,000.00
1c	Electrical and Controls				
	Electrical Service and Distribution	1	LS	\$ 35,000.00	\$ 35,000.00
	SCADA System	1	LS	\$ 25,000.00	\$ 25,000.00
	Security System	1	LS	\$ 25,000.00	\$ 25,000.00
	Instrumentation	1	LS	\$ 22,000.00	\$ 22,000.00
	Lighting	1	LS	\$ 17,000.00	\$ 17,000.00
	Grounding	1	LS	\$ 6,000.00	\$ 6,000.00
2	Off-site Access Road and Grading	40	SY	\$ 30.00	\$ 1,200.00
3	Off-site Water Main				
	12-inch Water Main and Fittings	225	LF	\$ 150.00	\$ 33,750.00
4	Mobilization (10% of items 1, 2, 3 - rounded)	1	LS	\$ 200,000.00	\$ 200,000.00
Contingency					20%
Composite (Rounded)				\$	2,700,000.00
Spheroid (Rounded)				\$	2,600,000.00
Multi-Column (Rounded)				\$	2,200,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - SITE B

Sheet: 3 of 6

Item No.	Description	Quantity	Unit	Unit Cost	Item Cost
1	WATER ELEVATED STORAGE TANK (Approx. Tank Height to Overflow 173-feet)				
	Composite Elevated Storage Tank	1	EA	\$ 1,650,000.00	\$ 1,650,000.00
	Spheroid Elevated Storage Tank	1	EA	\$ 1,450,000.00	\$ 1,450,000.00
	Multi-Column Elevated Storage Tank	1	EA	\$ 1,100,000.00	\$ 1,100,000.00
1a	Site Work				
	8-inch Flex Base Paving (TXDOT ITEM 247, Type A, Grade 2)	250	SY	\$ 30.00	\$ 7,500.00
	Chain-link fence (#9 gauge, 3 strand barbed wire)	600	LF	\$ 50.00	\$ 30,000.00
	Onsite 12-inch Water Main and Fittings	100	LF	\$ 200.00	\$ 20,000.00
	Erosion Control/SWPPP/Site Restoration	1	LS	\$ 25,000.00	\$ 25,000.00
	Site Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
	Site Grading	1	LS	\$ 5,000.00	\$ 5,000.00
	Containment for Sandblasting/Coating (Spheroid and Multi-Column)	1	LS	\$ 100,000.00	\$ 100,000.00
	Containment for Sandblasting/Coating (Composite)	1	LS	\$ 50,000.00	\$ 50,000.00
	Chlorine Boosting	1	EA	\$ 10,000.00	\$ 10,000.00
1b	Elevated Storage Tank				
	Tank Control Valve Assembly	1	LS	\$ 80,000.00	\$ 80,000.00
	Tank Valves and Piping	1	LS	\$ 40,000.00	\$ 40,000.00
	Slab/Valve Vault (Multi-Column EST Only)	1	LS	\$ 20,000.00	\$ 20,000.00
1c	Electrical and Controls				
	Electrical Service and Distribution	1	LS	\$ 35,000.00	\$ 35,000.00
	SCADA System	1	LS	\$ 25,000.00	\$ 25,000.00
	Security System	1	LS	\$ 25,000.00	\$ 25,000.00
	Instrumentation	1	LS	\$ 22,000.00	\$ 22,000.00
	Lighting	1	LS	\$ 17,000.00	\$ 17,000.00
	Grounding	1	LS	\$ 6,000.00	\$ 6,000.00
2	Off-site Access Road and Grading	350	SY	\$ 30.00	\$ 10,500.00
3	Off-site Water Main				
	12-inch Water Main and Fittings	3,650	LF	\$ 150.00	\$ 547,500.00
4	Mobilization (10% of items 1, 2, 3 - rounded)	1	LS	\$ 260,000.00	\$ 260,000.00
Contingency					20%
Composite (Rounded)				\$	3,500,000.00
Spheroid (Rounded)				\$	3,300,000.00
Multi-Column (Rounded)				\$	2,900,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - SITE C

Sheet: 4 of 6

Item No.	Description	Quantity	Unit	Unit Cost	Item Cost
1	WATER ELEVATED STORAGE TANK (Approx. Tank Height to Overflow 98-feet)				
	Composite Elevated Storage Tank	1	EA	\$ 1,450,000.00	\$ 1,450,000.00
	Spheroid Elevated Storage Tank	1	EA	\$ 1,250,000.00	\$ 1,250,000.00
	Multi-Column Elevated Storage Tank	1	EA	\$ 975,000.00	\$ 975,000.00
1a	Site Work				
	8-inch Flex Base Paving (TXDOT ITEM 247, Type A, Grade 2)	250	SY	\$ 30.00	\$ 7,500.00
	Chain-link fence (#9 gauge, 3 strand barbed wire)	600	LF	\$ 50.00	\$ 30,000.00
	Onsite 12-inch Water Main and Fittings	130	LF	\$ 200.00	\$ 26,000.00
	Erosion Control/SWPPP/Site Restoration	1	LS	\$ 25,000.00	\$ 25,000.00
	Site Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
	Site Grading	1	LS	\$ 5,000.00	\$ 5,000.00
	Chlorine Boosting	1	EA	\$ 10,000.00	\$ 10,000.00
1b	Elevated Storage Tank				
	Tank Control Valve Assembly	1	LS	\$ 80,000.00	\$ 80,000.00
	Tank Valves and Piping	1	LS	\$ 40,000.00	\$ 40,000.00
	Slab/Valve Vault (Multi-Column EST Only)	1	LS	\$ 20,000.00	\$ 20,000.00
1c	Electrical and Controls				
	Electrical Service and Distribution	1	LS	\$ 35,000.00	\$ 35,000.00
	SCADA System	1	LS	\$ 25,000.00	\$ 25,000.00
	Security System	1	LS	\$ 25,000.00	\$ 25,000.00
	Instrumentation	1	LS	\$ 22,000.00	\$ 22,000.00
	Lighting	1	LS	\$ 17,000.00	\$ 17,000.00
	Grounding	1	LS	\$ 6,000.00	\$ 6,000.00
2	Off-site Overhead Electric Extension (single-phase)	350	LF	\$ 100.00	\$ 35,000.00
3	Off-site Access Road and Grading	2,600	SY	\$ 30.00	\$ 78,000.00
4	Off-site Water Main				
	12-inch Water Main and Fittings	1,950	LF	\$ 150.00	\$ 292,500.00
5	Mobilization (10% of items 1, 2, 3, 4 - rounded)	1	LS	\$ 230,000.00	\$ 230,000.00
Contingency					20%
Composite (Rounded)				\$	3,000,000.00
Spheroid (Rounded)				\$	2,700,000.00
Multi-Column (Rounded)				\$	2,400,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - SITE D

Sheet: 5 of 6

Item No.	Description	Quantity	Unit	Unit Cost	Item Cost
1	WATER ELEVATED STORAGE TANK (Approx. Tank Height to Overflow 140-feet)				
	Composite Elevated Storage Tank	1	EA	\$ 1,550,000.00	\$ 1,550,000.00
	Spheroid Elevated Storage Tank	1	EA	\$ 1,350,000.00	\$ 1,350,000.00
	Multi-Column Elevated Storage Tank	1	EA	\$ 1,025,000.00	\$ 1,025,000.00
1a	Site Work				
	8-inch Flex Base Paving (TXDOT ITEM 247, Type A, Grade 2)	250	SY	\$ 30.00	\$ 7,500.00
	Chain-link fence (#9 gauge, 3 strand barbed wire)	600	LF	\$ 50.00	\$ 30,000.00
	Onsite 12-inch Water Main and Fittings	75	LF	\$ 200.00	\$ 15,000.00
	Erosion Control/SWPPP/Site Restoration	1	LS	\$ 25,000.00	\$ 25,000.00
	Site Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
	Site Grading	1	LS	\$ 5,000.00	\$ 5,000.00
	Containment for Sandblasting/Coating (Spheroid and Multi-Column)	1	LS	\$ 100,000.00	\$ 100,000.00
	Containment for Sandblasting/Coating (Composite)	1	LS	\$ 50,000.00	\$ 50,000.00
	Chlorine Boosting	1	EA	\$ 10,000.00	\$ 10,000.00
1b	Elevated Storage Tank				
	Tank Control Valve Assembly	1	LS	\$ 80,000.00	\$ 80,000.00
	Tank Valves and Piping	1	LS	\$ 40,000.00	\$ 40,000.00
	Slab/Valve Vault (Multi-Column EST Only)	1	LS	\$ 20,000.00	\$ 20,000.00
1c	Electrical and Controls				
	Electrical Service and Distribution	1	LS	\$ 35,000.00	\$ 35,000.00
	SCADA System	1	LS	\$ 25,000.00	\$ 25,000.00
	Security System	1	LS	\$ 25,000.00	\$ 25,000.00
	Instrumentation	1	LS	\$ 22,000.00	\$ 22,000.00
	Lighting	1	LS	\$ 17,000.00	\$ 17,000.00
	Grounding	1	LS	\$ 6,000.00	\$ 6,000.00
2	Off-site Access Road and Grading	150	SY	\$ 30.00	\$ 4,500.00
3	Off-site Water Main				
	12-inch Water Main and Fittings	200	LF	\$ 150.00	\$ 30,000.00
4	Mobilization (10% of items 1, 2, 3 - rounded)	1	LS	\$ 200,000.00	\$ 200,000.00
Contingency					20%
Composite (Rounded)				\$	2,700,000.00
Spheroid (Rounded)				\$	2,400,000.00
Multi-Column (Rounded)				\$	2,100,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - SITE E

Sheet: 6 of 6

Item No.	Description	Quantity	Unit	Unit Cost	Item Cost
1	WATER ELEVATED STORAGE TANK (Approx. Tank Height to Overflow 95-feet)				
	Composite Elevated Storage Tank	1	EA	\$ 1,450,000.00	\$ 1,450,000.00
	Spheroid Elevated Storage Tank	1	EA	\$ 1,250,000.00	\$ 1,250,000.00
	Multi-Column Elevated Storage Tank	1	EA	\$ 975,000.00	\$ 975,000.00
1a	Site Work				
	8-inch Flex Base Paving (TXDOT ITEM 247, Type A, Grade 2)	250	SY	\$ 30.00	\$ 7,500.00
	Chain-link fence (#9 gauge, 3 strand barbed wire)	600	LF	\$ 50.00	\$ 30,000.00
	Onsite 12-inch Water Main and Fittings	90	LF	\$ 200.00	\$ 18,000.00
	Erosion Control/SWPPP/Site Restoration	1	LS	\$ 25,000.00	\$ 25,000.00
	Site Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
	Site Grading	1	LS	\$ 5,000.00	\$ 5,000.00
	Containment for Sandblasting/Coating (Spheroid and Multi-Column)	1	LS	\$ 100,000.00	\$ 100,000.00
	Containment for Sandblasting/Coating (Composite)	1	LS	\$ 50,000.00	\$ 50,000.00
	Chlorine Boosting	1	EA	\$ 10,000.00	\$ 10,000.00
1b	Elevated Storage Tank				
	Tank Control Valve Assembly	1	LS	\$ 80,000.00	\$ 80,000.00
	Tank Valves and Piping	1	LS	\$ 40,000.00	\$ 40,000.00
	Slab/Valve Vault (Multi-Column EST Only)	1	LS	\$ 20,000.00	\$ 20,000.00
1c	Electrical and Controls				
	Electrical Service and Distribution	1	LS	\$ 35,000.00	\$ 35,000.00
	SCADA System	1	LS	\$ 25,000.00	\$ 25,000.00
	Security System	1	LS	\$ 25,000.00	\$ 25,000.00
	Instrumentation	1	LS	\$ 22,000.00	\$ 22,000.00
	Lighting	1	LS	\$ 17,000.00	\$ 17,000.00
	Grounding	1	LS	\$ 6,000.00	\$ 6,000.00
2	Off-site Overhead Electric Extension (single-phase)	550	LF	\$ 100.00	\$ 55,000.00
3	Off-site Access Road and Grading	3,000	SY	\$ 30.00	\$ 90,000.00
4	Off-site Water Main				
	12-inch Water Main and Fittings	2,250	LF	\$ 150.00	\$ 337,500.00
5	Mobilization (10% of items 1, 2, 3, 4 - rounded)	1	LS	\$ 240,000.00	\$ 240,000.00
Contingency					20%
Composite (Rounded)				\$	3,100,000.00
Spheroid (Rounded)				\$	3,000,000.00
Multi-Column (Rounded)				\$	2,700,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - System Pressure Reducing Valve 1 at Silver Spur Trail

Sheet: 1 of 2

Item No.	Description	Quantity	Unit	Unit Cost		Item Cost
1	System PRV 1					
	8-inch Pressure Reducing Valve and Pipe Assembly	1	EA	\$ 40,000.00	\$	40,000.00
	4-inch Pressure Reducing Valve and Pipe Assembly	1	EA	\$ 10,000.00	\$	10,000.00
1a	Site Work					
	PRV Concrete Vault	1	EA	\$ 30,000.00	\$	30,000.00
	Site Work / Restoration	1	EA	\$ 10,000.00	\$	10,000.00
1b	Electrical and Controls					
	Electrical Service and Distribution	1	EA	\$ 10,000.00	\$	10,000.00
	Instrumentation and SCADA Panels	1	EA	\$ 80,000.00	\$	80,000.00
	Radio Equipment and Antenna	1	EA	\$ 30,000.00	\$	30,000.00
2	Mobilization (10% of items above rounded)	1	LS	\$ 10,000.00	\$	10,000.00
Contingency						20%
System PRV 1 (Rounded)						\$ 270,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Client: City of Fair Oaks Ranch
 Project: 0.5 MG Elevated Storage Tank
 KHA No.: 68686901

Date: 10/30/2019
 Prepared By: MMV/MAV
 Checked By: VRS

Title: Water Elevated Storage Tank - System Pressure Reducing Valve 2 at Meadow Creek Trail

Sheet: 2 of 2

Item No.	Description	Quantity	Unit	Unit Cost		Item Cost
1	System PRV 2					
	8-inch Pressure Reducing Valve and Pipe Assembly	1	EA	\$ 40,000.00	\$	40,000.00
	4-inch Pressure Reducing Valve and Pipe Assembly	1	EA	\$ 10,000.00	\$	10,000.00
1a	Site Work					
	PRV Concrete Vault	1	EA	\$ 30,000.00	\$	30,000.00
	Site Work / Restoration	1	EA	\$ 10,000.00	\$	10,000.00
1b	Electrical and Controls					
	Electrical Service and Distribution	1	EA	\$ 10,000.00	\$	10,000.00
	Instrumentation and SCADA Panels	1	EA	\$ 80,000.00	\$	80,000.00
	Radio Equipment and Antenna	1	EA	\$ 30,000.00	\$	30,000.00
2	Mobilization (10% of items above rounded)	1	LS	\$ 10,000.00	\$	10,000.00
Contingency						20%
System PRV 1 (Rounded)						\$ 270,000.00

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

City of Fair Oaks Ranch, TX

Elevated Storage Tank Project
Council Briefing – November 21, 2019

Ryan Sowa, P. E.



Kimley»Horn

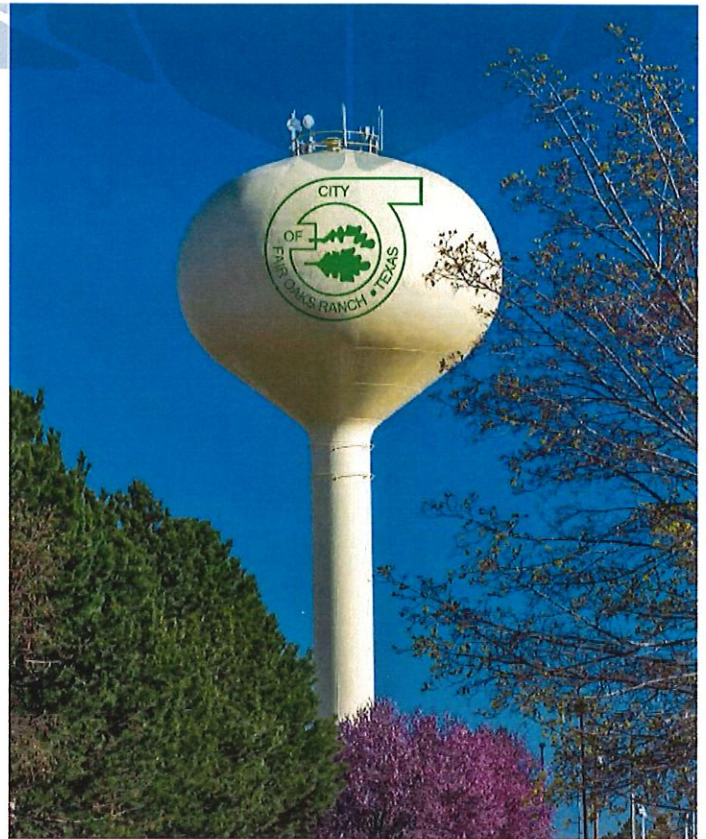
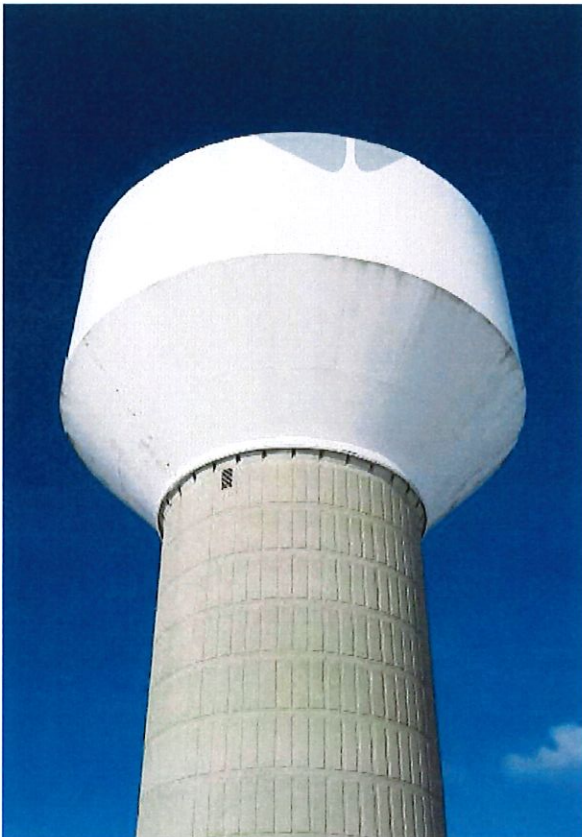


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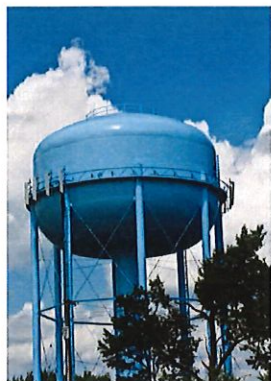
- Scope of Work Performed Summary
- Tank Style Summary
 - Questions
- Site Summary
 - Questions



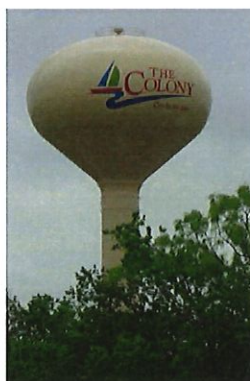
Scope of Work Performed - Summary

- Tank Style Evaluation
 - Capital Costs
 - Long Term Maintenance Costs
 - Storage Considerations
- Tank Site Evaluation
 - Engineering Analysis
 - Water System Modeling
 - Projected Construction Costs
- Stakeholder Outreach to Include:
 - Federal Aviation Administration (FAA)
 - Pedernales Electric Cooperative, Inc
 - Kendall and Comal County
 - Guadalupe-Blanco River Authority (GBRA)
 - Camp Bullis and Camp Stanley Military Installations
 - Private Developers (Green Land Ventures, LTD and Boerne Ranch Estates, LLC)
 - Property Owner – MLZ Ranch Estates, LLC

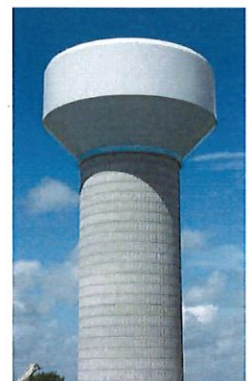
Tank Style Summary



Multi-Column

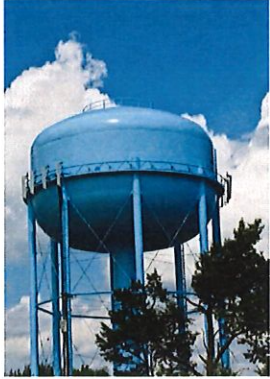


Spheroid



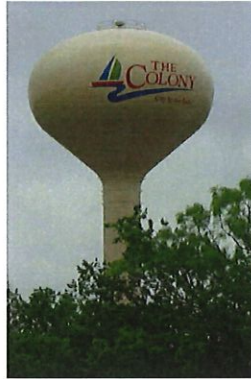
Composite

Capital Cost by Tank Style



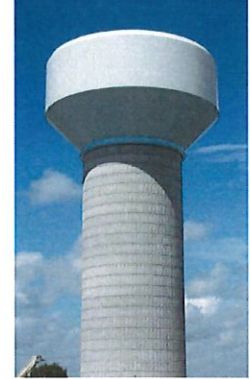
Multi-Column

\$.98 M - 1.10 M



Spheroid

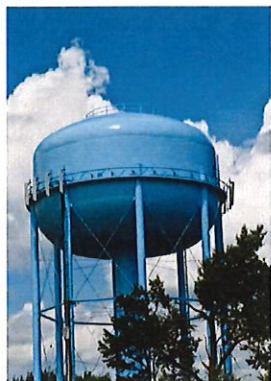
\$1.25 M - \$1.45 M



Composite

\$1.45 M - \$1.65 M

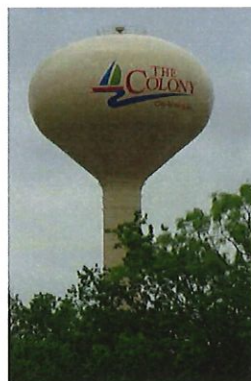
Life Cycle Cost by Tank Style*



Multi-Column

Highest Cost

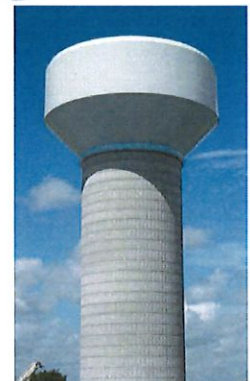
\$290,000-350,000/repaint



Spheroid

Middle Cost

\$260,000-320,000/repaint



Composite

Lowest Cost

\$220,000/repaint

*Life cycle costs were created assuming a 60-year life cycle, with repaints every 15 years.

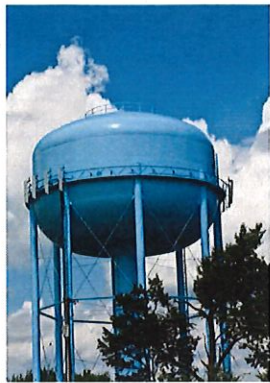
A large circular tunnel under construction. Scaffolding and bright work lights are visible on the left side of the frame. Two yellow cables run down the center of the tunnel. The bottom left corner shows a partial view of a globe with the text "Globe Press 2011" and a star.

-

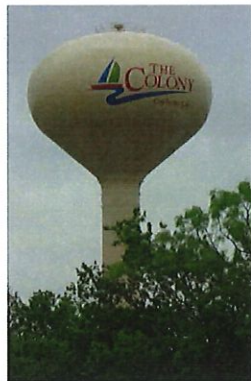
- Majority of the mechanical and electrical equipment could be mounted in the base

Multi-Column Tank	0 votes
Composite Tank	31 votes
Spheroid Tank	6 votes

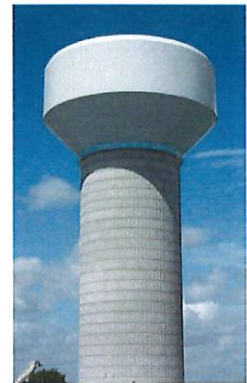
Tank Style Selection Questions



Multi-Column

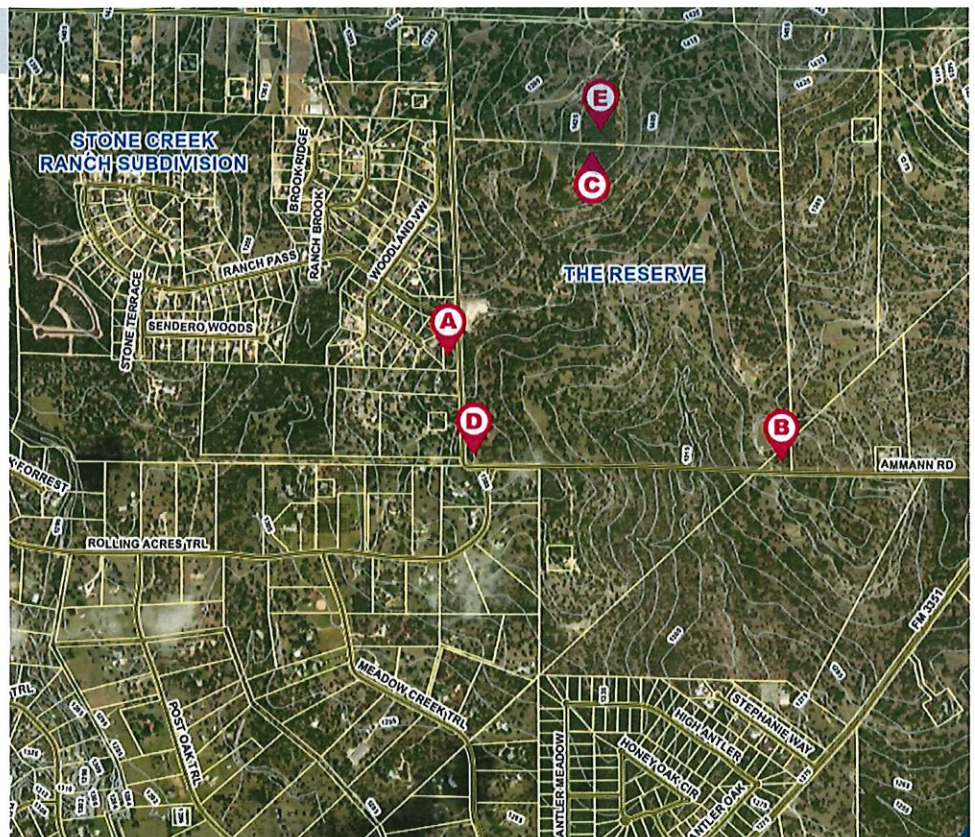


Spheroid



Composite

Site Selection Summary



Site Capital Costs (Excluding Elevated Storage Tank)

- Site A: \$300,000
- Site B: \$790,000
- Site C: \$650,000
- **Site D: \$270,000**
- Site E: \$720,000

Lowest Overall Capital Cost: Site D

*Site capital costs include estimates for site work, electrical and controls, and off-site work including access roads, extension of existing utilities, and drainage. Land acquisition costs are not included.

Land Acquisition Considerations

Entity	Potential Tank Site Location	Developer Agreement	Requirements	Land Acquisition Impact
Green Land Ventures, LTD	A	Yes	Water Supply Agreement Section III. L. "The Owner shall, at the Owner's sole cost and expense, secure a suitable one-half acre tract of land within one-half mile of the Property for the future location and construction of an elevated water storage tank. Owner agrees to donate this elevated storage tank site and surrounding sanitary easement to the City at no cost."	Purchase of up to one-half acre of land to be funded by Green Land Ventures, LTD.
Boerne Ranch Estates, LLC	B, C, D	Yes	Development Agreement. "Provide for infrastructure for the Land including: (i) streets and roads, (ii) street and road drainage, (iii) land drainage, (iv) internal water storage and distribution, wastewater collection, treatment and disposal and other utility systems."	Developer agreement does not specifically define whether the land would be donated by developer. Further coordination with developer will be required. The cost up to one-half acre would be the responsibility of Green Land Ventures, LTD.
MLZ Ranch Properties	E	None	Requirements for the site are to be determined if Site E were selected.	Site E is located within one-half mile of Green Land Ventures, LTD property. The cost of up to one-half acre of land acquisition would be the responsibility of Green Land Ventures, LTD.

Hydraulic Summary

- None of the potential tank sites displayed a significant change in system performance when compared to the originally modeled site (Site B).
- For projected 2023 demands, all potential tank sites meet minimum TCEQ pressure requirement of 35 psi.
- Location of tank has no detrimental impact on available fire flow for buildout conditions.
- Raising/lowering tank operating range did not yield significant improvements from the originally modeled operating range.

Permits

Permitting Entity	Sites				
	A	B	C	D	E
Federal Aviation Administration 7460	X	X	X	X	X
TCEQ – Plan Review	X	X	X	X	X
TCEQ – Edwards Aquifer Exception Request		X			

- **Federal Aviation Administration form 7460** was submitted for Sites A, B, C, and D. It was determined that those sites were not a hazard to air navigation. If Site E is selected, form 7460 for Site C would be updated due to the close proximity.
- **TCEQ Edwards Aquifer Exception Request:** exception request plan required for access road/driveway to site.

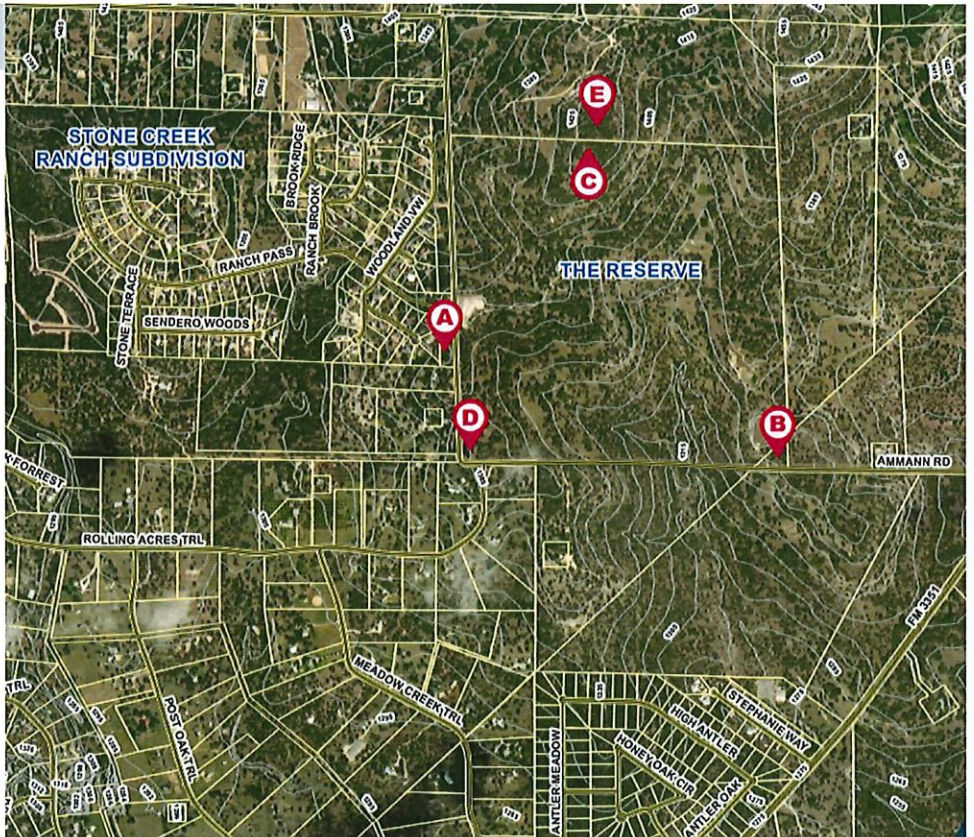
Community Workshop #2: Potential Tank Site Results

Option A	0 votes
Option B	34 votes 
Option C	6 votes 
Option D	3 votes 
Option E	1 vote 

Feedback Received:

- **Strong preference for avoiding sites near existing residences.**

Tank Site Selection Questions





CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Consideration and possible action establishing an Audit Committee and Charter

DATE: November 21, 2019

DEPARTMENT: Finance

PRESENTED BY: Sarah Buckelew, Finance Director

INTRODUCTION/BACKGROUND:

Those who manage financial resources on behalf of others owe them a duty of accountability for that stewardship, especially in the public sector. Essential elements of this accountability include timely publication of reliable financial statements, as well as established internal controls. As in the private sector, citizens, investors, creditors and other counterparties are also among the principal users of public-sector financial statements, which they use to assess creditworthiness as well as compliance with finance-related legal and contractual requirements (e.g., bond covenants).

Three parties share responsibility for risk management and the quality of financial reporting: City Council, management, and the independent auditors. Establishment of an audit committee is means for better ensuring that the City Council maintains awareness of the effectiveness of risk management, internal control and financial reporting, and responds to risks and events in a timely and appropriate manner.

In order to establish an audit committee, an audit committee formation group was established in March of 2019. The purpose of the formation group was to develop a charter for adoption by City Council.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

Sound risk management and financial reporting are essential components of public-sector accountability. The audit committee is an invaluable tool for helping to ensure that all those responsible, including City Council, management, and independent auditors, fully meet their respective responsibilities in this regard.

LONG-TERM FINANCIAL & BUDGETARY IMPACT:

A \$1,000 standard budget was included within the FY 2019-20 budget for the annual operating costs of this committee.

LEGAL ANALYSIS:

Not applicable

RECOMMENDATION/PROPOSED MOTION:

The Mayor is recommending that the same three individuals that served on the Audit Committee Formation Group remain as members of the Audit Committee. If Council agrees, the motion should be: "I move to nominate Mayor Garry Manitzas, Mayor Pro Tem Roy Elizondo, and Council Member Greg Maxton as Audit Committee Members. I also move to approve the Audit Committee Charter".

City of Fair Oaks Ranch Audit Committee Charter

Purpose

The City of Fair Oaks Ranch maintains a system of internal controls to reasonably ensure effectiveness and efficiency of operations, safeguarding of assets and compliance with laws, regulations and policies. The system of internal controls is established by policies set forth by City Council. The City Manager has primary responsibility for maintaining the system of internal controls. The purpose of the City of Fair Oaks Ranch Audit Committee is to provide oversight of the City's internal control system with the following goals:

- Satisfy itself that management is maintaining a comprehensive framework of internal control
- Ensure that management's internal controls for financial reporting are assessed objectively
- Determine to its own satisfaction that the financial statements are properly audited and that any problems disclosed in the course of the audit are satisfactorily resolved

Authority

The Audit Committee is hereby established by adoption of this Charter. The Charter provides the following authority for the Audit Committee, under auspices of City Council, will:

1. Receive reports or results on audits or matters arising from the financial statement audit directly from the independent auditors
2. Be granted access to information relating to internal audits and other matters that may be necessary to understand and assess financial statement audit plans or reports
3. Receive funding through the budget process for work and member training, including funding necessary professional expertise outside the range of knowledge of the Audit Committee membership
4. Request or recommend reviews or investigations into matters within its scope of responsibility to City Council
5. Recommend to Council the engagement of financial statement auditors employed by the City
6. Meet with City management and staff, external auditors, or outside counsel, as necessary for the conduct of Audit Committee business

Audit Committee Composition and Membership

The Audit Committee will be composed of three members of the City Council, which shall be nominated by the Mayor, and appointed by a majority of a quorum of City Council. The committee members selected will be independent and objective and will possess, or acquire through ongoing education, a reasonable level of knowledge of financial reporting standards, financial policies and internal control principles. The Audit Committee members will serve for a term of three years or until the expiration of their elected term on the Council. Each year's term ends following the close of the annual financial statement audit. At the beginning of each annual term, the Audit Committee will select a Chair by consensus. The Chair will retain full voting rights as a Committee member, and will serve as the primary point of contact for Committee business. Audit Committee members may be reappointed by the Council without limitation.

Meetings

The Audit Committee will meet as required to meet its objectives and goals. The Committee may invite members of management, auditors, or others to attend meetings and provide pertinent information as needed. The meetings of the Audit Committee will be private meetings and only members of the Audit Committee and invited guests may attend.

The Audit Committee will periodically report to City Council in public meetings on its activities and any actions taken. Actions requiring City Council approval will be scheduled on agendas for public meetings. The Audit Committee will annually submit a written report to City Council on how it has discharged its responsibilities and met its responsibilities.

The following meetings should occur at least annually:

1. There should be at least one meeting per year between the Audit Committee and the independent auditors that is conducted in private to ensure a full and frank exchange of views on management's financial reporting practices
2. There should be a planning conference and an exit conference between the Audit Committee and management that takes place privately to ensure that management is free to express its true assessment of the degree of coordination and cooperation achieved between the City's staff and the staff of the independent auditors
3. The Audit Committee itself needs to deliberate privately, at least once, to facilitate a full and free discussion of its conclusions
4. Other meetings may be scheduled as needed to ensure the Audit Committee's goals are achieved

Specific Responsibilities of the Audit Committee

In addition to other duties noted, the Audit Committee will carry out the following responsibilities specifically related to financial statements and internal controls:

1. Annually evaluate the independence and performance of the external auditors, and make recommendations to City Council on the appointment or discharge of the auditors.
2. Review with management and the external auditors the results of the audit, including any difficulties encountered.
3. Understand the scope of internal reviews and external auditors' review of internal control over financial reporting and obtain reports on significant findings and recommendations, together with management's responses.
4. Understand the finding of any review by regulatory agencies and any auditor observations that have a material effect on a Financial Statement line item, cause suspension of an operation, or disposal of an asset.
5. Obtain updates from management and City legal counsel regarding significant risks or compliance matters that could have a material effect on the City's financial statements.
6. Review and assess the adequacy of the committee charter at least every three years.



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Consideration and possible action approving a Resolution approving a depository agreement with Frost Bank

DATE: November 21, 2019

DEPARTMENT: City Council

PRESENTED BY: Sarah Buckelew, Finance Director

INTRODUCTION/BACKGROUND:

The City of Fair Oaks Ranch is currently entered into an active depository agreement with Frost Bank through December 31, 2019. The City has negotiated a new depository agreement for the period January 1, 2020 – September 30, 2024 with Frost Bank.

Chapter 105 of the Local Government Code (“LGC”), which provides the process for selecting a depository and specifies the necessary components of a city’s depository services contract, applies to the funds of any city department or agency of the City. LGC 105.016(a) states that a city council “shall designate the bank, credit union, or savings association to serve as a depository for the municipality’s funds”. Council may approve any depository services contract whose term does not exceed five years.

In absence of adopted provisions under LGC 105.011 to allow for depositories outside the City, and with only one bank institution within the City, the City is not required to request applications for depository services. As Frost Bank is the only bank institution within the City Limits, the City did not request applications for depository services, and has moved forward with negotiations with Frost Bank.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

The updated fee schedule from Frost Bank has been reviewed by both the Finance Director, as well as an external consultant who specializes in Banking RFQ processes in the State of Texas to ensure that service costs are competitive and fair.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

The City should not see a significant increase or decrease in bank fees. Based on the new fee structure, a comparison of one month in 2019 under both structures resulted in a reduced fee amount by \$141 under the new structure, but fees will vary month to month depending on transaction volume under different classes of fees.

LEGAL ANALYSIS:

The depository agreement has been reviewed by the City’s Legal Counsel as to form and compliance with Local Government Code 105. The City’s decision to not request applications for depository services, and to negotiate with the only bank within the city was also approved by Legal Counsel.

RECOMMENDATION/PROPOSED MOTION:

I move to approve a resolution designating Frost Bank as the depository for the City of Fair Oaks Ranch's funds.

A RESOLUTION

APPROVING THE INTENT TO ENGAGE IN CONTRACTUAL AGREEMENTS BY AND BETWEEN THE CITY OF FAIR OAKS RANCH AND FROST NATIONAL BANK, FOR SERVICES PROVIDED THEREIN FOR THE PERIOD BEGINNING JANUARY 1, 2020 AND ENDING SEPTEMBER 30, 2024

WHEREAS, the City of Fair Oaks Ranch, Texas, intends to engage in contractual agreements to provide certain services for the funds, treasury management services, security, and depository of city funds, taking into consideration the fiscal years' financial feasibility for the costs of services provided by the contractor therein; and,

WHEREAS, upon the City Council's approval of each fiscal year's budget, the contractual agreements shall be determined approved, agreeing to the terms and conditions and cost for services provided by Contractor; and,

WHEREAS, the Contractor agrees to provide the services agreed upon for the period beginning January 1, 2020 and ending September 30, 2024.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF FAIR OAKS RANCH THAT:

Upon approval of each fiscal year's budget, the following contractual service agreements; Bank Depository Agreement and Security Agreement, on file in the City Secretary's office, by and between the City of Fair Oaks Ranch and Contractor agree to the terms and conditions set therein

1. The agreement shall begin January 1, 2020, and shall expire on September 30, 2024.
2. The Mayor and City Secretary are hereby authorized and directed to respectfully execute and attest said contracted agreements.
3. Agreements may be terminated by either party with required notice determined by the terms and conditions of each Contractors Service Agreement.

PASSED, APPROVED, AND ADOPTED on this 21st day of November, 2019.

Garry Manitzas, Mayor

ATTEST:

APPROVED AS TO FORM:

Christina Picioccio, City Secretary

Denton Navarro Rocha Bernal & Zech, P.C.,
City Attorney



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Consideration and possible action approving a Resolution casting votes for candidates for the Board of Directors for Bexar and Comal Appraisal Districts for tax years 2020 and 2021

DATE: November 21, 2019

DEPARTMENT: City Council

PRESENTED BY: Mayor Garry Manitzas and Council Member Laura Koerner

INTRODUCTION/BACKGROUND:

Texas Property Tax Code states the governing body of each taxing unit entitled to vote shall determine its vote for appraisal district board of directors by resolution and submit no later than December 15, 2019.

Per Section 6.03 of the Texas Property Tax Code, voting entitlement is determined by dividing the total dollar amount of property taxes imposed in the District by the taxing unit for the preceding tax year by the sum of the total dollar amount of property taxes imposed in the District for that year by each taxing unit that is entitled to vote, by multiplying the quotient by 1,000 and by rounding the product to the nearest whole number. The City has the following votes to cast: 1) Bexar - 5 votes and 2) Comal - 10 votes. Kendall Appraisal District Board of Directors will be voted on in 2020.

Today's agenda item is for City Council to cast its' ballots for Board of Directors for the Comal and the Bexar Appraisal Districts. At the Mayor's request, Council Member Koerner has vetted the candidates and makes the following voting proposal:

Comal Appraisal District:

- Equally separate the City's votes across all 5 candidates. 2 each. Each candidate is an incumbent and there are no open positions or opponents.

Bexar District:

- Cast all 5 City votes for Jon Fisher. The four incumbents (Cheri Byrom, Sergio "Chico" Rodriguez, George Torres, and Roberto Trevino) will have enough votes with their nominating taxing units to retain their seats handily. There is one open position that was previously held by the Northeast ISD. Northeast ISD now nominates Jon Fisher, I recommend we vote for this candidate with all of our City votes.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

Compliance with the Texas Tax Code

LONG-TERM FINANCIAL & BUDGETARY IMPACT:

None

LEGAL ANALYSIS:

Approved as to form.

RECOMMENDATION/PROPOSED MOTION:

I move to approve a resolution casting the City of Fair Oaks Ranch votes for the Bexar and Comal Appraisal District Board of Directors as follows:

Bexar Appraisal District

Jon Fisher (5 votes)

Comal Appraisal District

Wade Cleary (2 votes)

Dan Krueger (2 votes)

John Kuntz (2 votes)

Nancy Pappas (2 votes)

John Tyler (2 votes)

A RESOLUTION

OF THE CITY OF FAIR OAKS RANCH, TEXAS CASTING VOTES FOR CANDIDATES FOR THE BOARD OF DIRECTORS FOR BEXAR AND COMAL APPRAISAL DISTRICTS FOR TAX YEARS 2020-2021

WHEREAS, the City of Fair Oaks Ranch is required under Section 6.03(k) of the Texas Property Tax Code to cast votes by written resolution for the candidate(s) for the Board of Directors for the Bexar and Comal Appraisal Districts; and,

WHEREAS, the City of Fair Oaks Ranch is required to submit its' results of the vote to the Chief Appraiser of the Bexar and Comal Appraisal Districts by December 15, 2019; and,

WHEREAS, the City Council of the City of Fair Oaks Ranch deems it appropriate to cast their ballots for the Board of Directors of the Bexar and the Comal Appraisal Districts.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF FAIR OAKS RANCH, that:

PART 1. The recitals contain in the preamble hereto are hereby found to be true and such recitals are hereby made a part of this resolution for all purposes and are adopted as a part of the judgment and findings of the Council.

PART 2. It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs, and sections of this resolution be severable, and, if any phrase, clause, sentence, paragraph, or section of this resolution shall be declared invalid by judgment or decree of any court of competent jurisdiction, such invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs, or sections of this resolution and the remainder of this resolution shall be enforced as written.

PART 3. It is officially found, determined and declared that the meeting at which this resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this resolution, was given, all as required by Chapter 551, as amended, Texas Government Code.

PART 4. This resolution shall be in full force and effect from and after its passage and approval.

PART 5. The City Council of the City of Fair Oaks Ranch hereby cast votes for candidates for the election of the Board of Directors as follows:

- I. 5 votes cast for Jon Fisher for Bexar Appraisal District.
- II. 2 votes cast each for Wade Clearly, Dan Krueger, John Kuntz, Nancy Pappas, and John Tyler for Board of Directors for Comal Appraisal District.

PART 6. A signed copy of this resolution along with the appropriate ballot, before December 15, 2019, shall be submitted by the City Secretary, to the Chief Appraiser of Bexar and Comal Appraisal Districts.

PASSED, APPROVED, AND ADOPTED on this 21st day of November, 2019.

ATTEST:

Garry Manitzas, Mayor

Christina Picioccio, City Secretary



CITY COUNCIL CONSIDERATION ITEM
CITY OF FAIR OAKS RANCH, TEXAS
November 21, 2019

AGENDA TOPIC: Consideration and possible action on cancelling the January 2, 2020 City Council meeting.

DATE: November 21, 2019

DEPARTMENT: City Council

PRESENTED BY: Council Member Patel

INTRODUCTION/BACKGROUND:

Council Member Patel requested consideration of cancelling the January 2, 2020 City Council meeting as it falls the day after the New Year's Day holiday and during the school recess.

The City Council Meeting Rules of Procedure indicates City Council shall meet in regular session on each first Thursday in each calendar month beginning at 9:30 AM and the third Thursday in each calendar month beginning at 6:30 PM unless postponed or cancelled for valid reason(s). The City Council, by a majority vote, may reschedule any regular meeting.

In reviewing with staff on the effects of cancelling the January 2 meeting, the Public Works Director noted he has been working with Council approved consultant on an impact fee update and amendment. At the CIAC meeting held on September 25, 2019, a schedule was presented and accepted for the Impact Fee update. This schedule includes a Resolution and presentation to City Council on the January 2, 2020 meeting to obtain City Council possible adoption of impact fee amendment.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

TBD

LONGTERM FINANCIAL & BUDGETARY IMPACT:

TBD

LEGAL ANALYSIS:

N/A

RECOMMENDATION/PROPOSED MOTION:

If City Council wants to cancel the January 2, 2019 meeting a motion to that affect should be made otherwise no action is required.



CITY COUNCIL CONSIDERATION ITEM
CITY OF FAIR OAKS RANCH, TEXAS
November 21, 2019

AGENDA TOPIC: Consideration and possible action regarding means and methods for scheduling special called city council meetings

DATE: November 21, 2019

DEPARTMENT: Administration

PRESENTED BY: Tobin Maples, City Manager

INTRODUCTION/BACKGROUND:

As prescribed in Section 3.06 D 3 of the Home Rule Charter, the City Manager placed this item on the agenda. The purpose of the agenda item is to seek insight and direction from council regarding the process staff utilizes to schedule special called meetings. As you know, we do our best to coordinate individually with all council-members but it is impossible to accommodate everyone's schedules. Accordingly, the date and time of a special called meeting is based on the prevailing preference.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

TBD

LONGTERM FINANCIAL & BUDGETARY IMPACT:

TBD

LEGAL ANALYSIS:

N/A

RECOMMENDATION/PROPOSED MOTION:

The City Manager would appreciate receiving insight and direction from Council regarding the process utilized to schedule special called city council meetings.



CITY COUNCIL CONSIDERATION ITEM
CITY OF FAIR OAKS RANCH, TEXAS
November 21, 2019

AGENDA TOPIC: Presentation of Quarterly Financial and Investment Report- Q3 2019
DATE: November 21, 2019
DEPARTMENT: Finance
PRESENTED BY: Sarah Buckelew, Finance Director

INTRODUCTION/BACKGROUND:

Pursuant to Texas Government Code Section 2256.023 and the City's Investment Policy Section 12, the Finance Director is required, on a quarterly basis, to prepare and submit to City Council a written report of investment transactions that have occurred since the previous report, and the market value of the current investments.

The attached presentation is being made to comply with the Q3 2019 reporting requirements.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

Frequent review and reporting of the City's assets and investment vehicles is both prudent and necessary to verify that the City's investment portfolio is being managed according to the investment policy.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

The investment portfolio shall be managed in accordance with the objectives specified in the investment policy (safety, liquidity, diversification, and yield). The portfolio should obtain a market average rate of return during a market/economic environment of stable interest rates.

LEGAL ANALYSIS:

Not applicable at this time.

RECOMMENDATION/PROPOSED MOTION:

This presentation is for informational purposes only and to comply with requirements under Texas Government Code Section 2256.023 and the City's Investment Policy.



September 2019

QUARTERLY FINANCIAL REPORT



About This Quarterly Financial Report

This report has been prepared by the City of Fair Oaks Ranch Finance Department. The Quarterly Financial Report is intended to provide our users (internal and external) with information regarding the City's financial position. This report includes information for the quarter ending September 30, 2019.

This report is presented in three sections.

1. The Executive Dashboard section contains a high level summary of the major operating funds using graphic illustrations and key economic indicators. Narrative disclosures are also included to highlight any significant changes or fluctuations.
2. The Year-End Dashboard section reports the Fund Balance detail for the Governmental and Enterprise Funds with a high level summary explaining changes in Fund Balances.
3. The Quarterly Investment Report provides a summary of the City's investment portfolio, interest earnings and a brief market outlook.

The Quarterly Financial Report is intended to provide our users with timely and relevant information. Please provide us with any comments or suggestions you may have. If you would like additional information, feel free to contact me.



Sarah Buckelew
Director of Finance

7286 Dietz Elkhorn
Fair Oaks Ranch, TX 78015
210-698-0900

Section **1**

City of Fair Oaks Ranch
Quarterly Financial Report
September 2019

Executive Dashboards



City of Fair Oaks Ranch, Texas

General Operations Executive Dashboard

	Budget	Actual	Percent of Budget	Surplus / (Deficit)	
Beginning Fund Balance 9/30/18	2,900,376	2,757,377	-4.9%	(142,999)	
Revenues:					
Taxes	5,739,835	5,997,021	4.5%	257,186	Final Property Tax levy was higher than budget by \$80k. Sales Tax Receipts were about \$170k higher than budget.
Franchise Fees	566,500	597,496	5.5%	30,996	CPS Franchise fees were higher than budget due to increased consumption.
Interest	63,500	139,817	120.2%	76,317	Interest earnings in Texpool exceeded budget due to mid-year target interest rate increases by the Fed.
Permits	272,700	253,815	-6.9%	(18,885)	Permit Revenue was less than anticipated due to decreasing size of residential builds.
Animal Control	3,400	3,405	0.1%	5	
Fines & Forfeitures	127,570	137,176	7.5%	9,606	
Fees & Services	230,034	241,869	5.1%	11,835	
Miscellaneous Income	20,100	44,260	120.2%	24,160	Miscellaneous Income includes proceeds from auctioned equipment of \$20k.
Total Revenues	7,023,639	7,414,858	5.6%	391,219	
Transfers in	268,250	152,707	-43.1%	(115,543)	Transfer revenue in from Equipment Replacement Fund wasn't necessary for one patrol vehicle and the PS Building generator purchase moving to next FY.
Total Revenues	7,291,889	7,567,565	3.8%	275,675	
Expenditures:					
Personnel	4,039,354	3,740,256	-7.4%	299,098	Personnel savings due to delay in build-out renovations of City Hall.
Maintenance & Ops	215,850	216,209	0.2%	(359)	
Professional Services	1,009,461	868,946	-13.9%	140,515	\$41k savings in court due to internal efficiencies. \$35k internal controls implementation deferred; savings transferred to SAP Fund for FY 19-20. \$20k savings from fewer elections than budgeted. Across the board savings in Training and Meetings.
Shared Services	397,592	379,513	-4.5%	18,079	
Capital Outlay	345,323	207,075	-40.0%	138,248	Total of Public Safety savings \$57k plus Maintenance savings \$68k (see detail below).
Debt Service	-	-	0.0%	-	
Transfers	1,133,074	1,235,824	9.1%	(102,750)	Total broken out below.
Total Expenditures	7,140,654	6,647,823	-6.9%	492,831	
Savings to 6 month op reserve	151,235	916,870	506.3%	(765,635)	Per council Action, surplus was to be closed out to the 6 month operating reserve.
Transfer to Restricted Funds	-	2,872	-	(2,872)	
Ending Fund Balance	3,051,611	3,677,119	20.5%		

For Note on Capital Outlays:

	Budgeted	Actual	Surplus / (Deficit)	Notes
Police Vehicle	31,000	31,845	(845)	Asset purchased
Vehicle outfitting	40,000	14,057	25,943	Budgeted to outfit 2 vehicles, only purchased 1.
Police Vehicle	31,000	-	31,000	Vehicle inventory not available, deferred to FY 19-20.
Vehicle camera systems	10,600	10,890	(290)	Asset purchased
Ipad for new officer	750	-	750	Assets are leased, cost is coded to Shared Dep't.
Ipad for new officer	750	-	750	Assets are leased, cost is coded to Shared Dep't.
Total Budgeted Purchases	114,100	56,792	57,308	
	Budgeted	Actual	Surplus / (Deficit)	Notes
Kubota Tractor	35,532	36,739	(1,207)	
Grasshopper Mower	12,750	12,686	64	
Towable manlift trailer	9,000	-	9,000	Will not purchase trailer to cover deficit for ATV
Atlas Crew ATV	9,500	18,520	(9,020)	Deficit covered by trailer.
Public Safety Generator *	75,000	-	75,000	* Pushed back to FY 19-20.
Crack Seal Machine *	70,000	74,252	(4,252)	Cost higher than anticipated.
Skid Steer side feed	6,691	8,086	(1,395)	Cost higher than anticipated.
Total Budgeted Purchases	218,473	150,284	68,189	

For Note on Transfers:

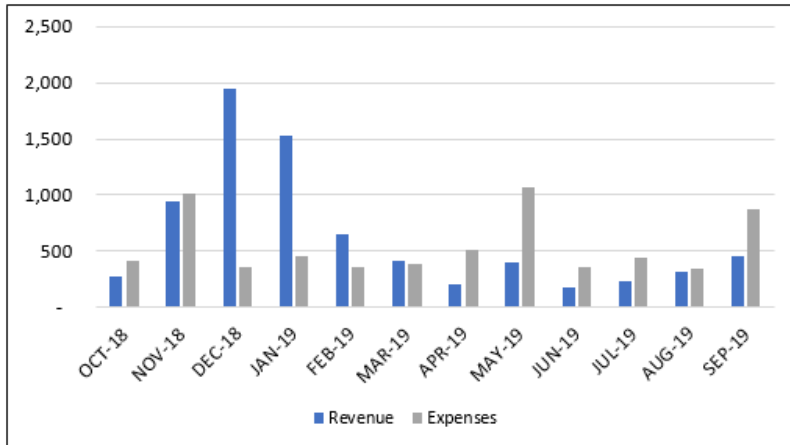
	Budgeted	Actual	Surplus / (Deficit)	Notes
Building Renovations	250,000	250,000	-	
Master Land Use Plan	60,000	60,000	-	
Street Maintenance	427,711	427,711	-	
Stormwater Funding	120,000	120,000	-	
Bond Over-run	114,860	114,860	-	
Internal Controls Implementation	-	35,000	(35,000)	Deferred to next FY.
Delayed Furniture Purchase	-	12,750	(12,750)	Deferred to next FY.
Transfer to Equip Replace Fund	160,503	215,503	(55,000)	\$35k add'l savings for PS Bldg. generator and \$20k for patrol vehicle outfitting deferred to next FY.
Total Budgeted Purchases	1,133,074	1,235,824	(102,750)	



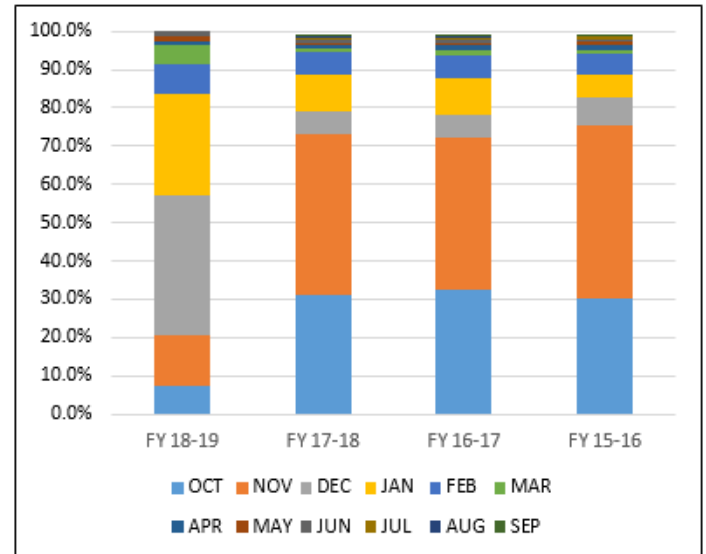
City of Fair Oaks Ranch, Texas

General Operations Executive Dashboard

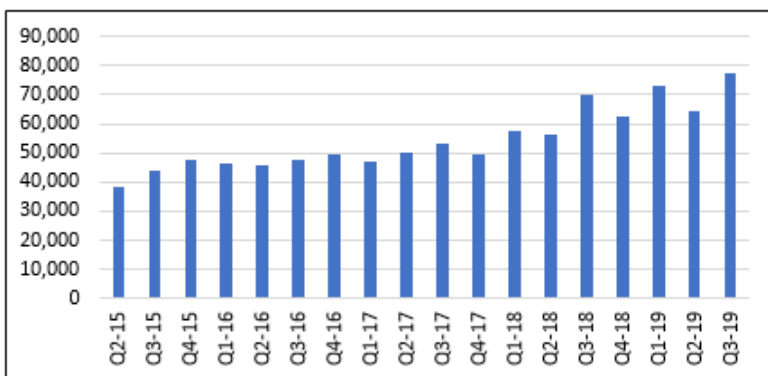
Revenue & Expenses (in thousands)



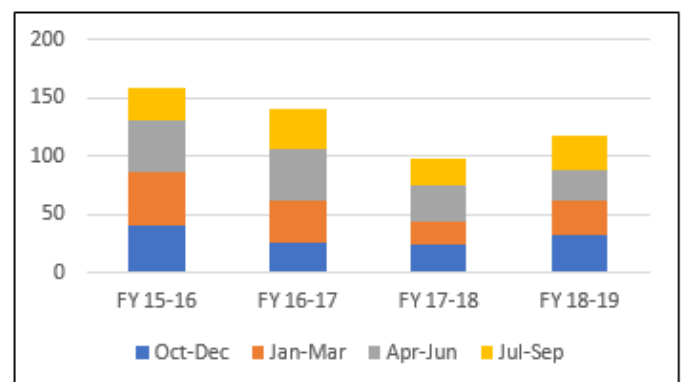
Historical % of Property Tax Collected by Month



Sales Tax Monthly Average by Quarter



New Residential Bldg Permits Issued





City of Fair Oaks Ranch, Texas

Strategic Action Plan (SAP) Dashboard

	FY 18-19 Budget	FY 18-19 Actual	FY 18-19 % Variance
Beginning Fund Balance 9/30/18	167,310	223,508	33.6%
Resources:			
Transfer from General Fund	972,571	1,037,171	6.6%
Total Resources	972,571	1,037,171	6.6%
Expenditures:			
Master Land Use Plan	60,000	60,000	0.0%
Master Drainage Plan	-	7,679	0.0%
MS4 and SSO Permitting	-	34,492	0.0%
Stormwater Funding	120,000	-	-100.0%
Bldg/Bldg Improvement	488,149	26,416	-94.6%
Infrastructure	121,860	10,451	-91.4%
Total Expenditures	790,009	139,037	-82.4%
Net Income	182,562	898,134	
Transfer To/(From) Allocated	(38,149) (a)	712,593 (c)	
Transfer To/(From) Unallocated	227,711 (b)	185,541 (b)	
Ending Fund Balance	349,872	1,121,642	220.6%

(a) Budgeted transfer of \$38,149 from Allocated Fund Balance to the City Hall Bldg. Improvement project work not completed in previous fiscal year.

(b) Budget Adjustment approved to transfer Street Maintenance budget to SAP Fund as the remaining proceeds are being spent for current year street maintenance.

(c) See detail below for a breakdown of all allocated projects.

SAP Fund Balance					
Project Allocations and Fund Balance					
	Actual 2017-18	Total Transfers In	Actual Spend	Allocations	Projected 9/30/2019
Update Subdivision Regulations	-	-	-	-	-
Master Land Use Plan	-	60,000	(60,000)	-	-
Annexation Plan	-	-	-	-	-
Master Drainage Plan	-	-	(7,679)	7,679	-
Stormwater Funding	-	120,000	-	-	120,000
Zoning Regulations	-	-	-	-	-
Development Handbook	-	-	-	-	-
Master Roadway	-	-	-	-	-
MS4 and SSO Permitting	-	-	(34,492)	34,492	-
Land/Land Improvement	-	-	-	-	-
Bldg/Bldg Improvement	38,145	450,000	(26,416)	-	461,729
Infrastructure (Roads)	-	121,860	(10,451)	-	111,409
Personal Property	-	-	-	22,600	22,600
Internal Controls Implementation	-	-	-	35,000	35,000
Unallocated Fund Balance	185,363	285,311	-	(99,770)	370,904
Total Fund Balance	223,508	1,037,171	(139,037)	-	1,121,642



City of Fair Oaks Ranch, Texas

Utility Operations Dashboard

Water Utility Fund Summary September 30, 2019 100% of Fiscal Year					
	Budget	Year-to-Date Actual	Percent of Budget	Budget Balance	
Water Revenues	3,804,008	3,868,621	101.7%	(64,614)	
Water Operating Expenses					
Personnel	717,398	648,303	90.4%	69,095	Personnel savings due to staff vacancies.
Supplies, Maintenance & Operations	1,699,543	1,589,996	93.6%	109,547	Savings in GBRA fees \$76k, Electricity \$20k and Bldg. Maintenance \$4k
Services	47,081	188,708	400.8%	(141,627)	Legal fees exceeded budget.
Total Water Operating Expenses	2,464,022	2,427,006		37,016	
Operating Income	1,339,986	1,441,615		(101,629)	
Capital Outlay	1,050,038	200,381	19.1%	849,656	See (Note A) below for project detail
Lease Interest Expense	82,729	82,729	100.0%	-	
Transfers & Non-Cash	(280,334)	361,048	-128.8%	(641,382)	Creek Crossing West Waterline and Elevated Storage Tank not completed.
Net Income/(Loss)	487,553	797,456	163.6%	(309,903)	
Note A:					
		YTD Actual			
	Budgeted	Actual	Surplus / (Deficit)		
Water CIP					
Elevated Storage Tank	247,000	106,226	140,774		Project will continue to FY 19-20
Utility Rate Analysis	200,000	-	200,000		Project deferred until FY 20-21.
Master Water/Wastewater Plan	-	19,777	(19,777)		PY budget did not roll over.
Fix Exposed Water Line	400,000	8,040	391,960		Project started and will continue into FY 19-20.
Impact Fee Analysis	25,000	5,924	19,076		Project scheduled for FY 19-20.
	872,000	139,968	732,032		
Water Operations					
New truck	40,000	35,317	4,683		Asset purchased.
SCADA program	80,000	-	80,000		Project deferred; balance will not roll forward.
Replacement generators	20,000	-	20,000		Transferred unspent funds to ERF for purchase next FY.
Leak detection equipment	15,000	7,406	7,594		Asset purchased.
Fence & gates at Elmo Davis	20,000	14,979	5,021		Asset purchased.
Heavy duty trailers	3,038	2,713	325		Asset purchased.
	178,038	60,414	117,624		
Total Capital Outlay	1,050,038	200,381	849,656		



City of Fair Oaks Ranch, Texas

Utility Operations Dashboard

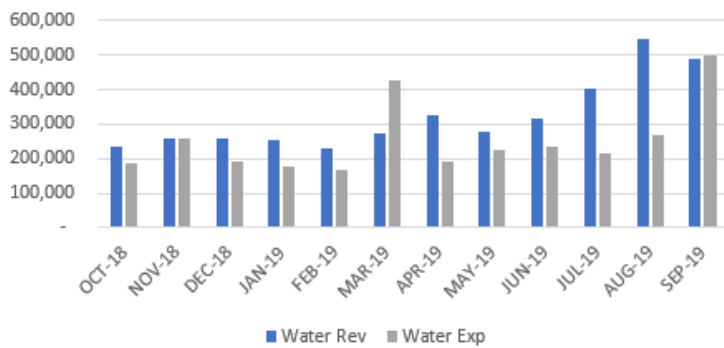
Wastewater Utility Fund Summary					
September 30, 2019					
100% of Fiscal Year					
	Budget	Year-to-Date Actual	Percent of Budget	Budget Balance	
Wastewater Revenues	1,064,661	1,127,937	105.9%	(63,276)	Budget surplus primarily from interest earnings.
Wastewater Operating Expenses					
Personnel	611,820	540,585	88.4%	71,235	Personnel savings due to staff vacancies.
Supplies, Maintenance & Operations	662,906	666,188	100.5%	(3,283)	
Services	1,162	1,092	94.0%	70	
Total Wastewater Operating Expenses	1,275,887	1,207,864		68,023	
Operating Income	(211,226)	(79,927)		(131,299)	
Capital Outlay	773,038	525,387	68.0%	247,651	Budgeted capital not purchased; see Note A.
Lease Interest Expense	15,758	15,758	100.0%	(0)	
Transfers & Non-Cash	(298,814)	21,629	-7.2%	(320,443)	Digester Planning project not completed \$100k and Collection System Repairs \$193k not capitalizable as an asset.
Net Income/(Loss)	(701,208)	(642,701)	91.7%	(58,507)	
			YTD Actual		
Note A:	Budgeted	YTD Actual	Surplus / (Deficit)		
Wastewater CIP Fund					
Master Wastewater Plan	125,000	19,805	105,195		Project continuing into FY 19-20.
Impact Fee Study	25,000	5,924	19,076		Project scheduled for FY 19-20.
Future WW Treatment Plant	-	14,983	(14,983)		Project continuing into FY 19-20.
Digester Planning	100,000	-	100,000		Project scheduled for FY 19-20.
Collection system repairs	170,000	192,872	(22,872)		Project complete.
	420,000	233,585	186,415		
Wastewater Operations					
Vaccum Jetter	90,000	91,250	(1,250)		
Camera System	50,000	64,849	(14,849)		
New trucks	40,000	35,317	4,683		
Heavy duty trailer	3,038	2,713	325		
Sludge dewatering box	150,000	-	150,000		Project cancelled.
Replacement generators	20,000	-	20,000		Transferring unspent funds to ERF for purchase next FY.
Lift station pump	-	28,807	(28,807)		This was budgeted in Maintenance of Plant Lines.
Hidro stal pump	-	32,092	(32,092)		This was budgeted in Maintenance of Plant Lines.
In-yard LS retrofit	-	31,710	(31,710)		This was budgeted in Maintenance of Plant Lines.
Lift Station #3 Pump	-	5,064	(5,064)		This was budgeted in Maintenance of Plant Lines.
	353,038	291,801	61,236		
Total budgeted purchases	773,038	525,386	247,651		



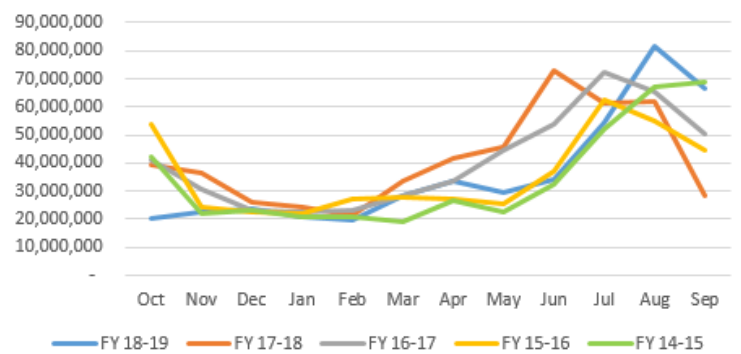
City of Fair Oaks Ranch, Texas

Utility Operations Dashboard

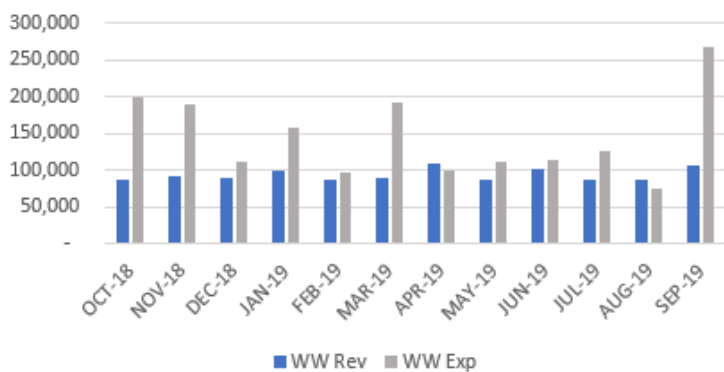
Water Utility Revenue and Expenses



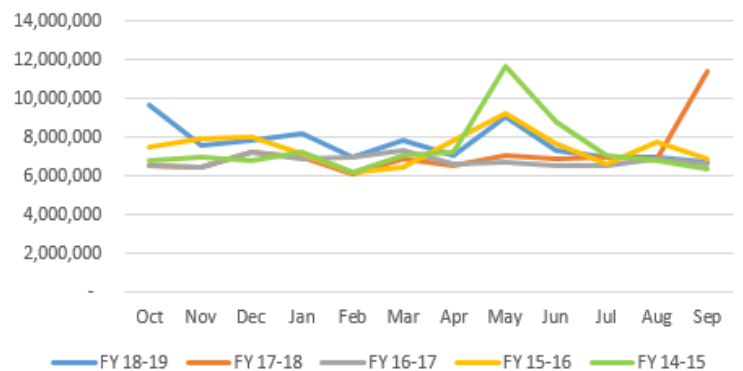
Water Billed Consumption (gallons)



Wastewater Utility Revenue and Expenses



Wastewater Treated (gallons)



Section 2

City of Fair Oaks Ranch Quarterly Financial Report September 2019

This report is designed for internal use and does not include all the funds and accounts included in the City of Fair Oaks Ranch operations. The information provided is unaudited; for a complete audited report, please refer to the City of Fair Oaks Ranch Comprehensive Annual Financial Report, available through the City's Finance Department, City Secretary's Office, or on the City's website.

YEAR-END DASHBOARDS



City of Fair Oaks Ranch, Texas

Year-End Governmental Funds Dashboard

FUND BALANCE ROLLFORWARDS FYE 9/30/2019

Non-Spendable - Portion of Fund balance that is not in spendable form. Most common are prepaid expenses.

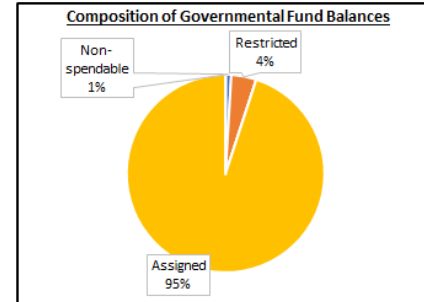
Restricted -constrained for specific purposes by providers; such as grantors, bondholders, higher level of government, contract, or law.

Committed - constrained to specific purposes by City Council through formal action. Only City Council action can commit or uncommit to this category.

Assigned - Portion of Fund Balance the City intends to use for specific purposes. This category is assigned by the City Manager. No formal action is needed to assign or unassign funds.

Unassigned - Remaining portion of Fund Balance that is not identified in one of the other categories.

	FYE 9/30/2019
Non-spendable	53,275
Restricted	
Court Technology	11,386
Court Security Building	54,848
Court Efficiency	401
Felony Forfeiture	8,954
Lease Training	9,912
PEG Fees	4,319
Debt Service	18,640
Roadway Construction Bond Project	128,163
Total Restricted	236,622
Committed	-
Assigned	
Capital Projects	1,121,642
Equipment Replacement	816,395
Legal Reserve	50,000
6 month Operating Reserve	3,496,326
	5,484,363
Unassigned	-
Governmental Fund Balances	5,774,260
Net Asset Composition	9/30/2019
Cash & Investments	6,174,942
Prepays and Receivables	462,552
Payables	(644,662)
Deferred Revenues	(122,146)
Long-term liabilities	(118,578)
Governmental Fund Balance	5,752,108



Unrestricted Balance Rollforward

FY 17-18	3,600,275
FY 18-19	5,484,363
Change in Fund Balance	1,884,088
Equip Fund-Savings	55,796
6 mo. Operating expense Savings	930,157
Capital Projects	898,134
Reclass for Restricted balances	1,884,088

6 Mo. Operating Expense Reserve

FY 17-18	2,566,169
FY 18-19	3,496,326

Per Council action, surplus to be closed out to the 6 month operating reserve.
Balance represents 6.3 months of FY 2018-19 operating expense.



City of Fair Oaks Ranch, Texas

Year-End Enterprise Funds Dashboard

CONSOLIDATED UTILITY NET INCOME / (LOSS)			
	Budget	Year-End Actual	Surplus / (Deficit)
Water	487,553	797,456	309,903
Wastewater	(701,209)	(642,701)	(58,508)
Utility Equip. Replacement Fund	78,846	118,846	40,000
TOTAL UTILITY NET INCOME/(LOSS)	(134,810)	273,604	291,395
TOTAL CHANGE IN NET POSITION		273,604	

	9/30/2018	Projected close-out	Reclasses	9/30/2019
Net investment in Capital Assets	8,464,020	(1,570)		8,462,450
Unrestricted Reserves				
Impact Fees (Elevated Storage Tank)	628,528	(106,226)		522,302
Equipment Replacement Fund	640,737	118,846		759,583
6 month Operating Expense	1,869,955	-		1,869,955
Water Capital	1,668,710	260,032	(1,517,706)	411,036
Wastewater Capital	80,314	(127,359)	272,347	225,302
Unassigned	560,731	129,879	1,245,359	1,935,969
Total Unrestricted	5,448,975	275,172	-	5,724,147
Total Reserves	13,912,995	273,602	-	14,186,597

Water Capital:	
Impact Fee Study	19,076
Creek Crossing West Waterline	391,960
	411,036
Wastewater Capital:	
Impact Fee Study	19,076
Solids Handling Improvements	100,000
	119,076
6 months operating:	
Represents 6 months of FY 18-19 operating expense.	

Section 3

City of Fair Oaks Ranch
Quarterly Financial Report
September 2019

INVESTMENT REPORT



City of Fair Oaks Ranch

Investment Report Q3 2019

Investment Inventory 7/1/2019 - 9/30/2019

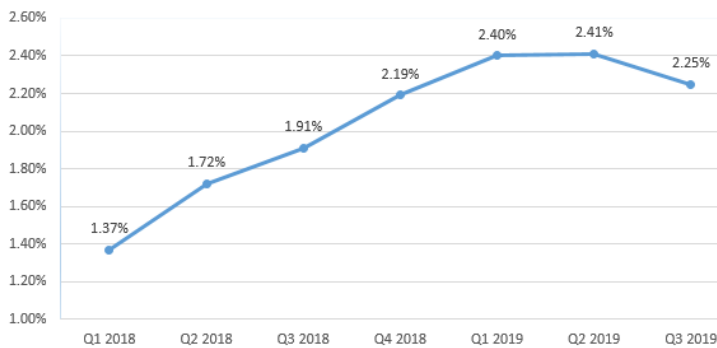
Governmental Fund Investments

Security	Yield	Beg Bal	Transfers In/Out	Interest Earnings	Ending Bal	Ending Market	Weighted Avg Maturity	Maturity Date
Pool (Texpool 004) General	2.250%	9,712,206	(555,073)	52,933	9,210,066	9,210,066	35 days	-
Pool (Texpool 006) 2015 CIP Bonds	2.250%	403,406	(36,645)	2,242	369,003	369,003	35 days	-
Pool (Texpool 007) Debt Service	2.250%	1,037	9,843	60	10,940	10,940	35 days	-
TOTAL		10,116,649	(581,875)	55,235	9,590,009	9,590,009	-	

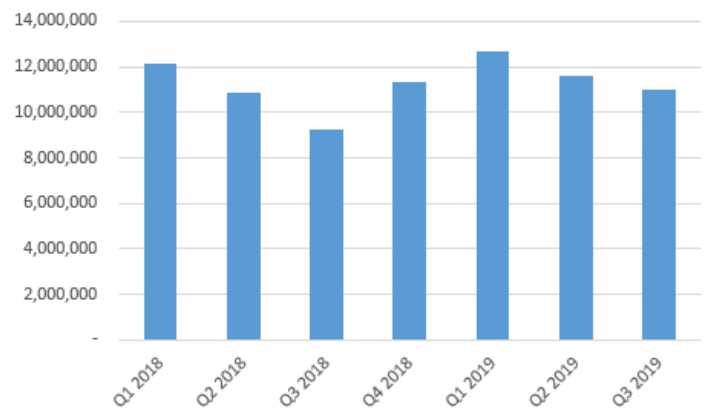
Utility Fund Investments

Security	Yield	Beg Bal	Transfers In/Out	Interest Earnings	Ending Bal	Ending Market	Weighted Avg Maturity	Maturity Date
Pool (Texpool 001) Utility	2.250%	1,110,668		6,287	1,116,956	1,116,956	35 days	-
Pool (Texpool 002) Water Cap	2.250%	176,724		1,000	177,724	177,724	35 days	-
Pool (Texpool 003) Sewer Cap	2.250%	214,821	(132,363)	1,067	83,525	83,525	35 days	-
Pool (Texpool 005) 1997 CO	2.250%	7,870		45	7,914	7,914	35 days	-
TOTAL		1,510,083	(132,363)	8,399	1,386,119	1,386,119	-	

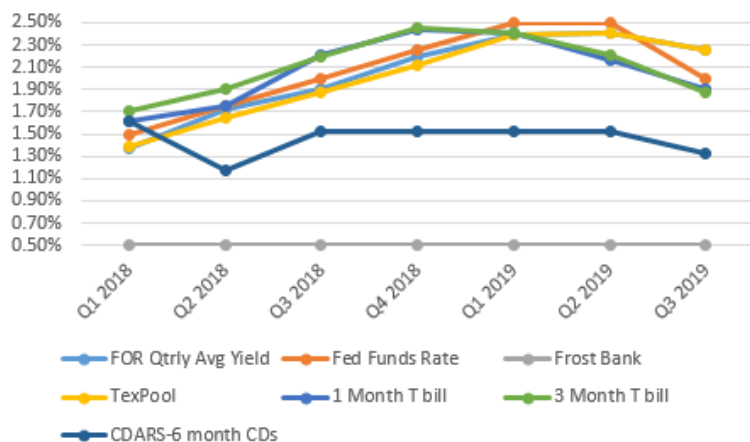
FOR Qtrly Avg Yield



Investment Balance



Comparative Yields



Key Trends

- This report is in compliance with the City's Investment Policy Section 9 and 11 and Texas Government Code Section 2256.023.
- Transfers in and out of accounts represents vendor payments made, or funding of City operations by transferring funds into the City Operating Cash Account. Transfers into TexPool represent deposits of property tax revenue.



CITY COUNCIL CONSIDERATION ITEM

CITY OF FAIR OAKS RANCH, TEXAS

November 21, 2019

AGENDA TOPIC: Consideration and possible action on Home Rule Charter amendment submissions

START DATE: November 21, 2019

DEPARTMENT: Administration

PRESENTED BY: Carole Vanzant, Assistant City Manager

INTRODUCTION/BACKGROUND:

The Texas Constitution, Article XI, Section 5 (b) states “no city charter shall be altered, amended, or repealed more often than every two years”. At the September 5th City Council meeting, Council voted, as authorized by Local Government Code, Section 9.004, to submit Home Rule Charter amendments to the city’s qualified voters for their approval at the May 2020 election.

Accordingly, on September 20th, the Assistant City Manager provided Council members, legal, and senior staff a copy of the current City Charter along with instructions on submitting proposed amendments. At the November 7th City Council meeting, Council was provided a copy of all submissions. After a brief discussion the City Attorney offered to provide City Council with a written opinion memorandum on the proposed charter amendments.

For your discussion and action today, enclosed is the City Attorney’s Memorandum divided into three categories:

1. Submissions or comments upon which no opinion is expressed.
2. Submissions or comments with which the City Attorney disagrees as to necessity.
3. Submissions or comments upon which the City Attorney has suggestions or opinions as to necessity or wording.

At the conclusion of the discussion, staff and legal will need a clear understanding of which submissions, if any, are to be placed on the ballot so that the appropriate amendment language can be drafted. Once drafted, the amendments will be presented to the City Council for their approval of placement on the ballot.

POLICY ANALYSIS/BENEFIT(S) TO CITIZENS:

1. To ensure the City Charter continues to properly define the organization, powers, functions and essential procedures of the City of Fair Oaks Ranch government.
2. Complies with the approval of City Council proposing Home Rule Charter amendments.

LONGTERM FINANCIAL & BUDGETARY IMPACT:

Special election cost and legal services.

LEGAL ANALYSIS:

City Attorney has provided an Opinion Memorandum on Proposed Charter Amendments.

RECOMMENDATION/PROPOSED MOTION:

I move to place the amendments, as discussed during today's presentation, on the city's May 2020 election and authorize the city attorney to draft appropriate language for each amendment.

DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.
MEMORANDUM

TO: TOBIN MAPLES, CITY MANAGER

FROM: T. DANIEL SANTEE, OFFICE OF THE CITY ATTORNEY

ISSUE: OPINION MEMORANDUM ON PROPOSED CHARTER AMENDMENTS

DATE: 11/14/19

CHARTER AMENDMENT COUNCIL AND STAFF
SUBMISSIONS FOR CONSIDERATION

Our firm was asked, as City Attorney to review the possible Charter revisions submitted by members of the City Council and City staff. In doing so, we divided the submissions into three categories. 1) Submissions or comments upon which we express no opinion. This is because the changes recommended or comments made are entirely within the policy making purview of the City Council and, should the Council decide to proceed with the recommended change, do not appear to have any impact on the entity from a legal standpoint. 2) Submissions or comments with which we disagree as to necessity. In this category we express our opinion as to necessity because the recommendation made is unnecessary and the inclusion will not improve the Charter from a legal standpoint. Including unnecessary amendments will also increase the expense of the election. 3) Submissions or comments upon which we have suggestions or opinions as to necessity or wording. In this category we provide responses to questions or comments and provide suggested language

**I. SUBMISSIONS OR COMMENTS UPON WHICH WE EXPRESS NO
OPINION**

TOPIC 1

D. Agendas.

1. A Member of City Council may place an item on an agenda. The Member of City Council desiring to place an item on an agenda shall submit in writing the request to place the item on an agenda to the City Secretary. The item shall be placed on the next City Council meeting occurring on or after the 5th calendar day after receiving the request.

3.06.D.1 – Agendas

Amend to read: “The item shall be placed ~~on the next City Council meeting occurring on or after the 5th calendar day after receiving the request~~ at next council meeting, or the council meeting as determined between the council member and Staff”.

Reason: It's not always possible to meet the current mandate.

3.06.D.1

Amend to read: "The Member of City Council desiring to place an item on an agenda shall submit in writing the request to place the item on an agenda and supportive documentation, to the City Secretary. The item shall be placed on ~~an~~ the next appropriate City Council meeting in accordance to the policy on file in the City Secretary's office ~~occurring on or after the 5th calendar day after receiving the request.~~"

Reason: Depending on the date request and supportive documents are provided to the City Secretary, additional research and/or legal assistance may be required, which may delay packet production.

TOPIC 2

F. Legislation by Ordinance.

3. Every ordinance shall become effective upon final adoption or at any later time(s) specified in the ordinance, except that every ordinance imposing any penalty, fine or forfeiture shall become effective only after its caption having been published twice after adoption, in a newspaper designated as the official newspaper of the City.

3.06.F.3 - Legislation by Ordinance

Amend to read: "Every ordinance shall become effective upon final adoption or at any later time(s) specified in the ordinance, except that every ordinance imposing any penalty, fine or forfeiture shall become effective only after its caption having been published ~~twice~~ once after adoption in a newspaper designated as the official newspaper of the City".

Reason: Current requirement increases cost and creates a time delay in enforcing the law.

TOPIC 3

Section 3.10 - Prohibitions

C. Interference with Administration. Except for the purpose of inquiries and investigations, unless otherwise provided in this Charter, the City Council and Members of City Council shall deal with City officers and employees who are subject to the direction and supervision of the City Manager solely through the City Manager, and neither the City Council nor Members of City Council shall give orders to any such officer or employee, either publicly or privately.

Section 3.10.C – Prohibitions.

Amend to read: ~~“Interference with Administration,–~~ *Freedom of Interference. Except for the purpose of inquiries and investigations, unless otherwise provided in this Charter, the City Council and Members of City Council shall deal with City officers and employees who are subject to the direction and supervision of the City Manager solely through the City Manager, and neither the City Council nor Members of City Council shall give orders to any such officer or employee, either publicly or privately. It shall be unlawful for the City Council or any of its members to dictate to the City Manager the appointment of any person to office or employment. The City Council or its persons will not interfere in any manner with the City Manager in the performance of the duties of that office or prevent him from exercising his own judgment in the appointment of officers and employees whose employment, appointment, and supervision are reserved by this Charter for the City Manager. Except for the purpose of inquiries, the City Council and its persons shall deal with the City Staff solely through the City Manager, and neither the Council nor any member not having administrative or executive functions under this Charter shall give orders to any of the subordinates of the City Manager, either publicly or privately.*

TOPIC 4

Section 5.04 - City Secretary

A. The City Council shall appoint, and may remove without cause, the City Secretary upon the affirmative vote of a majority of the City Council.

B. The City Council shall fix the compensation of the City Secretary, and the City Secretary's compensation may be amended, from time to time, in accordance with the City Secretary's experience, qualifications and performance. The City Secretary shall report administratively to the City Manager but may be removed from office only by the Council.

C. The City Secretary shall:

- 1. Give notice of all official public meetings of the City Council, Commissions, and Boards in a manner consistent with this Charter and state laws;**
- 2. Attend all public meetings and hearings of the City Council;**
- 3. Keep the minutes of the proceedings of all public official meetings and hearings of the City Council in a manner prescribed by the City Council consistent with applicable law;**
- 4. Act as custodian of all official records of the City Council;**
- 5. Hold and maintain the seal of the City and affix this seal to all appropriate documents;**

6. **Authenticate, by signature and seal, and record all ordinances, resolutions and proclamations of the City;**
7. **Perform such other duties, as may be required by the City Council, which are consistent with this Charter and state and federal law; and**
8. **Schedule and oversee all City elections in accordance with the Texas Election Code (Tex. Election Code, Section 1.001 et seq.) and any other applicable law.**

5.04 - City Secretary

Amend to repeal entire section:

~~A. The City Council shall appoint, and may remove without cause, the City Secretary upon the affirmative vote of a majority of the City Council.~~

~~B. The City Council shall fix the compensation of the City Secretary, and the City Secretary's compensation may be amended, from time to time, in accordance with the City Secretary's experience, qualifications and performance. The City Secretary shall report administratively to the City Manager but may be removed from office only by the Council.~~

~~C. The City Secretary shall:~~

- ~~—1. Give notice of all official public meetings of the City Council, Commissions, and Boards in a manner consistent with this Charter and state laws;~~
- ~~—2. Attend all public meetings and hearings of the City Council;~~
- ~~—3. Keep the minutes of the proceedings of all public official meetings and hearings of the City Council in a manner prescribed by the City Council consistent with applicable law;~~
- ~~—4. Act as custodian of all official records of the City Council;~~
- ~~—5. Hold and maintain the seal of the City and affix this seal to all appropriate documents;~~
- ~~—6. Authenticate, by signature and seal, and record all ordinances, resolutions and proclamations of the City;~~
- ~~—7. Perform such other duties, as may be required by the City Council, which are consistent with this Charter and state and federal law; and~~
- ~~—8. Schedule and oversee all City elections in accordance with the Texas Election Code [Tex. Election Code, § 1.001 et seq.] and any other applicable law.~~

Reason: It makes no sense to have an important staff member report to City Council instead of the City Manager.

5.04.B Amend to read: “The City Secretary ~~shall report administratively to the City Manager but may be removed from office only by the Council~~ is appointed, removed and works directly for the City Manager.”

TOPIC 5

Section 5.05 - Other Departments, Offices, and Agencies

A. There are hereby created the following administrative departments: Police, Finance, Public Works, and such other departments as may be established by the City Council as hereinafter provided.

B. The City Council may, if it deems it advisable, consolidate the departments hereby established.

C. The City Council by ordinance may create, change, and abolish offices, departments, or agencies other than the offices, departments and agencies established by this Charter.

5.05.A - Departments

Amend to read: There are hereby created the following administrative departments: Police, Finance, Public Works, Human Resources, Administration, and such other departments as may be established by the City Council as hereinafter provided.

TOPIC 6

Section 7.13 - City Comprehensive Plan

A. It is the purpose and intent of this section that the City Council establish comprehensive planning as a continuous and ongoing government function in order to promote and strengthen the existing role, processes and powers of the City to prepare, adopt and implement a City Comprehensive Plan to guide, regulate, and manage the future development within the corporate limits and the extraterritorial jurisdiction of the City to assure the most appropriate and beneficial use of land, water, and other natural resources, consistent with the public interest.

B. The City Council shall adopt a Comprehensive Plan which shall be reviewed and adopted no less than every two years.

7.13 – Comprehensive Plan

Amend to add: C. Each proposed revision to the Comprehensive Plan along with the final draft requires the affirmative vote of at least five Council members”.

Reason: As currently written, Comprehensive Plan revisions could be presented to the Council as a “take it or leave it” package. That is what was done with the original HRC which is why we are now considering a lot of revisions. It is important to give each proposed change full debate and a vote. A supermajority of five Council votes should be required because a tremendous amount of work went into its preparation and future Council members are unlikely to have this background. These are not changes to be taken lightly which is why a supermajority is important.

TOPIC 7

Section 7.15 - Penalty Clause

A. Criminal Penalty. Any person who by himself or with others violates any provision of this Charter shall, in addition to any other penalty, be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more \$500.00. City Council shall enact an ordinance enforcing this section.

B. Civil Penalty. Upon the affirmative vote of two-thirds of the City Council any person who by himself or with others violates any provision of this charter shall be, in addition to any other penalty provided for herein, subject to a civil fine of not more than \$500.00.

7.15 – Penalty Clause

Amend to repeal entire section:

~~A. Criminal Penalty. Any person who by himself or with others violates any provision of this charter shall, in addition to any other penalty, be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more \$500.00. City Council shall enact an ordinance enforcing this section.~~

~~B. Civil Penalty. Upon the affirmative vote of two-thirds of the City Council any person who by himself or with others violates any provision of this charter shall be, in addition to any other penalty provided for herein, subject to a civil fine of not more than \$500.00~~

Reason: Every Council member is already subject to federal, state and local laws. It makes no sense to add additional criminal and civil penalties unique to Council members. Few enough residents run for Council as it is without hanging this over their heads.

TOPIC 8

Section 3.01 - Number, Selection, and Term

A. The membership of City Council shall be composed of the Mayor and six (6) Council Members (Members of City Council). The Mayor and Council Members shall be elected from the City at-large for three (3) year terms. Each Council Member shall occupy a place on the Council, such places being numbered 1 through 6. In year one, which shall be the year 2021, the Mayor and Council Place One shall be elected to their respective terms, in year two Council Places Three, Four and Five shall be elected to their respective terms and in year three Council Places Two and Six shall be elected for their respective terms except as set forth in the transitional provisions provided for in [Section 8.05](#) of this Charter.

Comment: Current arrangement causes an election every year. Depending on which county we contract with, and the number of other entities sharing the cost this can cost between \$10,000 to \$40,000 annually. It also is a significant investment of staff time.

TOPIC 9

Section 3.04 - The Mayor

D. The Mayor shall appoint, upon nomination by majority vote of the City Council, the members of citizen advisory boards and commissions.

Comment: Currently the whole Council performs the interview process for board members & commissions. This is not necessary according to the Charter.

II. SUBMISSIONS OR COMMENTS WITH WHICH WE DISAGREE AS TO NECESSITY.

TOPIC 1

Section 3.06 - Meetings

C. Vote. No action of the City Council, except as specifically provided in this Charter, shall be valid or binding unless adopted by the affirmative vote of a majority of the City Council.

3.06.C. – Meetings

Amend to read: “Vote. No action of the City Council, except as specifically provided in this Charter, shall be valid or binding unless adopted by the affirmative vote of a majority at least four members of the City Council.”

Reason: As currently written, it is ambiguous because it doesn’t say whether it is a majority of the entire Council or a majority of those present. For example, if five members are present, three members could pass an ordinance. It just makes sense that a majority of the entire Council should be required for a resolution, ordinance, etc. to pass.

DNRBZ Opinion: This is not ambiguous. A vote to approve something requires a majority vote of the City Council. Section 3.01 A of the Charter provides that the “membership of City Council shall be composed of the Mayor and six (6) Council Members.” That means a vote of a “majority of the City Council” is a vote of 4.

TOPIC 2

Section 5.04 - City Secretary

C. The City Secretary shall:

5.04.C - City Secretary shall:

Amend to read: "The City Secretary shall, but not limited to:"

DNRBZ Opinion: This is not necessary.

TOPIC 3

Section 8.03 - Pending Matters

All rights, claims, actions, orders, contracts and legal administrative proceedings shall continue except as modified pursuant to the provisions of this Charter and in each case shall be maintained, carried on or dealt with by the City department, office, or agency appropriate under this Charter.

AND

Section 8.04 - Manner of Submission to Electors

In preparing this Charter, the Charter Commission finds and decides that it is impractical to segregate each subject so as to permit a vote of "yes" or "no" on the same, for the reason that the Charter is so constructed that in order to enable it to work and function, it is necessary that it should be adopted in its entirety.

Comment: These paragraphs were specific to the original adoption of the Charter. I believe the paragraph is still needed, but should be worded in a manner that is related to the adoption of the Charter.

DNRBZ Opinion: Do not change either section.

TOPIC 4

Section 3.09 - Vacancies; Forfeiture of Office; Filling of Vacancies

B. Forfeiture. A Council Member or the Mayor shall forfeit his/her office if he/she:

- 3. Failure to regularly attend City Council meetings without an approved absence obtained by a majority vote of City Council either before or after the absence. There shall be a presumption of failure to regularly attend when three (3) regular meetings are missed during a term year without obtaining an approved absence from City Council.**

Section 3.09.B.3.

Amend to read: Failure to regularly attend City Council meetings without an approved absence obtained by a majority vote of City Council either before or ~~after~~ the absence.

Or

Amend to read: Failure to regularly attend City Council meetings without an approved absence obtained by a majority vote of City Council ~~either before or after the absence~~ prior to the City Council meeting for which the Council Member will be absent.

DNRBZ Opinion – Sometimes emergencies arise that result in the Council Member missing a meeting before they can get approval. Recommend no change.

TOPIC 5

General Comment related to voting of Council Members:

In several places in the Charter a 2/3 vote of the Council is required to take an action. For example, 5.01B2 says “A two-thirds (2/3) vote of the City Council is required to appoint the City Manager.” I recommend that this and every other similar occurrence be changed to “A vote of five City Council members is required to appoint the City Manager.”

Reason: “2/3 vote” is an ambiguous statement. Does it always mean 2/3 of seven members which would be 4 and 2/3 votes? What if only five members are present? Is it 2/3 of five members or 2/3 of seven members? For clarity, I suggest these super majority votes always require five votes. These issues are obviously important and should require a supermajority of the entire Council.

DNRBZ Opinion: This is not ambiguous. A vote to approve something requires a majority vote of the City Council. Section 3.01 A of the Charter provides that the “membership of City Council shall be composed of the Mayor and six (6) Council Members.” That means a vote of a “majority of the City Council” is a vote of 4 and a super majority vote of the Council is 5.

III. SUBMISSIONS OR COMMENTS UPON WHICH WE HAVE SUGGESTIONS OR OPINIONS AS TO NECESSITY OR WORDING

TOPIC 1

Section 3.09 - Vacancies; Forfeiture of Office; Filling of Vacancies

B. Forfeiture. A Council Member or the Mayor shall forfeit his/her office if he/she:

- 1. Fails to maintain at any time during the term of office any qualification for the office prescribed by this Charter or by law;**
- 2. Is convicted of a misdemeanor involving moral turpitude, a violation of any state laws regulating conflicts of interest of municipal officers, a**

felony, or is assessed a deferred adjudication or probation for a felony or any state laws regulating conflicts of interest of municipal officers;

3. Failure to regularly attend City Council meetings without an approved absence obtained by a majority vote of City Council either before or after the absence. There shall be a presumption of failure to regularly attend when three (3) regular meetings are missed during a term year without obtaining an approved absence from City Council.

Section 3.09.B – Forfeiture of Office

Amend to read:

B. Forfeiture. A Council Member or the Mayor shall forfeit his/her office if he/she:

- ~~1. Fails to maintain at any time during the term of office any qualification for the office prescribed by this Charter or by law;~~
- ~~2. Is convicted of a misdemeanor involving moral turpitude, a violation of any state laws regulating conflicts of interest of municipal officers, a felony, or is assessed a deferred adjudication or probation for a felony or any state laws regulating conflicts of interest of municipal officers;~~
- ~~3. Failure to regularly attend City Council meetings without an approved absence obtained by a majority vote of City Council either before or after the absence. There shall be a presumption of failure to regularly attend when three (3) regular meetings are missed during a term year without obtaining an approved absence from City Council.~~

- 1. Lacks at any time during his term of office any qualification for the office prescribed by this Charter of by law;*
- 2. Violates any express prohibition of this Charter;*
- 3. Fails to attend three (3) consecutive regular Council meetings without being excused by the majority vote of the City Council;*
- 4. Is convicted of a felony and/or a misdemeanor involving moral turpitude, such forfeiture shall be declared and enforced by a majority vote of the Council;*
- 5. Is adjudged mentally incompetent in accordance with the laws of Texas and is unable or unfit to discharge promptly and properly official duties because of mental defect that did not exist at the time of the officer's election.*

DNRBZ Opinion – Generally no issue with proposal. One thing we have encountered since this Charter was adopted is when someone moves outside the City limits. Recently people have been challenging the requirement to maintain their residence within the City limits unless is specifically provides for such in the City Charter. As a result we have started recommending that Cities include the following:

“Fails to maintain their residence within the City Limits during their term of office.”

TOPIC 2

Section 4.02 - Regulation of Elections

B. The City Council shall appoint the election judges and other election officials.

4.02.B. - Regulation of Elections

Amend to read: “The City Council shall appoint the election judges and other election officials or ratify their appointments through the approved joint election contract.”

Reason: We currently contract with counties to run our elections and therefore Council is not appointing election judges and officials.

DNRBZ Opinion – Or, you may delete entirely as it is dictated by state law.

TOPIC 3

Section 7.02 - General Prohibitions

A. Activities prohibited.

4. No person who holds any compensated City position shall solicit or receive any contribution to the campaign funds of any candidate for municipal office or take any part in the management, affairs, or political campaign of any municipal candidate.

7.02.A.4 - Activities Prohibited

Amend to read: “No person who holds any compensated City position shall solicit or receive any contribution to the campaign funds of any candidate for ~~municipal office~~ the City of Fair Oaks Ranch or take any part in the management, affairs, or political campaign of any ~~municipal office~~ City of Fair Oaks Ranch candidate”.

Reason: Potential violation of an employee’s First Amendment.

DNRBZ Opinion – To the extent City Council agrees that it clarifies the intent, this is fine.

TOPIC 4

Section 7.12 - Disaster Clause

In case of disaster when a legal quorum of the City Council cannot otherwise be assembled due to multiple deaths or injuries, the surviving persons of the City Council, or highest surviving City official, if no elected official remains, shall, within 24 hours of such disaster, request the highest surviving officers of the Kendall County Commissioners Court to appoint a number of residents of Fair Oaks Ranch equal to the number necessary to make a quorum to act during the emergency as the City Council. The newly appointed City Council shall call a City election within 15 days of their appointment, or as provided in the Texas Election

Code, for election of the vacant offices, if for good reasons it is known a quorum of the present City Council will never again meet. If it is determined that a quorum of the present City Council will meet again, the appointed Council Members shall serve in their position until such time as the present Council Members may begin serving.

Comment: I question the requirement to hold a City election within 15 days. The way I read this is that within 24 hours a new council is appointed and then 15 days later an election is held to fill the vacant spots. If this is happening just after a significant emergency condition has occurred in the City, I don't think the focus in the 2 weeks after is going to be on setting up and conducting an election IAW the Texas Election Code. Realistically, my belief is that this should be a longer time, more like 60 day or even longer, if I understand this correctly.

DNRBZ Response – The 15 days is simply when the election must be called. Not when the election must be held. In addition, it may not be possible to call the election within 15 days as state law may dictate otherwise. It was really just a date to ensure it gets done quickly if the law would allow for it.

TOPIC 5

Section 5.04 - City Secretary

C. The City Secretary shall:

4. Act as custodian of all official records of the City Council;

Comment: Can we define which of our records are “of City Council” versus other documents?

DNRBZ Response – Probably better to not and sort that out in the Charter. Better to just make that determination through policy outside the Charter.

TOPIC 6

Section 3.11 - Council Investigations; Hearings; Process

B. Hearings Process for Forfeitures of Office and Prohibitions.

2. The officer holder subject to any investigation and/or hearing under this section shall be entitled to written notice, delivered by certified mail return receipt requested, of the allegations of forfeiture and/or the alleged violation of this Charter as applicable; delivery shall be complete on the fifth business day following upon deposit of the written notice, postpaid and properly addressed, in the mail.

Comment: *delivery shall be complete on the fifth business day following upon deposit of the written notice, postpaid and properly addressed in the mail.*

Does the preceding statement mean the post office must deliver the written notice by 5 days? This makes the City responsible for the post office's timely delivery? Or does it mean the City must deliver/post mark the notice by 5 days?

DNRBZ Response – This means that there is a presumption that delivery occurred on the fifth business day after it was mailed by the City.

TOPIC 7

Section 4.07 - Taking of Office

Each newly elected person to the City Council shall be inducted into office at the first regular City Council meeting following the canvass of the votes.

Comment: What is the definition of inducted? Ceremonial versus formal swearing in? What if this is not possible? Should some alternate language be added?

DNRBZ Response –Induction means to “Take Office”. The Texas Constitution requires that all appointed and elected officers in the state must take an oath of office. TEX. CONST. Art. XVI, §1. Texas Government Code Section 602.002 lists multiple positions that carry the power to administer the oath of office. All elected and appointed officers must take the oath of office before entering upon the duties of their offices. TEX. CONST. art. XVI, § 1(a)-(b). A formal oath in a home rule municipality may only be given by one of those persons listed in the Government Code, but could then participate in a ceremonial swearing in if desired. The charter can control whether a failure to take the oath within a specific period of time creates a vacancy.