



City of Sachse, Texas

Meeting Agenda

City Council

Monday, December 18, 2017

7:30 PM

Council Chambers

The Mayor and Sachse City Council request that all cell phones be turned off or set to vibrate. Members of the audience are requested to step outside the Council Chambers to respond or to conduct a phone conversation.

The City Council of the City of Sachse will hold a Regular Meeting on Monday, December 18, 2017, at 7:30 p.m. in the Council Chambers at Sachse City Hall, 3815 Sachse Road, Building B, Sachse, Texas to consider the following items of business:

Invocation and Pledges of Allegiance to U.S. and Texas Flags.

A. Pledge of Allegiance to the Flag of the United States of America: I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands: one nation under God, indivisible, with liberty and justice for all.

B. Pledge of Allegiance to the Texas State Flag: Honor the Texas flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.

1. CONSENT AGENDA.

All items listed on the consent agenda will be considered by the City Council and will be enacted on by one motion. There will be no separate discussion of these items unless a Council Member or citizen so requests.

[17-4097](#) Approve the minutes of the December 4, 2017 workshop meeting.

Attachments: [12.04.17 Minutes Workshop](#)

[17-4098](#) Approve the minutes of the December 4, 2017 regular meeting.

Attachments: [12.04.17 Minutes](#)

[17-3850](#) Approve a resolution awarding the bid for the construction of the 2017-2018 Sachse Water & Sewer Main Rehabilitation project to KIK Underground, LLC.

Attachments: [Rehab Location Maps](#)

[Plans 22x34](#)

[BID TAB- Sachse Utility Rehab 2017-2018 11x17](#)

[Resolution](#)

[17-4096](#) Approve the 2015 International Model Codes.

Attachments: [Proposed Ordinance](#)

[Summary of Code Changes](#)

[17-4101](#) Accept the 4th Quarter Investment Report for September 30, 2017.

Attachments: [4th Qtr FY17 Investment Report](#)

- [17-4104](#) Accept the Monthly Revenue and Expenditure Report for the period ending October 31, 2017.

Attachments: [GF 10-31-17](#)

[UF 10-31-17](#)

[DS 10-31-17](#)

[SEDC 10-31-17](#)

[Sales Tax Analysis Dec 17](#)

2. MAYOR AND CITY COUNCIL ANNOUNCEMENTS REGARDING SPECIAL EVENTS, CURRENT ACTIVITIES, AND LOCAL ACHIEVEMENTS.

3. CITIZEN INPUT.

The public is invited at this time to address the Council. The Mayor will ask you to come to the microphone and state your name and address for the record. If your remarks pertain to a specific agenda item, please hold them until that item, at which time the Mayor may solicit your comments. Time limit is 3 minutes per speaker. The City Council is prohibited by state law from discussing any item not posted on the agenda according to the Texas Open Meetings Act, but may take them under advisement.

4. REGULAR AGENDA ITEMS.

- [17-4107](#) Discuss partnership with the North Central Texas Council of Governments (NCTCOG) to fund transportation improvements to Merritt Road and the offset intersection of Merritt Road and Woodbridge Parkway.

- [17-4105](#) Consider an ordinance directing the City Manager to erect No U-Turn signs for northbound and southbound traffic on Miles Road at Hunters Ridge Drive.

Attachments: [Location Map](#)

[Ordinance](#)

- [17-4103](#) Presentation of new Fire Truck.

5. EXECUTIVE SESSION.

- [17-4102](#) The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.072: Deliberation of the sale of real property generally located along SH 78.

Consider any action as a result of Executive Session.

- [17-4099](#) The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.074: Personnel: regarding the mid-year review of the City Manager.

Consider any action as a result of Executive Session.

6. ADJOURNMENT.

Vision Statement: Sachse is a friendly, vibrant community offering a safe and enjoyable quality of life to all who call Sachse home.

The City of Sachse reserves the right to reconvene, recess or realign the regular session or called Executive Session or order of business at any time prior to adjournment.

As authorized by Section 551.072(2) of the Texas Government Code, this meeting may be convened into closed Executive Session at any time during the City Council workshop or regular meeting for the purpose of seeking confidential legal advice from the City Attorney on any workshop or regular meeting agenda item listed herein.

Posted: December 15, 2017; 5:00 p.m.

Michelle Lewis Sirianni, City Secretary

If you plan to attend this public meeting and you have a disability that requires special arrangements, please contact Michelle Lewis Sirianni, City Secretary, at (972) 495-1212, 48 business hours prior to the scheduled meeting date.



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4097 **Version:** 1 **Name:** December 4, 2017 Council workshop minutes.
Type: Agenda Item **Status:** Agenda Ready
File created: 12/8/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Approve the minutes of the December 4, 2017 workshop meeting.
Sponsors:
Indexes:
Code sections:
Attachments: [12.04.17 Minutes Workshop](#)

Date	Ver.	Action By	Action	Result
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Title
December 4, 2017 workshop minutes.

Background
Minutes of the December 4, 2017 workshop meeting.

Policy Considerations
None.

Budgetary Considerations
None.

Staff Recommendations
Approve the minutes of the December 4, 2017 workshop meeting.

CITY COUNCIL OF THE CITY OF SACHSE
WORKSHOP MEETING MINUTES
DECEMBER 4, 2017

The City Council of the City of Sachse held a workshop meeting on Monday, December 4, 2017 at 6:30 p.m. at Sachse City Hall, 3815-B Sachse Road, Sachse, Texas. Those present were Mayor Mike Felix, Mayor Pro Tem Paul Watkins, Council Members Brett Franks, Charlie Ross, Bill Adams, Cullen King, and Jeff Bickerstaff. City Manager, Gina Nash; City Attorney, Joe Gorfida; City Secretary, Michelle Lewis Sirianni; Development Services Director, Dusty McAfee; Building Official, Michael Spencer; Parks and Recreation Director, Lance Whitworth; Human Resources Director, Melinda Walter; EDC Director, Leslyn Blake; Police Chief Bryan Sylvester; Assistant Police Chief, Steven Baxter; Robert Knappage, Fire Marshal; and Fire Chief, Marty Wade.

Mayor Felix opened the meeting to order at 6:31 p.m.

INTERNATIONAL BUILDING MODEL CODES: Receive and discuss a presentation on the 2015 International Model Codes.

Mrs. Nash stated the Council will receive a brief presentation on the 2015 model codes. The City is currently using the 2009 International Building and Fire Codes. Staff will be providing the importance of updating new codes and why. An ordinance will be brought back to Council at the next meeting if they choose to move forward on this item.

Mr. McAfee stated that Sachse adopted the 2009 model codes in 2012. If Council chooses to adopt the 2015 model codes, they would go into effect on January 1, 2018. The ICC updates and publishes the international model codes every three years. The State and NCTCOG reviews them and issues recommended state and regional amendments. Local cities review them and issue their own recommended local amendments. The codes are then usually adopted a year or two after they are published by the ICC. Mr. McAfee stated Texas requires cities to adopt several of the ICC model codes. It is important to adopt these codes for consistency, new public safety codes, helps with the City's ISO rating, innovation, and protects property, first responders and the tax base. Staff is open for questions and/or feedback regarding this item.

Councilman Adams asked if by updating to the 2015 codes would factor into the ISO rating. Fire Chief Wade stated this update would give the City a full point versus half.

Mayor Pro Tem Watkins asked if there were any specific changes for the City and what those are. Mr. Spencer, the City's Building Official stated for building inspections there are some exemptions based on square footage. Mr. Knappage, Fire Marshal added the new codes would make it more difficult to have open burning mostly through the permit fees.

Mr. McAfee commented that any new or remodels would have to abide with the new changes.

COMMUNITY CENTER: Receive presentation from Ron Hobbs regarding public input received for the Community Center.

Mr. Hobbs stated they received good feedback and had a good turnout at the public meetings. The presentation will highlight that information and receive Council feedback.

The presentation included the citizen and Park Board comments, general recommendations, citizen requests, and possible support spaces to include in the facility.

Councilman Adams stated he liked the multi-level aspect and walking track.

Councilman Bickerstaff asked Mr. Hobbs what items they should consider definitely including. Mr. Hobbs responded that many expressed that it be for all age groups and include spaces designated for these specific age groups, using nicer materials or finishes in the building so it's not quickly outdated, which included the technology aspect.

Councilman King expressed concern on having wood floors due to maintenance and should consider more multi-purpose flooring for the gymnasium. Likes the idea of having more flexibility with the space versus dedicated rooms and asked if they go with a multi-level facility, would they need an elevator. Mr. Hobbs commented that they could choose an elevator or ramp. In his past experience, he recommended avoiding an elevator due to maintenance issues.

Mayor Felix stated this item would be continued within the regular meeting for additional discussion.

ADJOURNMENT:

At 7:25 p.m. Mayor Felix adjourned the meeting.

MIKE J. FELIX, MAYOR

ATTEST:

Michelle Lewis Sirianni, City Secretary



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4098 **Version:** 1 **Name:** December 4, 2017 Council minutes.
Type: Agenda Item **Status:** Agenda Ready
File created: 12/8/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Approve the minutes of the December 4, 2017 regular meeting.
Sponsors:
Indexes:
Code sections:
Attachments: [12.04.17 Minutes](#)

Date	Ver.	Action By	Action	Result
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Title
December 4, 2017 regular minutes.

Background
Minutes of the December 4, 2017 regular meeting.

Policy Considerations
None.

Budgetary Considerations
None.

Staff Recommendations
Approve the minutes of the December 4, 2017 regular meeting.

CITY COUNCIL OF THE CITY OF SACHSE

MEETING MINUTES

DECEMBER 4, 2017

The City Council of the City of Sachse held a regular meeting on Monday, December 4, 2017 at 7:30 p.m. at Sachse City Hall, 3815-B Sachse Road, Sachse, Texas. Those present were Mayor Mike Felix, Mayor Pro Tem Paul Watkins, Council Members Brett Franks, Charlie Ross, Bill Adams, Cullen King, and Jeff Bickerstaff. City Manager, Gina Nash; City Attorney, Joe Gorfida; City Secretary, Michelle Lewis Sirianni; Economic Development Director, Leslyn Blake; Human Resources Director, Melinda Walter; Parks and Recreation Director, Lance Whitworth; Parks and Recreation Supervisor, Cynthia Wiseman; Library Manager, Mignon Morse; Development Services Director, Dusty McAfee; Police Chief, Bryan Sylvester; Assistant Police Chief, Steven Baxter; and Fire Chief, Marty Wade.

Mayor Felix opened the meeting at 7:41 p.m.

INVOCATION AND PLEDGE OF ALLEGIANCE TO U.S. AND STATE FLAG: The invocation was offered by Councilman King and the pledges by Councilman Adams.

CONSENT AGENDA: All items listed on the Consent Agenda are considered routine and will be acted on by one motion, with no separate discussion of these items unless a Council member or citizen so requests.

17-4081 - Approve the minutes of the November 6, 2017 workshop meeting.

17-4082 – Approve the minutes of the November 6, 2017 regular meeting.

17-4083 - Approve the minutes of the November 14, 2017 special meeting.

17-4053 – Reschedule the January 15, 2018 City Council Workshop and Meeting to Tuesday, January 16, 2018.

17-4054 – Cancel the January 1, 2018 City Council Workshop and Meeting.

Councilman Adams made a motion to approve items the consent agenda items as presented. Councilman King seconded that motion and the motion was unanimously approved.

MAYOR AND CITY COUNCIL ANNOUNCEMENTS REGARDING SPECIAL EVENTS:

Mayor Felix introduced and welcomed the City's new Assistant Police Chief, Steven Baxter.

Councilman Adams congratulated the Sachse High School Mustangs for their successful year and for all the citizen support they received.

Councilman King asked citizens to consider donating to the 5 Loaves Food Pantry here in Sachse. They are operated by North Point Church of Christ.

Mayor Felix thanked CERT for helping Public Safety during the Turkey Trot. It had a very successful turnout with up to 850 participants. Mayor Felix announced the upcoming Christmas Extravaganza, which will include the night parade, tree lighting, and lots of other activities, and on Friday, February 9 the Daddy/Daughter dance will take place at the Senior Center.

17-4095 – Recognize of service to the City for Mignon Morse.

Mayor Felix recognized and presented Mignon Morse a plaque for her service to the City due to her retirement.

17-4076 – Administer Oaths of Office to Board and Commission member(s).

Mayor Felix administered oaths of office to recently appointed Board and Commission members.

CITIZENS INPUT:

Becky Bernardi, resident of Copeville, who is in favor of a bridge over Lake Lavon expressed concern on increasing traffic and accidents on SH 78 and how many are having to travel around the lake versus having a more direct route.

REGULAR AGENDA ITEMS:

Councilman Bickerstaff made a motion to move items 17-4091 and 17-4902 to the front of the regular agenda. Mayor Pro Tem Watkins seconded that motion and the motion was unanimously approved.

17-4091 Conduct a public hearing and consider an ordinance amending the Code of Ordinances by amending Chapter 11 titled "Zoning Ordinance" by amending Exhibit 1 by amending Article 3 titled "Districts" by repealing Section 12 titled "MX- Mixed Use Regulations" and reserving Section 12 for future use by adding a new Section 15 titled "Old Town Zoning District".

Mrs. Nash stated that there will be two different presentations for this item. Kelsey Berry with Gateway Planning and Dusty will present to Council followed by a public hearing.

Mrs. Berry presented Council a review of the Old Town Zoning District which included the vision for the district, implementation goals, minor modifications, the current versus proposed

development process, the four character areas of the proposed new zoning district, sign standards, architectural standards and design guidelines, home conversions, and schedule of uses.

Mr. McAfee presented an overview of the item including a review of the public meetings held and the input received by the consultants. At the Planning and Zoning Commission meeting, nearly 20 people spoke at the public hearing and most had questions and concerns regarding traffic, taxes, the vision, the project pace, notifications, and grandfathering. There were no specific recommendations or suggestions made to the content. The Planning and Zoning Commission recommended approval with a 5-1 vote. Mr. McAfee stated common concerns expressed were that the City would force people out of their homes, being unaware of the zoning project, the vision for a new downtown area was not necessarily familiar to everyone, would reduce property values and/or increase property taxes, the ability to remodel or expand one's home, and questions regarding traffic, lack of pedestrian connectivity, and associated CIP projects, specifically the 5th Street reconstruction. Mr. McAfee stated this item is for the adoption of the Old Town Zoning regulations into Chapter 11 of the Code of Ordinances, and the next item is for the change in zoning of the land within the Old Town area. Staff recommends approval.

Mayor Felix opened the public hearing.

Liz Tobler, 3345 Seventh Street, stated that her neighbor expressed not wanting to be zoned Old Town and asked Council to consider allowing Boone Street between 6th and 7th Street to remain residential.

Scott Everett, 5205 Miles Road, stated he is against the timing of the project.

Kathy Cobb, 3820 Sixth Street, stated there were talks of the caboose moving to the round-about, and asked what kind of lighting would be on the streets. She expressed concern over having neon window lights and how long they would be allowed to stay on, addressing noise levels, parking structures, landscaping, traffic, landscaping, houses becoming businesses, and how are citizens being notified.

Matthew Wagner, 5909 DeWitt Street, stated his concerns are the sidewalks, street lights, and if would be allowed to keep his giraffe.

Mayor Felix opened the public hearing for item 17-4092.

Mike VanBuskirk, 7517 Forest Ridge Trail, is in favor of the zoning. He expressed that the City needs a vision of a downtown that gives identity, attracts people, and helps the commercial base.

Liz Tobler, 3345 Seventh Street, stated that she would like to see guidelines or a list of what is allowed and not allowed in home businesses. She requested Council to delay the item.

Kathy Cobb, 3820 Sixth Street, stated most people were intimidated by the process and didn't know about the item. She would like for people to have a better understanding of what is taking place.

Spencer Hauenstein, 7819 Hillsdale Drive, stated that he is in favor of this item. As a representative of the Sachse Economic Development Corporation, the intention is to develop a walkable area with sidewalks that attracts more stores and restaurants, which will in turn broaden the tax base and make the City more attractive.

Scott Everett, 5205 Miles Road, commented that if the City has a developer, then he is in favor of the project. If not, then he's against it. He would like to see the City focus on the 190 area.

Marcia Harris-Daniel, 5612 Creek Crossing, stated that as a member of the Sachse Economic Development Corporation, there have been many conversations about this item. She appreciates all the public input received and the work done by the City. She expressed that bringing businesses to Sachse is what the community needs all while finding ones the City can be proud to have. She is in favor of this item.

Fernando Gutierrez, 7515 Summit View Lane, stated the City needs a vibrant and live downtown. This area which would provide a medium residential density which is a different kind of lifestyle that is attractive to some. The area will create a mixed-use development with small businesses that would create jobs and overall allow people to enjoy where they live. He is in favor of this item.

Diana Smith, 4802 Sachse Road, stated the City needs this and only sees property values increasing. She is in favor of this item.

Sandra Richardson, 3433 Sachse Road, asked Council to reconsider item until reconstruction of Sachse Road was complete.

Councilman Adams made a motion to close the public hearings for items 17-4091 and 17-4092. Councilman Bickerstaff seconded that motion and the motion was unanimously approved.

Staff addressed the questions from residents regarding allowable uses, house conversions, streetscape, and types of allowable businesses.

The City Attorney requested several edits to the ordinance that was presented in the council packet and requested that such changes be included in the motion. The requested changes are as follows:

- Section 9.1.3 titled "Architectural Elements and Storefronts"
 - iii. To read as follows: Building entrances shall be defined and articulated by architectural elements such as lintels, pediments, pilasters, columns, porticos, porches, overhangs, railings, balustrades, and/or others (remaining text the same).
- Section 9.1.4. Building Materials
 - i. At least 70% of each exterior elevation shall be brick and/or stone, when mixed, stone shall be used as a base or foundation material and brick used above the stone. Up to 30% may be stucco, architectural split-face block, glass block, or (remaining text the same).

Councilman Adams made a motion to approve as presented and with changes read by the City Attorney. Councilman King seconded that motion.

Councilman Bickerstaff added that he 100% supports what they are doing and that the process began with the Comprehensive Plan in 2015.

The item was unanimously approved.

17-4092 Conduct a public hearing and consider an ordinance amending the Comprehensive Zoning Ordinance and map to grant a zoning change on approximately 160 acres of land, generally located along and to the north and south of SH 78, Fifth Street, Sachse Road, Billingsley Road, Boone Street, Alexander Street, Second Street, Third Street, Fourth Street, Sixth Street, Seventh Street, Floyd Street, Dewitt Street, and Sachse Street, and their respective intersections, from Commercial 1 (C1), Commercial 2 (C2), Planned Development 2 (PD2), Residential 3 (R3), Residential 5 (R5), Industrial 2 (I2), and Special Use Permits #1024, #1216, #1467, #1594, #1769, #1801, #1959, #1969, and #2058 to Old Town Zoning District.

Councilman Bickerstaff made a motion to approve item 17-4092 as presented. Councilman King seconded that motion and the motion was unanimously approved.

17-4088 Receive presentation from Ron Hobbs regarding public input received for the Community Center.

Council continued discussion from the workshop.

Mayor Pro Tem Watkins stated he likes the synthetic floor option, a walking track, and idea of it being multi-level. He is not in favor of having a fitness center.

Councilman Franks stated he liked a split or multi-level facility, having an elevated or recessed walking track, and asked about placing the gym under the first floor to help control the noise level.

Councilman Bickerstaff stated he likes the idea of a recessed walking track and no fitness center.

Councilman King stated he likes the idea of have a multi-level facility, having a multi-purpose surface on the gymnasium floor, a recessed walking track, restrooms, and kitchenette. He does not prefer the facility to have a nursery, fitness center, and lockers. He would like to see the facility be for all ages.

Council collectively agreed to have Mr. Hobbs explore an outdoor space.

No further comments were made.

17-4089 Consider approval of a resolution dedicating funds collected from the City of Sachse Municipal Development District (MDD) and the imposition of a sales and use tax of a quarter cent be used solely towards the financing of Park and Recreation Development projects within the City of Sachse.

Mrs. Nash stated this item establishes where the funds are to be allocated for the MDD. The funds are designated to a specific area, which has to be done by resolution and can only be changed by a resolution to undo the action.

Councilman Bickerstaff made a motion to approve a resolution dedicating funds collected from the City of Sachse Municipal Development District (MDD) and the imposition of a sales and use tax of a quarter cent be used solely towards the financing of Park and Recreation Development

projects within the City of Sachse. Councilman King seconded that motion and the motion was unanimously approved.

17-4079 Discuss possible creation of a Sachse Special Needs Advisory Committee.

Mrs. Nash stated that Councilman King requested to discuss this item.

Councilman King stated he would like feedback from Council on considering this type of committee. He is not sure what it should be called, but the persons would help guide the City and concentrate on special needs. He asked what Council's thoughts were on if they would be considered a regular board and follow same processes or just be for a specific course of time.

Councilman Adams asked whether they would be appointed as a committee or ad-hoc committee. Councilman King replied as a committee and suggested they could do a survey, flush out ideas and then advise Council.

Mayor Pro Tem Watkins stated that he needs to have a better understanding in order to justify. Councilman King stated his vision is for them to collect information and bring to Council.

Councilman Ross asked if this would be self-organizing or have a staff liaison. He stated if it was done with a staff person, then Mrs. Nash should decide what makes sense and how much time would be available to the committee.

Mr. Gorfida, City Attorney, stated if Council should choose to establish a Board, then they would start with a resolution which would define specific objectives, purposes, and be advisory in nature. The resolution would establish Council desires for the committee.

Councilman Franks stated he doesn't like the idea of having a Board, but more as a Committee. He stated his concerns included if it's a liability, and if the costs of CIP projects would increase dramatically due to more specific ADA compliance requests.

Mayor Felix requested for the item to be brought back to a workshop for further discussion. Mrs. Nash commented that the item would be brought back in February.

17-4078 Consider appointment(s) of Council liaisons to the City's Boards and Commissions.

Councilman Adams stated that due to his recent retirement, he would like to give the Planning and Zoning liaison to Mayor Pro Tem Watkins, and that he would take the WISD.

Councilman Franks asked if they could discuss adding a second person to EDC and that he would like to be considered. Mayor Felix stated he would be as a liaison not a member of the Commission, but could be considered when they do their appointments.

Councilman Adams made a motion to appoint Mayor Pro Tem Watkins as the Planning and Zoning Commission liaison. Councilman King seconded that motion and the motion was unanimously approved.

Mayor Pro Tem Watkins made a motion to appoint Councilman Adams to the WISD. Councilman King seconded that motion and the motion was unanimously approved.

Councilman Franks made a motion to re-appoint Councilman Bickerstaff to EDC and the GISD. Councilman Bickerstaff seconded that motion and the motion was unanimously approved.

Mayor Pro Tem Watkins made a motion to re-appoint Councilman King as the liaison to the Animal Shelter Board and Advisory Committee; Mayor Felix to NTTA and NCTCOG, Councilman Ross as liaison to the Library Board and TIF Board; and Councilman Franks as liaison to the Parks and Recreation Board. Councilman Adams seconded that motion and the motion was unanimously approved.

EXECUTIVE SESSION: The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.072: Deliberation of the purchase, sale and license of real property generally located in the mid-west part of the City of Sachse.

At 10:25 p.m. City Council recessed into Executive Session.

At 10:47 p.m. City Council reconvened back into regular session.

Councilman Adams made a motion to approve purchasing 5600 Boone Street by the Sachse EDC in the amount of \$75,000.00. Councilman King seconded that motion and the motion was unanimously approved.

ADJOURNMENT:

Mayor Felix adjourned the meeting at 10:48 p.m.

MIKE J FELIX, MAYOR

ATTEST:

Michelle Lewis Sirianni, City Secretary



City of Sachse, Texas

Legislation Details (With Text)

File #:	17-3850	Version:	1	Name:	Award the bid for the construction of the 2017-2018 Sachse Water & Sewer Main Rehabilitation project to KIK Underground, LLC.
Type:	Agenda Item	Status:			Agenda Ready
File created:	12/14/2017	In control:			City Council
On agenda:	12/18/2017	Final action:			
Title:	Approve a resolution awarding the bid for the construction of the 2017-2018 Sachse Water & Sewer Main Rehabilitation project to KIK Underground, LLC.				

Sponsors:

Indexes:

Code sections:

Attachments: [Rehab Location Maps](#)
[Plans 22x34](#)
[BID TAB- Sachse Utility Rehab 2017-2018 11x17](#)
[Resolution](#)

Date	Ver.	Action By	Action	Result
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Title

Award Bid for the 2017-2018 Sachse Water & Sanitary Sewer Main Rehabilitation project to KIK Underground, LLC.

Background

The project scope includes the rehabilitation of water mains on Pleasant Valley Place and Longbranch Court, and sanitary sewer mains in Kelli Street and Leasa Court.

The City Council included funding for construction of the project in the Fiscal Year 2017-2018 Budget as shown in the FY 2017-2018 Capital Improvement Plan. The engineering design was completed earlier this year by City staff.

The project was advertised for bid in the Sachse News, and through an online bid advertising website, www.civcast.com. City Staff held a non-mandatory pre-bid meeting on November 30th. Staff opened bids on December 14th. Seven bids were received. A tabulation of the bids recieved is provided in Exhibit 1. The lowest qualified bidder is KIK Underground, LLC, with a bid of \$422,054.00.

KIK Underground, LLC is located in Richardson, Texas and has experience in the construction of public water and sanitary sewer mains in several communities in our region including Plano, Addison, Princeton, Dallas, Farmers Branch, and Fate.

Construction is planned to begin in the first quarter of 2018.

Policy Considerations

The project is identified in the City of Sachse 2017-2018 Capital Improvement Plan as water rehabilitation project W-13-02 and sanitary sewer rehabilitation project SS-17-01.

Budgetary Considerations

The FY 17-18 Capital Improvement Plan includes funding for construction of the project in the amount of \$550,000.00 through the Utility Fund.

Staff Recommendations

Approve a resolution awarding the bid for the construction of the 2017-2018 Sachse Water & Sanitary Sewer Main Rehabilitation project to KIK Underground, LLC, in an amount not to exceed four hundred twenty-two thousand fifty-four dollars and zero cents (\$422,054.00) as a consent agenda item.

Location Map – Water Rehabilitation on Pleasant Valley Place & Longbranch Court



Proposed 8"
Water Main

Proposed 8"
Water Main

Location Map – Sewer Rehabilitation on Kellie Street and Leasa Court

Proposed 8"
Sewer Main

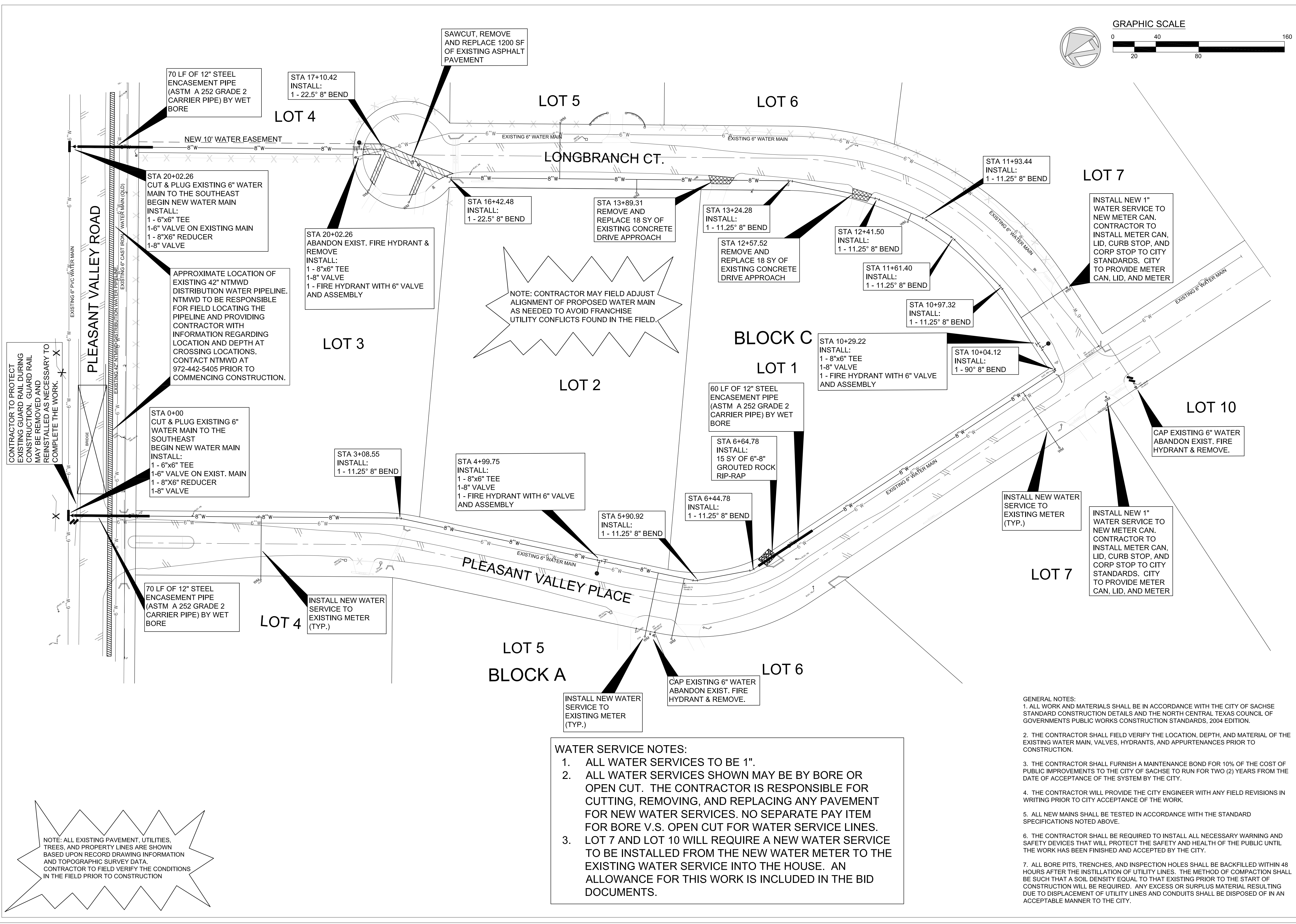
Kellie Street

Proposed 8"
Sewer Main

Leasa Court

Tina Street





ENGINEER:

FOR BID ONLY
NOT FOR
CONSTRUCTION

PREPARED BY GREGORY A.
PETERS, P.E., TX LICENSE
#105115



**PLEASANT VALLEY PLACE
& LONGBRANCH COURT
WATER SYSTEM REHABILITATION**

SACHSE, TEXAS

PROJECT NO.
N/A

CIP PROJECT NO.
N/A

PREPARED BY: GAP

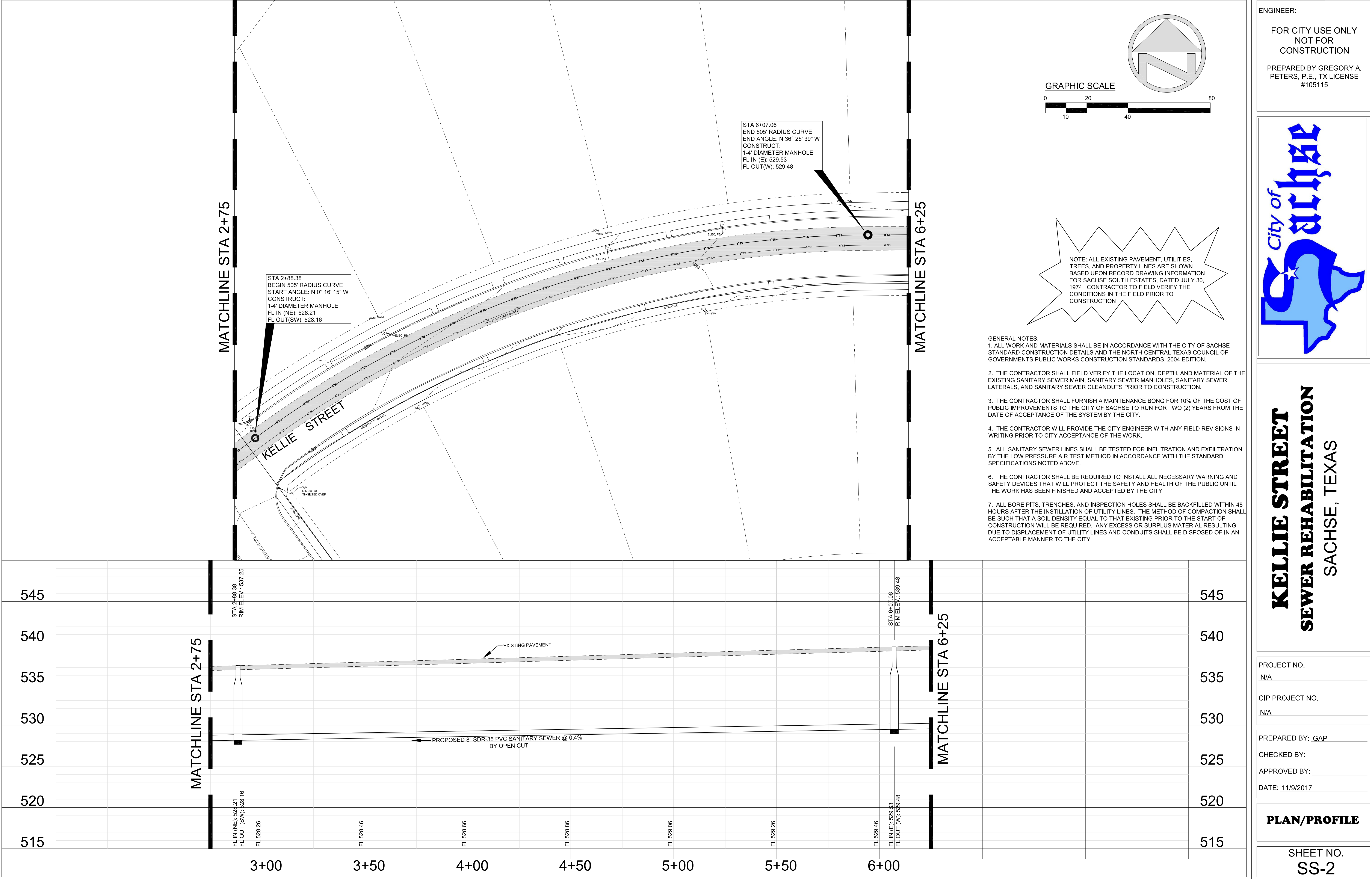
CHECKED BY: _____

APPROVED BY: _____

DATE: 11/09/2017

PLAN/PROFILE

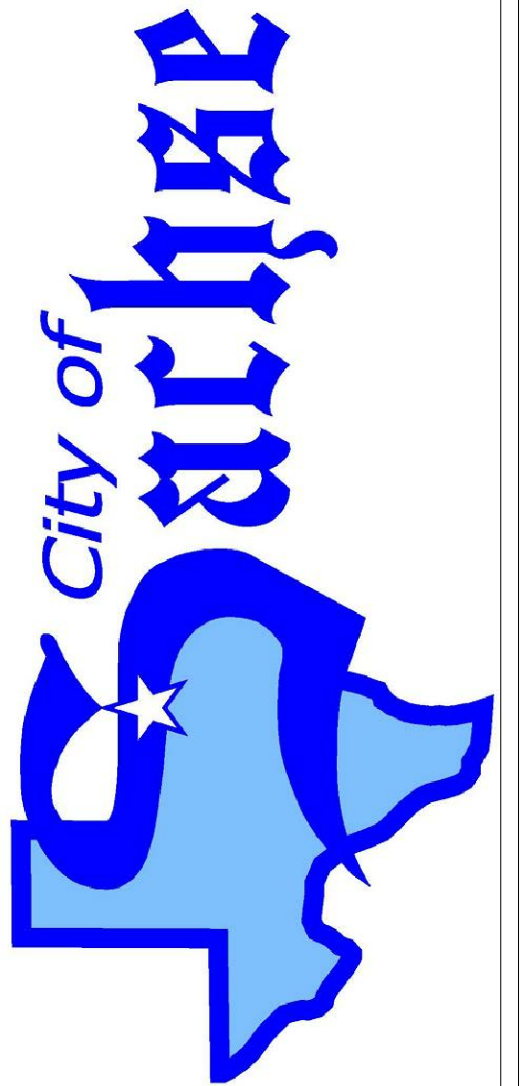
SHEET NO.
C1



ENGINEER:

FOR CITY USE ONLY
NOT FOR
CONSTRUCTION

PREPARED BY GREGORY A.
PETERS, P.E., TX LICENSE
#105115



**KELLIE STREET
SEWER REHABILITATION**
SACHSE, TEXAS

PROJECT NO.
N/A

CIP PROJECT NO.
N/A

PREPARED BY: GAP

CHECKED BY: _____

APPROVED BY: _____

DATE: 11/9/2017

PLAN/PROFILE

SHEET NO.
SS-2

BID TABULATION
Sachse Utility Rehab 2017-2018

CITY OF SACHSE, TEXAS
Summary By: WL
Checked By: GAP

Date: 12/15/2017

				KIK Underground LLC		LA Banda LLC		Moss Utilities		Wilson Contractor Services LLC		A&M Construction and Utilities Inc		Canary Construction Inc		Atkin Bros	
ITEM NO.	EST. QTY.	UNIT	DESCRIPTION / UNIT PRICE	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1	1	LS	Mobilization Fifteen Thousand DOLLARS And Zero CENTS (\$15,000.00 per Lump Sum)	\$15,000.00	\$15,000.00	\$12,000.00	\$12,000.00	\$10,550.00	\$10,550.00	\$25,250.00	\$25,250.00	\$16,000.00	\$16,000.00	\$25,000.00	\$25,000.00	\$15,000.00	\$15,000.00
2	1,130	SY	Remove and replace existing concrete street pavement (8" min. flex base (TXDOT 247) subgrade compacted to 95% standard proctor, 6" thick, 3500 PSI concrete street paving, #4 bars @ 18" O.C.E.W., 24" min, #4 dowels (epoxy) @ 24" O.C.), including testing, complete and in place DOLLARS CENTS per Square Yards	\$75.00	\$84,750.00	\$80.00	\$90,400.00	\$105.00	\$118,650.00	\$104.00	\$117,520.00	\$86.00	\$97,180.00	\$85.00	\$96,050.00	\$40.00	\$45,200.00
3	4	EA	Cut & Plug existing sanitary sewer main and abandon in place (6" dia thru 8" dia) complete and in place. DOLLARS CENTS per Each	\$500.00	\$2,000.00	\$250.00	\$1,000.00	\$1,090.00	\$4,360.00	\$1,220.00	\$4,880.00	\$900.00	\$3,600.00	\$650.00	\$2,600.00	\$125.00	\$500.00
4	1	EA	Abandon existing sanitary sewer manhole in place (plug upstream and downstream main, fill with 2' min depth above top of pipe with 3000 PS concrete, additional fill from concrete to rim with stabilized sand) complete and in place. DOLLARS CENTS per Each	\$650.00	\$650.00	\$300.00	\$300.00	\$1,730.00	\$1,730.00	\$3,050.00	\$3,050.00	\$1,600.00	\$1,600.00	\$1,250.00	\$1,250.00	\$1,000.00	\$1,000.00
5	4	EA	Cut & plug existing water main and abandon in place (4" dia. Thru 8" dia.), with concrete blocking at plug, complete and in place DOLLARS CENTS per Each	\$750.00	\$3,000.00	\$350.00	\$1,400.00	\$820.00	\$3,280.00	\$1,250.00	\$5,000.00	\$850.00	\$3,400.00	\$650.00	\$2,600.00	\$2,000.00	\$8,000.00
6	50	SY	Remove and replace existing drive approach (5" thick, 3600 PSI concrete paving, #4 bars @ 18" O.C.E.W.) including testing, complete and in place DOLLARS CENTS per Square Yards	\$62.00	\$3,100.00	\$60.00	\$3,000.00	\$95.00	\$4,750.00	\$128.00	\$6,400.00	\$93.00	\$4,650.00	\$75.00	\$3,750.00	\$75.00	\$3,750.00
7	100	SF	Remove and replace existing sidewalk (4" thick, 3000 PSI concrete sidewalk paving, #3 bars @ 18" O.C.E.W.) including testing, complete and in place. DOLLARS CENTS per Square Feet	\$6.55	\$655.00	\$60.00	\$6,000.00	\$18.00	\$1,800.00	\$16.00	\$1,600.00	\$11.50	\$1,150.00	\$55.00	\$5,500.00	\$10.00	\$1,000.00
8	862	LF	Construct new 8" diameter PVC SDR-35 sanitary sewer pipe with type B embedment, tested, complete and in place. DOLLARS CENTS per Linear Feet	\$51.00	\$43,962.00	\$45.00	\$38,790.00	\$40.00	\$34,480.00	\$61.00	\$52,582.00	\$54.00	\$46,548.00	\$80.00	\$68,960.00	\$125.00	\$107,750.00
9	2,003	LF	Install new 8" diameter PVC C900 DR-18 water pipe with bends, and appurtenances, type B embedment, tested, complete, and in-place DOLLARS CENTS per Linear Feet	\$39.00	\$78,117.00	\$41.50	\$83,124.50	\$36.00	\$72,108.00	\$44.00	\$88,132.00	\$46.00	\$92,138.00	\$70.00	\$140,210.00	\$90.00	\$180,270.00
10	108	LF	Construct new 8" diameter PVC SDR-35 sanitary sewer pipe by wet bore, tested, complete and in place DOLLARS CENTS per Linear Feet	\$195.00	\$21,060.00	\$100.00	\$10,800.00	\$150.00	\$16,200.00	\$167.00	\$18,036.00	\$425.00	\$45,900.00	\$265.00	\$28,620.00	\$250.00	\$27,000.00
11	10	EA	Construct new 4'-diameter sanitary sewer manhole, tested, complete, and in place DOLLARS CENTS per Each	\$3,040.00	\$30,400.00	\$3,800.00	\$38,000.00	\$3,300.00	\$33,000.00	\$3,470.00	\$34,700.00	\$4,700.00	\$47,000.00	\$4,542.00	\$45,420.00	\$6,000.00	\$60,000.00
12	2	EA	Install new 6-inch gate valve, tested, complete, and in place. DOLLARS CENTS per Each	\$1,000.00	\$2,000.00	\$900.00	\$1,800.00	\$1,085.00	\$2,170.00	\$1,250.00	\$2,500.00	\$980.00	\$1,960.00	\$1,200.00	\$2,400.00	\$900.00	\$1,800.00
13	5	EA	Install new 8-inch gate valve, tested, complete, and in place DOLLARS CENTS per Each	\$1,325.00	\$6,625.00	\$1,100.00	\$5,500.00	\$1,455.00	\$7,275.00	\$1,960.00	\$9,800.00	\$1,450.00	\$7,250.00	\$1,654.00	\$8,270.00	\$1,400.00	\$7,000.00
14	200	LF	Install new ASTM A 252 Grade 2 - 12" diameter steel encasement pipe by wet bore (3 locations @ total of 200 LF), pay item by total combined linear feet, complete and in place DOLLARS CENTS per Linear Feet	\$173.00	\$34,600.00	\$80.00	\$16,000.00	\$250.00	\$50,000.00	\$112.47	\$22,494.00	\$250.00	\$50,000.00	\$265.00	\$53,000.00	\$225.00	\$45,000.00
15	3	EA	Install new fire hydrant with associated 6-inch lead, and 6" valve, tested, complete and in place DOLLARS CENTS per Each	\$4,870.00	\$14,610.00	\$3,800.00	\$11,400.00	\$6,060.00	\$18,180.00	\$3,480.00	\$10,440.00	\$4,500.00	\$13,500.00	\$4,952.00	\$14,856.00	\$4,000.00	\$12,000.00
16	1	EA	Connect proposed 8" sanitary sewer main to existing manhole DOLLARS CENTS per Linear Feet	\$1,200.00	\$1,200.00	\$600.00	\$600.00	\$2,225.00	\$2,225.00	\$1,410.00	\$1,410.00	\$1,300.00	\$1,300.00	\$952.00	\$952.00	\$1,000.00	\$1,000.00
17	1	EA	Connect proposed 8" water main to existing 6" water main with 8"x6" reducer and 6"x6" tee, complete and in place. DOLLARS CENTS per Each	\$2,500.00	\$2,500.00	\$2,000.00	\$2,000.00	\$3,100.00	\$3,100.00	\$1,900.00	\$1,900.00	\$1,900.00	\$1,900.00	\$1,569.00	\$1,569.00	\$4,000.00	\$4,000.00
18	26	EA	Connect existing sanitary sewer laterals to new sanitary sewer main to City standard, complete and in place. DOLLARS CENTS per Each	\$500.00	\$13,000.00	\$1,000.00	\$26,000.00	\$820.00	\$21,320.00	\$712.00	\$18,512.00	\$1,500.00	\$39,000.00	\$975.00	\$25,350.00	\$900.00	\$23,400.00
19	10	EA	Install new water service from new water main to existing water meter to City standard, with appurtenances, complete and in place. DOLLARS CENTS per Each	\$1,000.00	\$10,000.00	\$1,000.00	\$10,000.00	\$660.00	\$6,600.00	\$1,888.00	\$18,880.00	\$1,150.00	\$11,500.00	\$1,562.00	\$15,620.00	\$1,400.00	\$14,000.00
20	2	EA	Install new water service and City-provided water meter can/box/lid/meter to City standard, with appurtenances, complete and in place. DOLLARS CENTS per Each	\$650.00	\$1,300.00	\$600.00	\$1,200.00	\$670.00	\$1,340.00	\$2,400.00	\$4,800.00	\$950.00	\$1,900.00	\$1,290.00	\$2,580.00	\$1,400.00	\$2,800.00
21	1	LS	Allowance to subcontract licensed plumber to run new private 1" water service line from new water meter to existing water service at existing home to City standards and in accordance with local plumbing codes, for Lot 7 and Lot 10, complete and in place. DOLLARS CENTS per Lump Sum	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
22	300	SY	Install sod in all disturbed areas along Kellie Street and Leasa Court, complete and in place. DOLLARS CENTS per Square Yards	\$8.00	\$2,400.00	\$8.00	\$2,400.00	\$12.00	\$3,600.00	\$9.00	\$2,700.00	\$9.00	\$2,700.00	\$8.00	\$2,400.00	\$14.00	\$4,200.00
23	2,000	SY	Install winter rye seed mix with curlex in all disturbed areas along Pleasant Valley Road, Pleasant Valley Place, and Longbranch Court, complete and in place DOLLARS CENTS per Square Yards	\$1.00	\$2,000.00	\$2.00	\$5,600.00	\$2.50	\$5,000.00	\$2.20	\$4,400.00	\$4.80	\$9,600.00	\$2.00	\$4,000.00	\$4.00	\$8,000.00
24	15	SY	Install 6"-8" grouted rock rip rap, complete and in place. DOLLARS CENTS per Square Yards	\$75.00	\$1,125.00	\$100.00	\$1,500.00	\$200.00	\$3,000.00	\$90.00	\$1,350.00	\$120.00	\$1,800.00	\$45.00	\$675.00	\$175.00	\$2,625.00
25	1	LS	Allowance to install basic erosion control devices, including silt fence and rock check dams, as needed to protect downstream creeks from construction activities (Contractor to provide copies of invoices to confirm actual costs, with allowed 15% mark-up), complete and in place Three Thousand DOLLARS And Zero CENTS (\$3,000.00 per Lump Sum)	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
26	1	LS	Allowance for sanitary sewer bypass pumping (Contractor to provide copies of invoices to confirm actual costs, with allowed 15% mark-up). Ten Thousand DOLLARS And Zero CENTS (\$10,000.00 per Lump Sum)	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
27	1	LS	Contingency allowance for City-approved change-orders (Contractor to receive approval from City prior to implementing any change orders). Twenty Five Thousand DOLLARS And Zero CENTS (\$25,000.00 per Lump Sum)	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SACHSE, TEXAS, AWARDING THE BID FOR THE CONSTRUCTION OF THE SACHSE 2017-2018 WATER AND SANITARY SEWER MAIN REHABILITATION PROJECT TO KIK UNDERGROUND, LLC, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED TWENTY-TWO THOUSAND FIFTY-FOUR DOLLARS AND ZERO CENTS (\$422,054.00); AUTHORIZING THE CITY MANAGER TO EXECUTE SUCH AGREEMENT IN A FORM APPROVED BY THE CITY ATTORNEY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, it is necessary for a contractor to construct sanitary sewer improvements in the City of Sachse Texas in order to rehabilitate water and sewer infrastructure in two residential neighborhoods; and

WHEREAS, the project will improve water and sanitary sewer infrastructure for the citizens of the City of Sachse;

WHEREAS, the project is included in the 2017-2018 Capital Improvement Plan as a rehabilitation projects W-13-02 and SS-17-01 with a total project budget of \$550,000.00; and

WHEREAS, the project funding source for the project includes funding from the Utility Fund for the City of Sachse, Texas; and

WHEREAS, the total City funding for the project shall not exceed \$422,054.00; and

WHEREAS, the City has taken sealed bids and City staff is recommending award to the lowest responsible bidder meeting the specifications; and

WHEREAS, the City Council of the City of Sachse, Texas desires to award the contract.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SACHSE, TEXAS;

Section 1: That the Bid for the construction of the 2017-2018 Water and Sanitary Sewer Rehabilitation project is hereby awarded to KIK Underground, LLC, in an amount not to exceed six hundred ninety-two thousand one hundred forty-seven dollars and sixty-three cents (\$422,054.00).

Section 2: That the City Manager is authorized to execute an agreement with Wilson Contractor Services, LLC, in a form approved by the City Attorney.

Section 3: That this resolution shall take effect immediately from and upon its adoption and it is so resolved.

RESOLVED this _____ day of December, 2017. City of Sachse, Texas.

Mike J. Felix, Mayor

ATTEST:

Michelle Lewis Sirianni, City Secretary



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4096 **Version:** 1 **Name:** 2015 IBC Adoption CC 12-18-17
Type: Agenda Item **Status:** Agenda Ready
File created: 12/6/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Approve the 2015 International Model Codes.

Sponsors:

Indexes:

Code sections:

Attachments: [Proposed Ordinance](#)
[Summary of Code Changes](#)

Date	Ver.	Action By	Action	Result
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Title

Approve the 2015 International Model Codes.

Background

- Sachse adopted the 2009 model codes in 2012 and has been operating under them since that time
- The 2015 model codes have been reviewed and are ready to be adopted
- If adopted, the 2015 codes would go into effect January 1st, 2018
- Sachse adopts the new model codes on a 6 year cycle (as opposed to a 3 year cycle)
- The ICC updates and publishes the international model codes every 3 years
- The State and NCTCOG reviews them and issues recommended state and regional amendments
- Local cities review them and issue their own recommended local amendments
- Codes are usually adopted a year or two after they are published by the ICC

Policy Considerations

- Texas requires cities to adopt several of the ICC model codes
- Consistency (most regional cities remain up-to-date on code adoptions)
- Public Safety (codes born out of tragedy)
- ISO Rating
- Innovation (technology and materials constantly improving)
- Modern building codes protect property, first responders, and the tax base

Budgetary Considerations

N/A

Next Steps

- City Council Work Session (12-04-17)
- City Council Regular Meeting (12-18-17)

- Goes into Effect (January 1st, 2018)
- 2021 Codes (5-6 years from now)
- Feedback / Questions?

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF SACHSE, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 3 "BUILDING REGULATIONS" BY AMENDING SECTION 3-1 "INTERNATIONAL BUILDING CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE WITH AMENDMENTS; BY AMENDING SECTION 3-1.1 "INTERNATIONAL RESIDENTIAL CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE WITH AMENDMENTS; BY AMENDING SECTION 3-1.2 "INTERNATIONAL ENERGY CONSERVATION CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE WITH AMENDMENTS; BY AMENDING SECTION 3-2 "INTERNATIONAL PLUMBING CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL PLUMBING CODE WITH AMENDMENTS; BY AMENDING SECTION 3-3 "INTERNATIONAL MECHANICAL CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL MECHANICAL CODE WITH AMENDMENTS; BY AMENDING SECTION 3-4 "NATIONAL ELECTRICAL CODE" TO ADOPT THE PROVISIONS OF THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE" WITH AMENDMENTS; BY AMENDING SECTION 3-22 "INTERNATIONAL FUEL GAS CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL FUEL GAS CODE WITH AMENDMENTS; BY AMENDING CHAPTER 3 "BUILDING REGULATIONS" BY AMENDING SECTION 3-23 "INTERNATIONAL PROPERTY MAINTENANCE CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE WITH AMENDMENTS AND TO ADOPT APPENDIX A; BY AMENDING CHAPTER 5 "FIRE PROTECTION" BY AMENDING SECTION 5-1 "INTERNATIONAL FIRE CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS AND ADOPTING APPENDICES B, C, D AND I; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SACHSE, TEXAS:

SECTION 1. That Chapter 3 titled "Building Regulations" of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-1 titled "International Building Code" to read as follows:

"Chapter 3

BUILDING REGULATIONS

Sec. 3-1. International Building Code.

A. *Adoption.* The International Building Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Building Code of the City of Sachse, the same as though such code were copied in full herein.

B. *Amendments to the International Building Code, 2015 Edition.* The following sections of the International Building Code, 2015 Edition, are hereby amended to read as follows:

(1) Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the Building Code of the City of Sachse, hereinafter referred to as “this code”.

(2) Section 101.4; change to read as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

(3) Section [A] 101.4.8; add the following:

[A] 101.4.8 Electrical. The provisions of the National Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

(4) Section 103 and [A] 103.1 amend to insert the Department Name

SECTION 103

BUILDING INSPECTION DEPARTMENT CITY OF SACHSE

[A] 103.1 Creation of enforcement agency. The Building Inspection Department of the City of Sachse is hereby created and the official in charge thereof shall be known as the building official.

(5) [A] Section 105.2 {Work exempt from building permit}; change to read as follows:

Building:

1. {delete in its entirety}
2. {delete in its entirety}
3. {delete in its entirety}
4. {delete in its entirety}
5. {delete in its entirety}
6. {delete in its entirety}

7. Add “Interior” at the beginning of the sentence.
8. {unchanged}
9. {unchanged}
10. {delete in its entirety}
11. {unchanged}
12. {delete in its entirety}
13. {unchanged}

- (6) Section 109; add Section 109.7 to read as follows:

[A] 109.7 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;
2. No building address or permit card is clearly posted;
3. City approved plans are not on the job site available to the inspector;
4. The building is locked or work otherwise not available for inspection when called;
5. The job site is red-tagged twice for the same item;
6. The original red tag has been removed from the job site.
7. Failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

- (7) Section 109; add Section 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:

[A] 109.8 Work without a permit.

109.8.1 Investigation. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a permit may be issued for such work.

109.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

[A] 109.9 Unauthorized cover up fee. Any work concealed without first obtaining the required inspection in violation of section 110 shall be assessed a fee as established by the city fee schedule.

- (8) Section 110.3.5; delete exception:

[A] Section 110.3.5; Lath, gypsum board and gypsum panel product inspection.

- (9) Section 202; amend definition of Ambulatory Care Facility as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

- (10) Section 202; add definition of Assisted Living Facility to read as follows:

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

- (11) Section 202; amend definition of Atrium as follows:

ATRIUM. An opening connecting three or more stories... {Balance remains unchanged}

- (12) Section 202; amend definition to read as follows:

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

- (13) Section 202; add definition of Repair Garage to read as follows:

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

- (14) Section 202; amend definition of Special Inspector to read as follows:

[BS] SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

- (15) Section 303.1.3; add a sentence to read as follows:

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy. Except when applying the assembly requirements of Chapter 10 and 11.

- (16) Section 304.1; add the following to the list of occupancies:

Fire stations

Police stations with detention facilities for 5 or less

- (17) Section 307.1.1; add the following to Exception 4:

4. Cleaning establishments... {text unchanged} ... with Section 707 or 1-hour horizontal assemblies constructed in accordance with Section 711 or both. See also IFC Chapter 21, Dry Cleaning Plant provisions.

- (18) Section 403.1, Exception 3; change to read as follows:

3. The open air portion of a building... {remainder unchanged}

- (19) Section 403.3, Exception; delete item 2.

- (20) Section 403.3.2; change to read as follows:

[F] 403.3.2 Water supply to required fire pumps. In buildings that are more than 120 feet (36.5 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

- (21) Section 404.5; delete Exception.

- (22) Section 406.3.5.1 Carport separation; add sentence to read as follows:

A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

- (23) Section 506.2.2; add a sentence to read as follows:

506.2.2 Open space limits. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane. In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway meeting fire department access from the street or approved fire lane shall be provided.

- (24) Section 712.1.9, change item 4 to read as follows:

4. Is not open to a corridor in Group I and R H occupancies.

- (25) Section 901.6.1; add Section 901.6.1.1 to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be back flushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and

Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as “Fifth Year” for Type of ITM, and the note on the back of the tag shall read “5 Year Standpipe Test” at a minimum.

6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.

(26) Section 903.1.1; change to read as follows:

[F] 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard, or as approved by the fire code official.

(27) Section 903.2; change to read as follows:

[F] 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Section 903.2.1 through 903.2.12. Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

(28) Section 903.2; delete the exception.

(29) Section 903.2.9; add Section 903.2.9.3 to read as follows:

[F] 903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

- (30) Section 903.2.11; amend 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

[F] 903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories, other than penthouses in compliance with Section 1510 of the International Building Code, located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions:

1. Open parking structures in compliance with Section 406.5 of the International Building Code, having no other occupancies above the subject garage.
2. {delete exception}

[F] 903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

[F] 903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

[F] 903.2.11.9 Buildings Over 6,000 square feet (557.5 m²). An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq.ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

Exception:

1. Open parking garages in compliance with Section 406.5 of the International Building Code.

- (31) Section 903.3.1.1.1; change to read as follows:

[F] 903.3.1.1.1 Exempt locations. When approved by the code official, automatic sprinklers shall not be required in the following rooms or areas where such... {text unchanged} ...because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. {delete}
5. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
6. {delete}

(32) Section 903.3.1.2.3; add section to read as follows:

[F] Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.

(33) Section 903.3.1.3; change to read as follows:

[F] 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

(34) Section 903.3.1.4; add to read as follows:

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and

3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

- (35) Section 903.3.5; add a second paragraph to read as follows:

[F] Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

- (36) Section 903.4; add a second paragraph after the exceptions to read as follows:

[F] Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

- (37) Section 903.4.2; add a second paragraph to read as follows:

[F] The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

- (38) Section 905.2; change to read as follows:

[F] 905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

- (39) Section 905.3; add Section 905.3.9 with exception to read as follows:

[F] 905.3.9 Buildings exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

(40) Section 905.4, change item 1, 3 and 5 and add Item 7 to read as follows:

[F] 1. In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.

2. {No change.}

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway hose connection by a{No change to rest.}

4. {No change.}

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with Section 1011.12.

6. {No change.}

7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

(41) Section 905.9; add a second paragraph after the exceptions to read as follows:

[F] Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(42) Section 907.1; add Section 907.1.4 to read as follows:

[F] 907.1.4 Design standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

- (43) Section 907.2.1; change to read as follows:

[F] 907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the having an occupant load due to the assembly occupancy is of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3. 10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {No change.}

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

- (44) Section 907.2.3; change to read as follows:

[F] 907.2.3 **Group E.** A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}
 - 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

{No change to remainder of exceptions.}

- (45) Section 907.2.13, Exception 3; change to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

- (46) Section 907.4.2; add Section 907.4.2.7 to read as follows:

[F] 907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

- (47) Section 907.6.1; add Section 907.6.1.1 to read as follows:

[F] 907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

- (48) Section 907.6.3; delete all four Exceptions.

- (49) Section 907.6.6; add sentence at end of paragraph to read as follows:

[F] See 907.6.3 for the required information transmitted to the supervising station.

- (50) Section 909.22; add to read as follows:

[F] 909.22 Stairway or ramp pressurization alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the Fire Department as per Section 105.7.

[F] 909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

[F] 909.22.1.1 Ventilation systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

[F] 909.22.1.2 Standby power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

[F] 909.22.1.3 Acceptance and testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

(51) Section 910.2; change Exception 2 and 3 to read as follows:

[F] 2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m \cdot S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

(52) Section 910.2; add Section 910.2.3 with exceptions to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exceptions: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3 and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exceptions: Buildings of noncombustible construction containing only noncombustible materials.

(53) Section 910.3; add section 910.3.4 to read as follows:

[F] 910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

[F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per 910.2

[F] 910.3.4.2 Nonsprinklered buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents

(54) Section 910.4.3.1; change to read as follows:

[F] 910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be manual or automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

- (55) Section 910.4.4; change to read as follows:

[F] 910.4.4 Activation. The mechanical smoke removal system shall be activated by manual controls only automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

- (56) Section 912.2; add Section 912.2.3 to read as follows:

[F] 912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet (30 480 mm) of the fire department connection as the fire hose lays along an unobstructed path.

- (57) Section 913.2.1; add second paragraph and exception to read as follows:

[F] When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by Section 506.1.

- (58) Section 1006.2.2.6 Add a new Section 1006.2.2.6 as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

- (59) Section 1009.1; add the following Exception 4:

Exceptions:

{previous exceptions unchanged}

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted

by the State, shall be deemed to be in compliance with the requirements of Section 1009.

- (60) Section 1010.1.9.4 Bolt Locks; amend exceptions 3 and 4 as follows:

Exceptions:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. {Remainder unchanged}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy {Remainder unchanged}

- (61) Section 1015.8 Window Openings. REVISE text as follows:

1. Operable windows where the top of the sill of the opening is located more than 75 feet (22 860 mm) 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

- (62) Section 1020.1 Construction; add exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

- (63) Section 1029.1.1.1 Delete this section. Spaces under grandstands and bleachers:

- (64) Section 1101.1 Scope. add exception to Section 1101.1 as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

- (65) Section 1203.1; amend to read as follows:

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the International Mechanical Code.

Where air infiltration rate in a dwelling unit is 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with

Section 402.4.1.2 of the International Energy Conservation Code, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403 of the International Mechanical Code.

- (66) Table 1505.1; delete footnote c and replace footnote b with the following:

b. Non-classified roof coverings shall be permitted on buildings of U occupancies having not more than 120 sq. ft. of protected roof area. When exceeding 120 sq. ft. of protected roof area, buildings of U occupancies may use non-rated non-combustible roof coverings.

c. {delete}

- (67) Section 1505.7; delete the section.

- (68) Section 1510.1; add a sentence to read as follows:

1510.1 General. Materials and methods of applications used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15. All individual replacement shingles or shakes shall be in compliance with the rating required by Table 1505.1.

{text of exception unchanged}

- (69) Section 1704.2, Special inspections and tests is amended to read as follows:

1704.2 Special inspections and tests. Where application is made to the Building Official for construction as specified in Section 105, the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Section 1705 and identify the approved agencies to the Building Official. The special inspector shall not be employed by the contractor. These special inspections and tests are in addition to the inspections identified by the Building Official that are identified in Section 110.

- (70) Section 1704.2.1, Special inspector qualifications, is amended to read as follows:

1704.2.1 Special inspector qualifications. Prior to the start of construction and or upon request, the approved agencies shall provide written documentation to the registered design professional in responsible charge and the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction.
{Remainder unchanged}

- (71) Section 1704.2.4, Report requirement, is amended to read as follows:

1704.2.4 Report requirement. Approved agencies shall keep records of special inspections and tests. The approved agency shall submit reports of special inspections and tests to the Building Official upon request, and to the registered design professional in responsible charge. Individual inspection reports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. {Remainder unchanged}

- (72) Section 1704.2.5.2, Fabricator approval, is amended to read as follows:

1704.2.5.1 Fabricator approval. Special inspections during fabrications required by Section 1704 are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency, or a fabricator that is enrolled in a nationally accepted inspections program. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge, stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the Building Official upon request.

- (73) Section 2901.1; add a sentence to read as follows:

[P] 2901.1 Scope. {existing text to remain} The provisions of this Chapter are meant to work in coordination with the provisions of Chapter 4 of the International Plumbing Code. Should any conflicts arise between the two chapters, the Building Official shall determine which provision applies.

- (74) Section 2902.1; add a second paragraph to read as follows:

In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building Official.

- (75) Table 2902.1; add footnote f to read as follows:

f. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

- (76) Section 2902.1.3; add new Section 2902.1.3 to read as follows:

2902.1.3 Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.

2902.1.3.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.3.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the <Jurisdiction's> health department.

(77) Section 3002.1 Hoistway Enclosure Protection. add exceptions to read as follows:

Exceptions:

1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.

(78) Section 3005.4; revise first sentence to read as follows:

Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces. Elevator machine rooms, control rooms, control spaces and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

{remainder unchanged}

(79) Section 3005.7 add a Section 3005.7 as follows:

3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.7.1 Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.

3005.7.2.1 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.

3005.7.2.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.7.3 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.7.4 Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

- (80) Section 3005.8 add Section 3005.8 as follows:

3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above listed locations stating: "No Storage Allowed".

- (81) Section 3006.2, Hoistway opening protection required. Revise text as follows:

5. The building is a high rise and the elevator hoistway is more than 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

- (82) Section 3109.1; change to read as follows:

3109.1 General. Swimming pools shall comply with the requirements of sections 3109.2 through 3109.5 and other applicable sections of this code and complying with applicable state laws.

..."

SECTION 2. That Chapter 3 titled "Building Regulations" of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-1.1 titled "International Residential Code" to read as follows:

"Sec. 3-1.1 International Residential Code.

- A. *Adoption* The International Residential Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Residential Code of the City of Sachse, the same as though such code were copied in full herein.
- B. *Amendments to the International Residential Code, 2015 Edition.* The following sections of the International Residential Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section R101.1; change to read as follows:

R101.1 Title. These provisions shall be known as the Residential Code for One- and Two-family Dwellings of the City of Sachse, Texas, and shall be cited as such and will be referred to as "this code."

- (2) Section R102.4; change to read as follows:

R102.4 Referenced codes and standards. The codes, when specifically adopted, and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

{remainder of text unchanged}

- (3) Section R104.10.1 Flood Hazard areas; delete this section.

- (4) Section 105.2 Work exempt from permit; change to read as follows:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15 m²).
2. Fences not over 2.5 feet (762 mm) high.
3. {unchanged}
4. {unchanged}
5. {delete in its entirety}
6. {unchanged}
7. {unchanged}
8. {unchanged}
9. {unchanged}
10. {delete in its entirety}

- (5) Section R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas; delete this section.

- (6) Section R106.1.4 Information for construction in flood hazard areas; delete this section.

- (7) Section R108.7; add Section 108.7 to read as follows:

R108.7 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;

2. No building address or permit card is clearly posted;
3. Approved plans are not on the job site available to the inspector;
4. The building is locked or work otherwise not available for inspection when called;
5. The job site is red-tagged twice for the same item;
6. The original red tag has been removed from the job site and/or,
7. Violations exist on the property including failure to maintain erosion control, trash control or tree protection.
8. Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

(8) Section R109.1.3; change to read as follows:

R109.1.3 Floodplain inspections. For construction permitted in areas prone to flooding as established by Table R301.2(1), upon . . . {text unchanged} . . . construction, the building official may require submission . . . {text unchanged}.

(9) Section R110 Certificate of Occupancy (R110.1 through R110.5); delete this section.

(10) Section R202; change definition of "Townhouse" to read as follows:

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

(11) Table R301.2(1); fill in as follows:

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f
	SPEED ^d (mph)	Topographic Effects ^k	Special Wind Region ^L	Windborne Debris Zone ^m	
5 lb/ft ²	115 (3-sec- gust)/76 fastest mile	No	No	No	A

SUBJECT TO DAMAGE FROM		
Weathering ^a	Frost line depth ^b	Termite ^c
moderate	6"	very heavy

WINTER DESIGN TEMP ^e	ICE BARRIER UNDER- LAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
22°F	No	local code	150	64.9°F

{No change to footnotes}

- (12) Section R302.1; add Exception #3 to read as follows:

Exceptions: {previous exceptions unchanged}

6. Open non-combustible carport structures may be constructed when also approved within adopted ordinances.

- (13) Section R302.3; add Exception #3 to read as follows:

Exceptions:

1. {existing text unchanged}
2. {existing text unchanged}
3. Two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.

- (14) Section R302.5.1; change to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

- (15) Section R303.3, Exception; change to read as follows:

Exception: {existing text unchanged} Exhaust air from the space shall be exhaust out to the outdoors unless the space contains only a water closet, a lavatory, or water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

- (16) Section R313.2; delete section.

- (17) Section R315.2.2 Alterations, repairs and additions. Amend to read as follows.

Exception:

2. Installation, alteration or repairs of electrical powered {remaining text unchanged}

(18) Section R322 Flood Resistant Construction. Delete Section.

(19) Section R326 Swimming Pools, Spas and Hot Tubs. Amend to read as follows.

R326.1 General. The design and construction of pools and spas shall comply with the 2015 IRC Appendix Q. Swimming Pools, Spas and Hot Tubs.

(20) Section R401.2, amended by adding a new paragraph following the existing paragraph to read as follows.

Section R401.2. Requirements. {existing text unchanged} ...

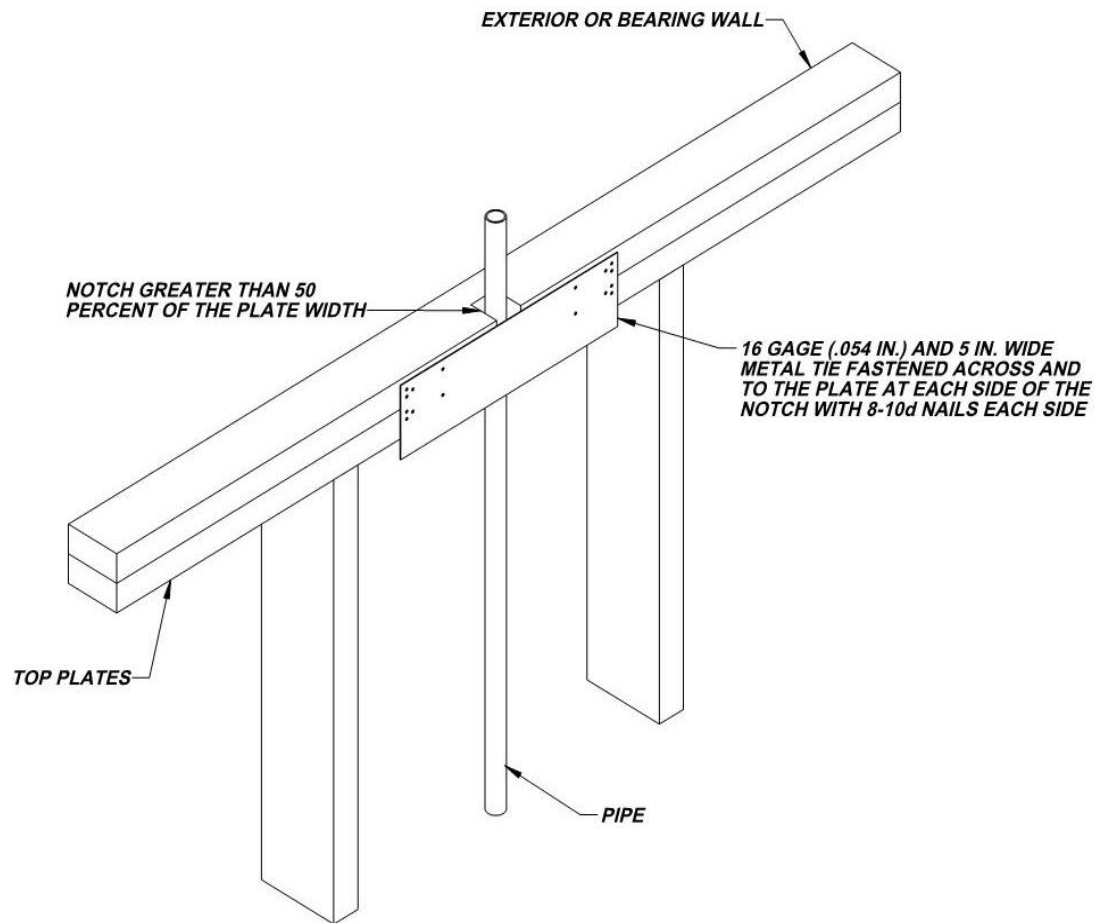
Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by a Texas-registered engineer.

(21) Section 602.6.1; amend the following:

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 Ga) and 5 inches (127 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 1 ½ inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See figure R602.6.1.

Exception: {unchanged}

(22) Figure R602.6.1; delete the figure and insert the following figure:



- (23) Section R703.8.4.1; add a second paragraph to read as follows:

In stud framed exterior walls, all ties shall be anchored to studs as follows:

1. When studs are 16 in (407 mm) o.c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o.c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm) from the foundation.

- (24) Section R902.1; Amend and add exception #5 to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B, or C roofing shall be installed. Classes A, B and C roofing required by this section...{remainder unchanged}.

Exceptions:

1. {text unchanged}

2. {text unchanged}
3. {text unchanged}
4. {text unchanged}
5. Non-classified roof coverings shall be permitted on one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed (area defined by jurisdiction).

- (25) Chapter 11 [RE] – Energy Efficiency is deleted in its entirety and replaced with the following:

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

N1101.2 Compliance. Compliance shall be demonstrated by meeting the requirements of the residential provisions of 2015 International Energy Conservation Code.

- (26) Section M1305.1.3; change to read as follows:

M1305.1.3 Appliances in attics. Attics containing appliances requiring access shall be provided . . . {bulk of paragraph unchanged} . . . sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger and large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lbs (136 kg) capacity.
3. An access door from an upper floor level.

Exceptions: {unchanged}

- (27) Section M1411.3; change to read as follows:

M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to a sanitary sewer through a trap, by means of a direct or indirect drain. {remaining text unchanged}

- (28) Section M1411.3.1, Items 3 and 4; add text to read as follows:

M1411.3.1 Auxiliary and secondary drain systems. {bulk of paragraph unchanged}

1. {text unchanged}

2. {text unchanged}
3. An auxiliary drain pan... {bulk of text unchanged}... with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.
4. A water level detection device... {bulk of text unchanged}... overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

(29) Section M1411.3.1.1; add text to read as follows:

M1411.3.1.1 Water-level monitoring devices. On down-flow units ...{bulk of text unchanged}... installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

(30) Section M1503.4; amend and add exception as follows:

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute.

(31) Section M2005.2; change to read as follows:

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that combustion air will not be taken from the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the International Energy Conservation Code and equipped with an approved self-closing device. Installation of direct-vent water heaters within an enclosure is not required.

(32) Section G2408.3 (305.5) Private garages; delete section.

(33) Section G2412.5 (401.5); add a second paragraph to read as follows:

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

- (34) Section G2413.3 (402.3); add an exception to read as follows:

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EDH).

- (35) Section G2415.12 (404.12); change to read as follows:

G2415.12 (404.12) Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

- (36) Section G2417.1 (406.1); change to read as follows:

G2417.1 (406.1) General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the building official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

- (37) Section G2417.4; change to read as follows:

G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

- (38) Section G2417.4.1; change to read as follows:

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one

half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing

- (39) Section G2417.4.2; change to read as follows:

G2417.4.2 (406.4.2) Test duration. The test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the Building Official, but in no case for less than thirty (30) minutes.

- (40) Section G2420.1 (406.1); add Section G2420.1.4 to read as follows:

G2420.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

- (41) Section G2420.5.1 (409.5.1); add text to read as follows:

G2420.5.1 (409.5.1) Located within the same room. The shutoff valve ...{bulk of paragraph unchanged}... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

- (42) Section G2421.1 (410.1); add text and Exception to read as follows:

G2421.1 (410.1) Pressure regulators. A line pressure regulator shall be ... {bulk of paragraph unchanged} ... approved for outdoor installation. Access to regulators shall comply with the requirements for access to appliances as specified in Section M1305.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

(43) Section G2422.1.2.3 (411.1.3.3); delete Exception 1 and Exception 4.

(44) Section G2445.2 (621.2); add Exception to read as follows:

G2445.2 (621.2) Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented room heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Building Official unless an unsafe condition is determined to exist as described in International Fuel Gas Code Section 108.7 of the Fuel Gas Code.

(45) Section G2448.1.1 (624.1.1); change to read as follows:

G2448.1.1 (624.1.1) Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with this code.

(46) Section P2603.5.1; change to read as follows:

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall not be less than 12 inches (304 mm) below finished grade at the point of septic tank connection. Building sewers shall not be less than 12 inches (304 mm) below grade.

(47) Section P2709.2; add Exception to read as follows:

Exception: Showers designed to comply with ICC/ANSI A117.1.

(48) Section P2801.6.1; change to read as follows:

Section P2801.6.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 2906.5.

Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

- (49) Section P2804.6.1; change to read as follows:

Section P2804.6.1 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge to the floor, to an indirect waste receptor or to the outdoors.

[remainder unchanged]

- (50) Section P2801.7; add Exception to read as follows:

Exceptions:

1. Electric Water Heater.

- (51) Section P2902.5.3; change to read as follows:

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

- (52) Section P3003.9.2; change to read as follows:

P3003.9.2. Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces.

The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

Exception: {delete exception}

- (53) Section P3111; delete.
- (54) Section P3112.2; delete and replace with the following:

P3112.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

- (55) Section Appendix Q Reserved; amended to read as follows:

Appendix Q. Swimming Pools, Spas and Hot Tubs.

SECTION AQ101 GENERAL

AQ101.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

AQ101.2 Pools in flood hazard areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section AQ101.2.1 or AQ101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AQ101.2.1 Pools located in designated floodways. Where pools are located in designated floodways, documentation shall be submitted to the building official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

AQ101.2.2 Pools located where floodways have not been designated. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

SECTION AQ102 DEFINITIONS

AQ102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103 SWIMMING POOLS

AQ103.1 In-ground pools.

In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.

AQ103.2 Above-ground and on-ground pools.

Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.

AQ103.3 Pools in flood hazard areas.

In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

SECTION AQ104 SPAS AND HOT TUBS**AQ104.1 Permanently installed spas and hot tubs.**

Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.

AQ104.2 Portable spas and hot tubs.

Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

SECTION AQ105 BARRIER REQUIREMENTS**AQ105.1 Application.**

The provisions of this appendix shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

AQ105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier, which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102mm) sphere.

3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
8. Access gates shall comply with the requirements of Section AQ105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and
 - 8.2. The gate and barrier shall have not opening greater than 0.5 inch (13 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves a part of the barrier one of the following conditions shall be met:
 - 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
 - 9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch (ds)

shall be located at least 54 inches (1372 mm) above the threshold of the door; or

9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:

10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AQ105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter (102 mm) sphere.

AQ105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section AQ105.2, Item 9.

AQ105.4 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb them.

AQ105.5 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AQ107, shall be exempt from the provisions of this appendix

SECTION AQ106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AQ106.1 General.

Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

SECTION AQ107 ABBREVIATIONS

AQ107.1 General.

ANSI—American National Standards Institute
11 West 42nd Street
New York, NY 10036

APSP—Association of Pool and Spa Professionals
NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue
Alexandria, VA 22314

ASCE—American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 98411-0700

ASTM—ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

SECTION AQ108 REFERENCED STANDARDS

AQ108.1 General.

ANSI/NSP

ANSI/NSPI-3—99	Standard for Permanently Installed Residential Spas	AQ104.1
ANSI/NSPI-4—99	Standard for Above-ground/ On-ground Residential Swimming Pools	AQ103.2

ANSI/NSPI-5—03	Standard for Residential In-ground Swimming Pools	AQ103.1
ANSI/NSPI-6—99	Standard for Residential Portable Spas	AQ104.2

ANSI/APSP

ANSI/APSP-7—06	Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins	AQ106.1
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ASCE

ASCE/SEI-24—05	Flood-resistant Design and Construction	AQ103.3
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ASTM

ASTM F 1346—91 (2003)	Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools Spas and Hot Tubs	AQ105.2, AQ105.5
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UL

UL 2017—2000	Standard for General-purpose Signaling Devices and Systems—with revisions through June 2004	AQ105.2
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...

SECTION 3. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-1.2 titled “International Energy Conservation Code” to read as follows:

“Sec. 3-1.2 International Energy Conservation Code.

A. *Adoption.* The International Energy Conservation Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Energy Code of the City of Sachse, the same as though such code were copied in full herein.

B. *Amendments to the International Energy Conservation Code, 2015 Edition.* The following sections of the International Energy Conservation Code, 2015 Edition, are hereby amended to read as follows:

(1) Section 101.1; amend Section 101.1 to read as follows:

101.1 Title. This code shall be known as the International Energy Conservation Code of the City of Sachse, Texas, and shall be cited as such. It is referred to herein as “this code”.

(2) Section C102/R102; add Section C102.1.2 and R102.1.2 to read as follows:

C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4 and R403.3.3 respectively.

- (3) Section C202 and R202; add the following definition:

PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device..

- (4) Section R202; add the following definition:

DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

- (5) Table R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT; Amend by changing the WOOD FRAME WALL R-VALUE for CLIMATE ZONE 3 to read as follows:

13

- (6) Table R402.1.4 EQUIVALENT U-FACTORS; Amend by changing the WOOD FRAME WALL U-FACTOR for CLIMATE ZONE 3 to read as follows;

0.082

- (7) Section R402.3.2 Glazed fenestration SHGC; amend by adding a paragraph and table following the exception to read as follows:

Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

Table R402.3.2 SHGC Multipliers for Permanent Projections ^a

Projection Factor	SHGC Multiplier (all Other Orientation)	SHGC Multiplier (North Oriented)
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0 - 0.10	1.00	1.00
>0.10 – 0.20	0.91	0.95
>0.20 – 0.30	0.82	0.91
>0.30 – 0.40	0.74	0.87
>0.40 – 0.50	0.67	0.84
>0.50 – 0.60	0.61	0.81
>0.60 – 0.70	0.56	0.78
>0.70 – 0.80	0.51	0.76
>0.80 – 0.90	0.47	0.75
>0.90 – 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north.

- (8) Section R402.4.1.2 Testing; modify the first paragraph to read as follows:

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour in Climate Zone 3. {Remainder of text unchanged}

- (9) R402.4.1.2 Testing; Add a last paragraph to read as follows:

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

- (10) R403.3.3 Duct Testing (Mandatory); Add a last paragraph to read as follows:

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

- (11) Section C402.2.7/R402.2; Add Section C402.2.9 and R402.2.14 to read as follows:

Section C402.2.7/R402.2.14 Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official.

- (12) Section R405.6.2; add the following sentence to the end of paragraph:

Acceptable performance software simulation tools may include, but are not limited to, REM RateTM, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as

outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

- (13) TABLE R406.4 MAXIMUM ENERGY RATING INDEX; amend to read as follows:

TABLE R406.4¹
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65

¹ This table is effective until August 31, 2019.

TABLE R406.4²
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	63

² The table is effective from September 1, 2019 to August 31, 2022.

TABLE R406.4³
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	59

³ This table is effective on or after September 1, 2022.

...”

SECTION 4. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-2 titled “International Plumbing Code” to read as follows:

“Sec. 3-2. International Plumbing Code.

- A. *Adoption.* The International Plumbing Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Plumbing Code of the City of Sachse, the same as though such code were copied in full herein.
- B. *Amendments to the International Plumbing Code, 2015 Edition.* The following sections of the International Plumbing Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the International Plumbing Code of the City of Sachse, Texas, hereinafter referred to as “this code”.

- (2) Table of Contents, Chapter 7, Section 714; change to read as follows:

714 Engineered Computerized Drainage Design 69

- (3) Section 102.8; change to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 or the National Electrical Code (NEC) shall mean the Electrical Code as adopted.

- (4) Sections 106.6.2 and 106.6.3; change to read as follows:

106.6.2 Fee schedule. The fees for all plumbing work shall be as adopted by resolution of the governing body of the jurisdiction.

106.6.3 Fee Refunds. The code official shall establish a policy for authorizing the refunding of fees. {Delete balance of section}

- (5) Section 109; delete entire section and insert the following:

SECTION 109 MEANS OF APPEAL

[A] 109.1 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

- (6) Section 305.4.1; change to read as follows:

305.4.1 Sewer depth. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

- (7) Section 305.7; change to read as follows:

305.7 Protection of components of plumbing system. Components of a plumbing system installed within 3 feet (914 mm) along alleyways, driveways, parking garages or other locations in a manner in which they could be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner.

- (8) Section 314.2.1; change to read as follows:

[M] 314.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. ... {Text unchanged}... Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.

- (9) Section 409.2; change to read as follows:

409.2 Water connection. The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608. {Remainder of section unchanged}

- (10) Section 412.4; change to read as follows:

412.4 Required location for floor drains. Floor drains shall be installed in the following areas.

1. In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.
2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.
3. Public restrooms.

- (11) Section 419.3; change to read as follows:

419.3 Surrounding material. Wall and floor space to a point 2 feet (610 mm) in front of a urinal lip and 4 feet (1219 mm) above the floor and at least 2 feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, hard, nonabsorbent material.

- (12) Section 502.3; change to read as follows:

502.3 Appliances in attics. Attics containing a water heater shall be provided . . . {bulk of paragraph unchanged} . . . side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions be not less than 20 inches by 30 inches(508mm by 762mm) where such dimensions are large enough to allow removal of the water heater. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.

2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed... {remainder of section unchanged}

(13) Section 502.6; Add Section 502.6 to read as follows:

502.6 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

(14) Section 504.6; change to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacturer's installation instructions and installed with those instructions.

5. Discharge to an indirect waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.

9. Be installed so as to flow by gravity.
10. Terminate not more than 6 inches above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

(15) Section 504.7.1; change to read as follows:

Section 504.7.1 Pan size and drain. The pan shall be not less than 11/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

(16) Section 604.4; add Section 604.4.1 to read as follows:

604.4.1 State maximum flow rate. Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

(17) Section 606.1; delete items #4 and #5.

(18) Section 606.2; change to read as follows:

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

1. On the fixture supply to each plumbing fixture other than bathtubs and showers in one- and two-family residential occupancies, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses and similar occupancies.
2. {delete item}
3. On the water supply pipe to each appliance or mechanical equipment.

(19) Section 608.1; change to read as follows:

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable

liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to applicable local regulations, Table 608.1, except and as specifically stated in Sections 608.2 through 608.16.10.

- (20) Section 608.16.5; change to read as follows:

608.16.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

- (21) Section 608.17; change to read as follows:

608.17 Protection of individual water supplies. An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with applicable local regulations. Installation shall be in accordance with Sections 608.17.1 through 608.17.8.

- (22) Section 610.1; add exception to read as follows:

610.1 General. New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction or, in the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section. This requirement shall apply to “on-site” or “in-plant” fabrication of a system or to a modular portion of a system.

1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
2. The system or part thereof shall be filled with a water/chlorine solution containing at least 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing at least 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
4. The procedure shall be repeated where shown by a bacteriological examination that contamination remains present in the system.

Exception: With prior approval the Code Official may waive this requirement when deemed unnecessary.

(23) Section 703.6; delete section.

(24) Section 704.5; added to read as follows:

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast iron single stack shall be designed by a registered engineer and comply to a national recognized standard.

(25) Section 705.11.2; change to read as follows:

705.11.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

Exception: {delete}

(26) Section 712.5; add Section 712.5 to read as follows:

712.5 Dual Pump System. All sumps shall be automatically discharged and, when in any “public use” occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

(27) Section 714, 714.1; change to read as follows:

SECTION 714 ENGINEERED DRAINAGE DESIGN

714.1 Design of drainage system. The sizing, design and layout of the drainage system shall be designed by a registered engineer using approved design methods.

(28) Section 804.2; added to read as follows:

804.2 Special waste pipe, fittings, and components. Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials.

(29) Section 903.1; change to read as follows:

903.1 Roof extension. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar

purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

(30) Section 917 Single stack vent system. Delete entire section.

(31) Section 1002.10; delete.

(32) Section 1101.8; change to read as follows:

1101.8 Cleanouts required. Cleanouts or manholes shall be installed in the storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

Exception: {delete item}

(33) Section 1106.1; change to read as follows:

1106.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches (152 mm) per hour rainfall rate.

(34) Section 1108.3; change to read as follows:

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

(35) Section 1109; delete this section.

(36) Section 1202.1; delete Exception 2.

C. *Cross Connection Control Program.* No water service connection shall be made to any establishment where a potential or actual contamination hazard exists unless the water supply is protected in accordance with the Texas Commission on Environmental Quality, formerly known as Texas Natural Resource Conservation Commission, Rules and Regulations for Public Water Systems (TCEQ Rules) and City ordinance. The water purveyor shall discontinue water service if a required backflow prevention assembly is not installed, maintained and tested in accordance with the TCEQ Rules and City ordinance.

D. *Backflow Prevention Assembly Installation, Testing and Maintenance.*

1. All backflow prevention assemblies shall be tested upon installation by a recognized backflow assembly tester and certified to be operating within specifications. Backflow prevention assemblies which are installed to provide protection against health hazards

must also be tested and certified to be operating within specifications at least annually by a recognized backflow prevention assembly tester.

2. All backflow prevention assemblies shall be installed and tested in accordance with the manufacturer's instructions, the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14), or the University of Southern California Manual of Cross-Connection Control.
3. Assemblies shall be repaired, overhauled, or replaced at the expense of the customer whenever said assemblies are found to be defective. Original forms of such test, repairs, and overhaul shall be kept and submitted to the City of Sachse within five (5) working days of the test, repair or overhaul of each backflow prevention assembly.
4. No backflow prevention assembly or device shall be removed from use, relocated, or other assembly or device substituted without the approval of the City of Sachse. Whenever the existing assembly or device is moved from the present location or cannot be repaired, the backflow assembly or device shall be replaced with a backflow prevention assembly or device that complies with this section, the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14), current edition, or the University of Southern California Manual of Cross-Connection Control current edition, or the current plumbing code of the City of Sachse, whichever is more stringent.
5. Test gauges used for backflow prevention assembly testing shall be calibrated at least annually in accordance with the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14), current edition, or the University of Southern California Manual of Cross-Connection Control, current edition. The original calibration form must be submitted to the City of Sachse within five (5) working days after calibration.
6. A recognized backflow prevention assembly tester must hold a current endorsement from the Texas Commission on Environmental Quality.

E. *Customer Service Inspections.*

1. A customer service inspection shall be completed prior to providing continuous water service to all new construction, on any existing service when the water purveyor has reason to believe that cross-connections or other contaminant hazards exist, or after any material improvement, correction, or addition to the private water distribution facilities.
2. Only individuals with the following credentials shall be recognized as capable of conducting a customer service inspection.
 - a. Plumbing Inspectors and Water Supply Protection Specialists that have been licensed by the Texas State Board of Plumbing Examiners.
 - b. Certified Waterworks Operators and members of other water related professional groups who have completed a training course, passed an examination administered

by the Commission or its designated agent, and hold a current endorsement issued by the Commission.

3. The customer service inspection must certify that:
- a. No direct connection between the public drinking water supply and a potential source of contamination is permitted. Potential sources of contamination shall be isolated from the public water system by a properly installed air gap or an appropriate backflow prevention assembly.
 - b. No cross-connection between the public water system and private water source exists. Where an actual properly installed air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a recognized backflow prevention assembly tester.
 - c. No connection exists which allows water to be returned to the public drinking water supply is permitted.
 - d. No pipe or pipe fitting which contains more than 8% lead may be used for the installation or repair of plumbing at any connection that provides water for human use.
 - e. No solder or flux that contains more than 0.2% lead can be used for the installation or repair of plumbing at any connection that provides water for human use. A minimum of one lead test shall be performed for each inspection.

F. *Enforcement.* If a person is convicted of one or more distinct violations, the Sachse Public Works Department shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a reconnection charge, and any other costs incurred by the City of Sachse in discontinuing service. In addition, suitable assurance must be given to the Sachse Public Works Department or Building Inspection Department that the same action shall not be repeated.

G. *Conflicting Ordinances.* In the event of a conflict between the provisions of the National Electrical Code and any provision of this section, or any other City ordinance, the provision of this section or any other City ordinance shall prevail. In the event of conflict between ordinances, the more stringent provisions shall prevail.

H. *Liability of the City.* Neither the City nor any of its agents, servants or employees shall have any liability to any person by reason of permits issued, decisions made, or inspections made concerning electrical service on private property.”

...”

SECTION 5. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-3 titled “International Mechanical Code” to read as follows:

“Sec. 3-3. International Mechanical Code

- A. *Adoption.* The International Mechanical Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Mechanical Code of the City of Sachse, the same as though such code were copied in full herein.
- B. *Amendments to the International Mechanical Code, 2015 Edition.* The following sections of the International Mechanical Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the Mechanical Code of the City of Sachse, Texas, hereinafter referred to as “this code”.

- (2) Section 102.8; change to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the National Electrical Code (NEC) shall mean the Electrical Code as adopted.

- (3) Section 306.3; change to read as follows:

306.3 Appliances in attics. Attics containing appliances requiring access shall be provided . . . {bulk of paragraph unchanged} . . . side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the Code Official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed... {Remainder of section unchanged}

- (4) 306.5; change to read as follows:

306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . {bulk of section to read the same} . . . on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). ... {bulk of section to read the same}.

- (5) Section 306.5.1; change to read as follows:

306.5.1 Sloped roofs. Where appliances, equipment, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the International Building Code.

- (6) Section 306; add Section 306.6 to read as follows:

306.6 Water heaters above ground or floor. When the mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A maximum 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and the water heater installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

- (7) Section 307.2.3; amend item 2 to read as follows:

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.

(8) Section 403.2.1; add an item 5 to read as follows:

5. Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

(9) Section 501.3; add an exception to read as follows:

Exceptions:

1. {item unchanged}
2. {item unchanged}
3. {item unchanged}
4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

(10) Section 607.5.1; change to read as follows:

607.5.1 Fire Walls. Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 of the International Building Code shall be protected with listed fire dampers installed in accordance with their listing. For hazardous exhaust systems see Section 510.1 through 510.9 IMC.

- C. *Conflicting Ordinances.* In the event of a conflict between the provisions of the International Mechanical Code and any provision of this section, or any other City ordinance, the provisions of this ordinance or any other City ordinance shall prevail. In the event of conflict between ordinances, the most stringent provision shall prevail.
- D. *Liability of the City.* Neither the City nor any authorized agent acting under the terms of this section shall be liable or have any liability to reason of orders issued or work done in compliance with the terms of this section.”

...”

SECTION 6. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-4 titled “National Electrical Code” to read as follows:

“Sec. 3-4. National Electrical Code.

- A. *Adoption.* The National Electrical Code, 2014 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Electrical Code of the City of Sachse, the same as though such code were copied in full herein.
- B. *Amendments to the National Electrical Code, 2014 Edition.* The following sections of the National Electrical Code, 2014 Edition, are hereby amended to read as follows:

- (1) Article 100; add the following to definitions:

Engineering Supervision. Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

- (2) Article 100; add the following to definitions:

Intersystem Bonding Termination. A device that provides a means for connecting intersystem bonding conductors for communication systems and other systems to the grounding electrode system. Bonding conductors for other systems shall not be larger than 6 AWG.

- (3) Article 110.2; change the following to read as follows:

110.2 Approval. The conductors and equipment required or permitted by this Code shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third party inspection agency approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third party inspection agency approved by the AHJ.

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of Approved, Identified, Labeled, and Listed.

Informational Note No. 2: Manufacturer’s self-certification of equipment may not necessarily comply with US product safety standards as certified by a Nationally Recognized Testing Lab.

Informational Note No. 3: NFPA 790 and 791 provide an example of an approved method for qualifying a third party inspection agency.

- (4) Article 210.52(G) (1) Garages; amend to read as follows:

(1) Garages. In each attached garage and in each detached garage with electric power. At least one receptacle outlet shall be installed for each car space.

- (5) Article 230.71(A); add the following exception:

Exception: Multi-occupant buildings. Individual service disconnecting means is limited to six for each occupant. The number of individual disconnects at one location may exceed six.

- (6) Article 240.91; delete the Article.

- (7) Article 300.11; add the following exception:

Exception: Ceiling grid support wires may be used for structural supports when the associated wiring is located in that area, not more than two raceways or cables supported per wire, with a maximum nominal metric designation 16 (trade size 1/2").

- (8) Article 310.15 (B) (7); change to read as follows:

(7) This Article shall not be used in conjunction with 220.82.

- (9) Article 500.8 (A) (3); change to read as follows:

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

1. {text unchanged}
2. {text unchanged}
3. Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an engineering judgment signed and sealed by a qualified Licensed Professional Engineer in the State of Texas.

{remainder of text unchanged}

- (10) Article 505.7(A) changed to read as follows:

505.7 Special Precaution. Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are

identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

(A) Implementation of Zone Classification System. Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by a qualified persons Registered Licensed Professional Engineer in the State of Texas.

- (11) Article 517.30 Essential Electrical Systems for Hospitals; create a new (H) and add the following language:

(G) Coordination. Overcurrent protective devices serving the equipment branch of the essential electrical system shall be coordinated for the period of time that a fault's duration extends beyond 0.1 second.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

(H) Selective Coordination. Overcurrent protective devices serving the life safety, and critical branches of the essential electrical system shall be selectively coordinated with all supply-side overcurrent protective devices.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

- (12) Article 680.25(A) changed to read as follows:

680.25 Feeders. These provisions shall apply to any feeder on the supply side of panelboards supplying branch circuits for pool equipment covered in Part II of this article and on the load side of the service equipment or the source of a separately derived system.

(A) Wiring Methods.

(1) Feeders. Feeders shall be installed in rigid metal conduit, intermediate metal conduit. The following wiring methods shall be permitted if not subject to physical damage:

- (1) Liquidtight flexible nonmetallic conduit
- (2) Rigid polyvinyl chloride conduit
- (3) Reinforced thermosetting resin conduit
- (4) Electrical metallic tubing where installed on or in a building
- (5) Electrical nonmetallic tubing where installed within a building
- (6) Type MC Cable where installed within a building and if not subject to corrosive environment
- (7) Nonmetallic-sheathed cable
- (8) Type SE cable

Exception: {delete}

C. *Conflicting Ordinances.* In the event of a conflict between the provisions of the National Electrical Code and any provision of this section, or any other City ordinance, the provision of this section or any other City ordinance shall prevail. In the event of conflict between ordinances, the more stringent provisions shall prevail.

D. *Liability of the City.* Neither the City nor any of its agents, servants or employees shall have any liability to any person by reason of permits issued, decisions made, or inspections made concerning electrical service on private property.

E. *Licensed Required.* A person commits an offense if he or she install installs or repairs electrical components in a building (including but not limited to wiring, circuit breakers, and related components), unless such person holds a current license, as issued by the State of Texas Department of Licensing and Regulation, which is recognized by the City of Sachse as follows:

1. A master electrical license is required to permit electrical work done in the City.
2. A journeyman license is required for all commercial work. A journeyman may not be issued an electrical permit in his own name; such electrical permit can only be issued to a master electrician.
3. A residential specialist or wireman license is limited to electrical installations in single family and multifamily dwellings not exceeding four stories, provided that such work is inspected and approved by a journeyman electrician prior to inspection by the building official. A residential specialist or wireman may not be issued an electrical permit in his own name; such electrical permit can only be issued to a master electrician.
4. Exception: The owner of a single-family home may install or repair wiring, in his or her home, of not more than three 20-amp circuits (total 60 amps), providing such person first obtains an electrical permit from the City and the work is inspected by the building official.

F. *Registration required.* A master electrician, journeyman electrician, or residential specialist or wireman electrician commits an offense if he or she installs or repairs electrical

components in a building (including but not limited to wiring, circuit breakers, and related components), unless such person is registered as such with the City. An applicant for registration shall prepare and file an application for such, on a form to be provided by the building official. Upon completion, in proper form, of a registration form, and payment of the required fee, the building official shall issue a registration, which shall be valid for one year from the date of issuance.

G. *Registration fees.* The building official shall charge a fee which shall be established by resolution of the City Council.

H. *Penalty for violations.* A person commits an offense if he or she violates any provisions of this section, and upon conviction, may be punished by a fine as provided for in Section 1-7 of this Code of Ordinances.

...”

SECTION 7. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-22 titled “International Fuel Gas Code” to read as follows:

“Sec. 3-22. International Fuel Gas Code

A. *Adoption.* The International Fuel Gas Code, 2015 edition, a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Fuel Gas Code of the City of Sachse, the same as though such code were copied in full herein.

B. *Amendments to the International Fuel Gas Code, 2015 Edition.* The following sections of the International Fuel Gas Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the Fuel Gas Code of the City of Sachse, Texas, hereinafter referred to as “this code”.

- (2) Section 102.2; add an exception to read as follows:

Exception: Existing dwelling units shall comply with Section 621.2.

- (3) Section 102.8; change to read as follows:

[A] 102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced

codes and standards, each reference to said code and standard shall be considered to reference the amendments as well.

- (4) Section 306.3; change to read as follows:

[M] 306.3 Appliances in attics. Attics containing appliances shall be provided . . . {bulk of paragraph unchanged} . . . side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than ... {bulk of section to read the same}.

- (5) Section 306.5; change to read as follows:

[M] 306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 8 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . {bulk of section to read the same}. . . on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). ... {bulk of section to read the same}.

- (6) Section 306.5.1; change to read as follows:

[M] 306.5.1 Sloped roofs. Where appliances, equipment, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width

with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the International Building Code.

- (7) Section 306; add Section 306.7 with exception and subsection 306.7.1 to read as follows:

306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger when approved by the code official) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

306.7.1. Illumination and convenience outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1.

- (8) Section 401.5; add a second paragraph to read as follows:

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

- (9) Section 402.3; add an exception to read as follows:

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

- (10) Section 404.12; change to read as follows:

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches (458 mm) top of pipe below grade.

- (11) Section 406.1; change to read as follows:

406.1 General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

- (12) Section 406.4; change to read as follows:

406.4 Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

- (13) Section 406.4.1; change to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

- (14) Section 406.4.2; change to read as follows:

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than thirty (30) minutes.

{Delete remainder of section}

- (15) Section 409.1; add Section 409.1.4 to read as follows:

409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

- (16) Section 410.1; add a second paragraph and exception to read as follows:

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

- (17) Section 614.8; add a sentence to read as follows:

[M] 614.8 Domestic clothes dryer exhaust ducts. Exhaust ducts for domestic clothes dryers shall conform to the requirements of Sections 614.8.1 through 614.8.6. The size of duct shall not be reduced along its developed length nor at the point of termination.

- (18) Section 621.2; add exception as follows:

621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Code Official unless an unsafe condition is determined to exist as described in Section 108.7.

...”

SECTION 8. That Chapter 3 titled “Building Regulations” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 3-23 titled “International Property Maintenance Code” to read as follows:

“Sec. 3-23. International Property Maintenance Code.

A. *Adoption.* The International Property Maintenance Code, 2015 edition with amendments, including Appendix A “Boarding Standard,” a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Property Maintenance Code of the City of Sachse, the same as though such code were copied in full herein.

B. *Amendments to the International Property Maintenance Code, 2015 Edition.* The following sections of the International Property Maintenance Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section 101.1; change to read as follows:

[A] 101.1 Title. These regulations shall be known as the International Property Maintenance Code of the City of Sachse, Texas, hereinafter referred to as “this code”.

- (2) Section 103.5; change to read as follows:

[A] 103.5 Fees. The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be as indicated in the City of Sachse’s Master Fee Schedule.

- (3) Section 112.4; change to read as follows:

[A] 112.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be criminally liable for such offense in a fine amount not to exceed the sum of Two Thousand Dollars (\$2,000).

- (4) Section 302.4; delete the section in its entirety.

- (5) Section 304.14; change to read as follows:

304.14 Insect screens. Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: {text unchanged}

- (6) Section 602.3; change to read as follows:

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, shall supply heat to the occupants thereof to maintain a temperature of not less than 68°.

Exception:

1. {text unchanged}
2. {text unchanged}

- (7) Section 602.4; change to read as follows:

602.4 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat to maintain a temperature of not less than 68° during the period the spaces are occupied.

Exception:

1. {text unchanged}
2. {text unchanged}

...”

SECTION 9. That Chapter 5 titled “Fire Protection” of the City of Sachse Code of Ordinances be, and the same is hereby amended, by amending Section 5-1 titled “International Fire Code” to read as follows:

“Chapter 5

FIRE PROTECTION

Sec. 5-1. International Fire Code

A. *Adoption.* The International Fire Code, 2015 edition with amendments, including Appendix B “Fire-Flow Requirements for Buildings,” Appendix C “Fire Hydrant Locations and Distribution,” Appendix D “Fire Apparatus Access Roads” and Appendix I “Fire Protection Systems - Noncompliant Conditions,” a copy of which is on file in the office of the City Secretary, is hereby adopted and designated as the Fire Code of the City of Sachse, the same as though such code were copied in full herein.

B. *Amendments to the International Fire Code, 2015 Edition.* The following sections of the International Building Code, 2015 Edition, are hereby amended to read as follows:

- (1) Section 101.1; change to read as follows:

These regulations shall be known as the Fire Code of the City of Sachse, Texas, hereinafter referred to as “this code.”

- (2) Section 102.1; change #3 to read as follows:

3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.

- (3) Section 105.3.3; change to read as follows:

105.3.3 Occupancy Prohibited before Approval. The building or structure shall not be occupied prior to the fire code official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.

- (4) Section 105.7; add Section 105.7.19 to read as follows:

105.7.19 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

- (5) Section 109.4; change to read as follows:

109.4 Violations penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than Two Thousand Dollars (\$2,000.00). Each day that a violation continues after due noticed has been served shall be deemed a separate offense.

- (6) Section 111.4; change to read as follows:

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine not to exceed Two Thousand Dollars (\$2,000.00).

- (7) Section 202; add new definition of ADDRESSABLE FIRE DETECTION SYSTEM as follows:

ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of providing identification of each individual alarm-initiating device. The identification shall be in plain English and as descriptive as possible to specifically identify the location of the device in alarm. The system shall have the capability of alarm verification.

- (8) Section 202; amend definition of AMBULATORY HEALTH CARE FACILITY as follows:

[B] AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation. This group may include but not be limited to the following:

- Dialysis centers
- Procedures involving sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

- (9) Section 202; add new definition of ANALOG ADDRESSABLE FIRE DETECTION SYSTEM as follows:

ANALOG ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of calculating a change in value by directly measurable quantities (voltage, resistance, etc.) at the sensing point. The physical analog may be conducted at the sensing point or at the main control panel. The system shall be capable of compensating for long-term changes in sensor response while maintaining a constant sensitivity. The compensation shall have a preset point at which a detector maintenance signal shall be transmitted to the control panel. The sensor shall remain capable of detecting and transmitting an alarm while in maintenance alert.

- (10) Section 202; change definition of ATRIUM as follows:

[BG] ATRIUM. An opening connecting three or more stories... {Remaining text unchanged}

- (11) Section 202; add new definition of DEFEND IN PLACE as follows:

[BG] DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

- (12) Section 202; amend definition of FIRE WATCH as follows:

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the fire code official, for the

purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

- (13) Section 202; amend definition of FIREWORKS as follows:

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein. ... {Remainder of text unchanged}...

- (14) Section 202; add a second paragraph to HIGH-PILED COMBUSTIBLE STORAGE to read as follows:

HIGH-PILED COMBUSTIBLE STORAGE. Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

- (15) Section 202; change definition of HIGH-RISE BUILDING to read as follows:

HIGH-RISE BUILDING. A building having any floors used for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

- (16) Section 202; amend definition of REPAIR GARAGE to read as follows:

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement, and other such minor repairs.

- (17) 202; add new definition of SELF-SERVICE STORAGE FACILITY as follows:

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

- (18) Section 202; add new definition of STANDBY PERSONNEL as follows:

STANDBY PERSONNEL. Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

- (19) Section 202; add new definition of UPGRADED OR REPLACED FIRE ALARM SYSTEM as follows:

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

- (20) Section 307.1.1; change to read as follows:

307.1.1 Prohibited Open Burning. Open burning that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exceptions: {No changes}

- (21) Section 307.2; change to read as follows:

307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or open burning. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality guidelines and/or restrictions.
2. State, County, or Local temporary or permanent bans on open burning.
3. Local written policies as established by the fire code official.

- (22) Section 307.2; add Section 307.2.2 to read as follows:

307.2.2 Exception to the prohibition on Open Burning. Open burning is permitted by the City of Sachse for property owners with land parcels 2 acres and greater for the on-site burning of residential yard and garden debris and waste plant growth only. Trees, brush, grass, leaves, branch trimmings, or other plant growth may be burned on the property of which the material grew. The plant growth must be burned by the property owner or any person authorized by the owner. Permit holder shall comply with the general requirements for burning listed below and the other sections of this code.

1. Commence or continue burning only when the wind direction and other weather conditions are such that the smoke and other pollutants will not present a hazard to any public road, landing strip, or navigable water (e.g., lake, river, stream, or bay) or have an adverse effect on any off-site structure containing “sensitive receptors” (e.g., a residence, business, farm building, or greenhouse; see box, page 6).
2. Post someone to flag traffic if at any time the burning causes or may tend to cause smoke to blow onto or across a road or highway.
3. Keep fires downwind of, or at least 300 feet away from, any neighboring structure that contains sensitive receptors. This requirement may be waived only with the prior written approval of whoever owns or rents the adjacent property and either resides or conducts business there.
4. Begin burning no earlier than one hour after sunrise, end it the same day and no later than one hour before sunset, and make sure that a responsible party is present while the burn is active and the fire is progressing. At the end of the burn, extinguish isolated residual fires or smoldering objects if the smoke they produce can be a nuisance or a traffic hazard.
5. Don’t start burning unless weather conditions are such that the smoke will dissipate (winds of at least 6 miles per hour; no temperature inversions) while still allowing the fire to be contained and controlled (winds no faster than 23 miles per hour).
6. Don’t burn any electrical insulation, treated lumber, plastics, non-wooden construction or demolition materials, heavy oils, asphaltic materials, potentially explosive materials, chemical wastes, or items that contain natural or synthetic rubber.
7. The permit will be valid for a period of one year from issuance date.
8. An on-site inspection must be conducted prior to igniting each the fire.
9. Permit holder must notify the fire department dispatch center prior to igniting each fire.
10. The fire department will charge an administrative permit review fee per year.
11. The fire department on-site inspection fee will be charged for normal hours and for after hour & weekend inspections for each fire. This exception does not apply to land clearing operations.
12. Neither the permit nor this section shall alleviate the permit holder from complying with Texas Commissions on Environmental Quality and the Texas Clean Air Act rules and requirements.

- (23) Section 307.3; change to read as follows:

307.3 Extinguishment Authority. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

- (24) Section 307.4; change to read as follows:

307.4 Location. The location for open burning shall not be less than 300 feet (91 440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet (91 440 mm) of any structure.

Exceptions: {No changes}

- (25) Section 307.4.3, Exceptions: add exception #2 to read as follows:

Exceptions:

2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

- (26) Section 307.4.4; add Section 307.4.4 to read as follows:

307.4.4 Permanent Outdoor Firepit. Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

- (27) Section 307.4.5; add Section 307.4.5 to read as follows:

307.4.5 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

- (28) Section 307.5; change to read as follows:

307.5 Attendance. Open burning, trench burns, bonfires, recreational fires, and use of portable outdoor fireplaces shall be constantly attended until the ...
{remainder of section unchanged}

- (29) Section 308.1.4; change to read as follows:

308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be located or used on

combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs (5 containers).
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs (2 containers).
3. {No change}.

- (30) Section 308.1.6.2, Exception #3; change to read as follows:

Exceptions:

3. Torches or flame-producing devices in accordance with Section 308.1.3.

- (31) Section 308.1.6.3; change to read as follows:

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an untethered unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.

- (32) Section 311.5; change to read as follows:

311.5 Placards. The fire code official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

- (33) Section 401.3; add Section 401.3.4 to read as follows:

401.3.4 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

- (34) Section 403.5; change to read as follows:

403.5 Group E Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E

occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

- (35) Section 404.2.2; add number 4.10 to read as follows:

404.2.2 Fire Safety Plans.

4.10. Fire extinguishing system controls.

- (36) Section 405.4; change to read as follows:

405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

- (37) Section 501.4; change to read as follows:

501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

- (38) Section 503.1.1; add sentence to read as follows:

503.1.1 Buildings and facilities. *Approved* fire apparatus ...{text unchanged}... building or facility. Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a 10 feet (3048 mm) wide unobstructed pathway around the external walls of the structure.

Exceptions: {No changes}

- (39) Section 503.2.1; change to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).

Exception: Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

- (40) Section 503.2.2; change to read as follows:

503.2.2 Authority. The fire code official shall have the authority to require an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations.

- (41) Section 503.2.3; change to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 pounds for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

- (42) Section 503.3; change to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping. Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6”) in width to show the boundaries of the lane. The words “NO PARKING FIRE LANE” or “FIRE LANE NO PARKING” shall appear in four inch (4”) white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs. Signs shall read “NO PARKING FIRE LANE” or “FIRE LANE NO PARKING” and shall be 12” wide and 18” high. Signs shall be painted on a white background with letters and borders in red, using not less than 2” lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6’6”) above finished grade. Signs shall be spaced not more than fifty feet (50’) apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

- (43) Section 503.4; change to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

- (44) Section 505.1; change to read as follows:

505.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property.

Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

- (45) Section 507.4; change to read as follows:

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 “Recommended Practice for Fire Flow Testing and Marking of Hydrants” and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official, as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the fire code official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

- (46) Section 507.5.4; change to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

- (47) Section 509.1.2; add new Section 509.1.2 to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of two (2) inches when located inside a building and four (4) inches when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

- (48) Section 603.3.2.1, Exception; change exception to read as follows:

Exception: The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) in accordance with all requirements of Chapter 57.

{Delete remainder of Exception}

- (49) Section 603.3.2.2; change to read as follows:

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

- (50) Section 604.1.2; add sentence to read as follows:

604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the International Building Code, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

- (51) Section 604.1.9; add new Section 604.1.9 to read as follows:

604.1.9 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

- (52) Section 604.2; change to read as follows:

604.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.24 or elsewhere identified in this code or any other referenced code.

- (53) Section 604.2.4; change to read as follows:

604.2.4 Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the

following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

Covered and Open Malls, Section 907.2.20 and 914.2.3
Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.
Special Amusement Buildings, Section 907.2.12.3
High-rise Buildings, Section 907.2.13
Atriums, Section 907.2.14
Deep Underground Buildings, Section 907.2.19

- (54) Section 604.2.12; change to read as follows:

604.2.12 Means of Egress Illumination. Emergency power shall be provided for means of egress illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

- (55) Section 604.2.13; change to read as follows:

604.2.13 Membrane Structures. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the International Building Code. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

- (56) Section 604.2.15; change to read as follows:

604.2.15 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11:

Covered Mall Building, International Building Code, Section 402.7
Atriums, International Building Code, Section 404.7
Underground Buildings, International Building Code, Section 405.8
Group I-3, International Building Code, Section 408.4.2
Stages, International Building Code, Section 410.3.7.2
Special Amusement Buildings (as applicable to Group A's), International Building Code, Section 411.1
Smoke Protected Seating, Section 1029.6.2.1

- (57) Sections 604.2.17 to 604.2.24; add new sections to read as follows:

604.2.17 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

604.2.18 Airport Traffic Control Towers. A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

604.2.19 Smokeproof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the International Building Code, Section 909.20.6.2.

604.2.20 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the International Building Code, Section 909.21.5.

604.2.21 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the International Building Code, Section 717.5.3, exception 2.3.

604.2.22 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the International Mechanical Code, Section 504.10, Item 7.

604.2.23 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the International Building Code, Section 421.8.

604.2.24 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for means of egress illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

(58) Section 604.8; add new section to read as follows:

604.8 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

(59) Section 609.2; change to read as follows:

[M] 609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to

cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

Exceptions:

1. Tents, as provided for in Chapter 31.
2. {No change to existing Exception.}

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

- (60) Section 704.1; change to read as follows:

704.1 Enclosure. Interior vertical shafts, including but not limited to stairways, elevator hoist ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the International Building Code.

- (61) Section 807.3; change to read as follows:

807.3 Combustible Decorative Materials. In other than Group I-3 In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

- (62) Sections 807.5.2.2 and 807.5.2.3; change to read as follows:

807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.

Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

- (63) Sections 807.5.5.2 and 807.5.5.3; change to read as follows:

807.5.5.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

- (64) Section 901.6.1; add Section 901.6.1.1 to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be back flushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.

(65) Section 901.6.3; add Section 901.6.3 to read as follows:

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(66) Section 901.7; change to read as follows:

901.7 Systems Out of Service. Where a required fire protection system is out of service or in the event of an excessive number of activations, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch

shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. ...{remaining text unchanged}

- (67) Section 901.8.2; change to read as follows:

901.8.2 Removal of Occupant-use Hose Lines. The *fire code official* is authorized to permit the removal of occupant-use hose lines and hose valves where all of the following conditions exist:

1. The hose line(s) would not be utilized by trained personnel or the fire department.
2. If the occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be compatible with local fire department fittings.

- (68) Section 901.11; add Section 901.11 to read as follows:

901.10 Discontinuation or change of service. Notice shall be made to the fire code official whenever contracted alarm services for monitoring of any fire alarm system is terminated for any reason, or a change in alarm monitoring provider occurs. Notice shall be made in writing to the fire code official by the building owner and alarm service provider prior to the service being terminated.

- (69) Section 903.1.1; change to read as follows:

903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard, or as approved by the fire code official.

- (70) Section 903.2; add paragraph to read as follows:

Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

- (71) Section 903.2; delete the exception.

- (72) Section 903.2.9; add Section 903.2.9.3 to read as follows:

903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.

- (73) Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1510 of the International Building Code, located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception: Open parking structures in compliance with Section 406.5 of the International Building Code, having no other occupancies above the subject garage.

903.2.11.7 High-Piled combustible storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings 6,000 sq. ft. or Greater. An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

Exception: Open parking garages in compliance with Section 406.5 of the International Building Code.

- (74) Section 903.3.1.1.1; change to read as follows:

903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such... {text unchanged}...because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. {Delete}

5. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
6. {Delete}

(75) Section 903.3.1.2.3; add Section 903.3.1.2.3 to read as follows:

[F] Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.

(76) Section 903.3.1.3; change to read as follows:

903.3.1.3 NFPA 13D Sprinkler Systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

(77) Section 903.3.1.4; add Section 903.3.1.4 to read as follows:

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

(78) Section 903.3.5; add a second paragraph to read as follows:

[F] Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

- (79) Section 903.4; add a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

- (80) Section 903.4.2; add second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

- (81) Section 905.2; change to read as follows:

905.2 Installation Standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

- (82) Section 905.3; add Section 905.3.9 and exception to read as follows:

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

- (83) Section 905.4, change Item 1, 3, 5, and add Item 7 to read as follows:

1. In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. {No change.}
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway hose connection by a {No change to rest.}

4. {No change.}
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

- (84) Section 905.9; add a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

- (85) Section 907.1; add Section 907.1.4 to read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

- (86) Section 907.2.1; change to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3. 10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {No change.}

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

- (87) Section 907.2.3; change to read as follows:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}

1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

{No change to remainder of exceptions.}

(88) Section 907.2.13, change Exception 3 to read as follows:

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code, when used for open air seating; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

(89) Section 907.4.2; add Section 907.4.2.7 to read as follows:

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

(90) Section 907.6.1; add Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

(91) Section 907.6.3; delete all four Exceptions.

(92) Section 907.6.6; add sentence at the end of paragraph to read as follows:

[F] See 907.6.3 for the required information transmitted to the supervising station.

(93) Section 909.22; add Section 909.22 to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

[F] 909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

(94) Section 910.2; change Exception 2. and 3. to read as follows:

[F] 2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m \cdot S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

(95) Section 910.2; add subsection 910.2.3 with exceptions to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

- (96) Section 910.3; add subsection 910.3.4 to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

[F] 910.3.4.1 Sprinklered Buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

- (97) Section 910.4.3.1; change to read as follows:

910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be manual or automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

- (98) Section 910.4.4; change to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

- (99) Section 912.2; add sentence at the end of paragraph to read as follows:

912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. **The location of fire department connections shall be freestanding and a minimum of 1x's the building height away from the building.**

Exception: Changes made by the Authority having Jurisdiction.

- (100) Section 912.2; add Sections 912.2.3 and 912.2.4 to read as follows:

912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

912.2.4 Hydrant distance from protected buildings. See Appendix C of this code.

- (101) Section 913.1; add second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by Section 506.1.

- (102) Section 914.3.1.2; change to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 420 120 feet (128 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

- (103) Section 1006.2.2.6; add a new Section 1006.2.2.6 as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

(104) Section 1009.1; add the following exception 4:

Exceptions:

{previous exceptions unchanged}

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

(105) Section 1010.1.9.4 Bolt Locks; change Exceptions 3 and 4 to read as follows:

Exceptions:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. {Remainder unchanged}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy... {Remainder unchanged}...

(106) Section 1015.8 Window Openings; change number 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 55 (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

(107) Section 1020.1 Construction; add Exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

(108) Section 1029.1.1.1; delete this section.

(109) Section 1031.2; change to read as follows:

1031.2 Reliability. Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

(110) Section 1103.3; add sentence to end of paragraph as follows:

Provide emergency signage as required by Section 607.3.

- (111) Section 1103.5; add Section 1103.5.1 to read as follows:

1103.5.1 Spray Booths and Rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

- (112) Section 1103.7; add Section 1103.7.8 and 1103.7.8.1 to read as follows:

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

- (113) Section 2304.1; change to read as follows:

2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or,
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2304.3.

At any time the qualified attendant of item #1 or #2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

- (114) Section 2401.2; delete this section.

- (115) Table 3206.2, footnote j; change text to read as follows:

- j. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 ($m \cdot s$) $^{1/2}$ or less that are listed to control a fire in the

stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

- (116) Section 3310.1; add sentence to end of paragraph to read as follows:

When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time at which construction has progressed beyond completion of the foundation of any structure.

- (117) Section 5601.1.3; change to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, storage and handling of fireworks as allowed in Section 5604 and 5608.
2. {Delete Exception}
3. The use of fireworks for approved displays as allowed in Section 5608.
4. {Delete Exception}

- (118) Section 5703.6; add a sentence to read as follows:

5703.6 Piping systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

- (119) Section 5704.2.9.5; change Section 5704.2.9.5 and add Section 5704.2.9.5.3 to read as follows:

5704.2.9.5 Above-ground Tanks Inside of Buildings. Above-ground tanks inside of buildings shall comply with Section 5704.2.9.5.1 and 5704.2.9.5.2 through 5704.2.9.5.3.

5704.2.9.5.1 {No change.}

5704.2.9.5.2 {No change.}

5704.2.9.5.3 Combustible Liquid Storage Tanks Inside of Buildings. The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 5704.2.9.7 when all of the following conditions are met:

1. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;

2. The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;
3. The tanks shall be located in a room protected by an automatic sprinkler system complying with Section 903.3.1.1; and
4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an approved closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

(120) Section 5704.2.9.6.1; change to read as follows:

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited in accordance with the City of Sachse Code of Ordinances.

(121) Section 5704.2.11.4; add a sentence to read as follows:

5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 3404.2.11.5.1 through 3404.2.11.5.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

(122) Section 5704.2.11.4.2; change to read as follows:

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

(123) Section 5704.2.11.4; add Section 5704.2.11.4.3 to read as follows:

5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

(124) Section 5706.2.4.4; change to read as follows:

Section 5706.2.4.4 Locations where above-ground tanks are prohibited.
Storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited in accordance with the City of Sachse Code of Ordinances.

(125) Section 5706.5.4; delete Section 5706.5.4.5 and replace with the following:

5706.5.4.5 Commercial, industrial, governmental or manufacturing.
Dispensing of Class II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with Sections 5706.5.4.5.1 through 5706.5.4.5.3.

5706.5.4.5.1 Site requirements.

1. Dispensing may occur at sites that have been permitted to conduct mobile fueling.
2. A detailed site plan shall be submitted with each application for a permit. The site plan must indicate:
 - a. All buildings, structures, and appurtenances on site and their use or function;
 - b. All uses adjacent to the property lines of the site;
 - c. The locations of all storm drain openings, adjacent waterways or wetlands;
 - d. Information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and,
 - e. The scale of the site plan.
3. The Code Official is authorized to impose limits upon: the times and/or days during which mobile fueling operations are allowed to take place and specific locations on a site where fueling is permitted.
4. Mobile fueling operations shall be conducted in areas not generally accessible to the public.
5. Mobile fueling shall not take place within 15 feet (4.572 m) of buildings, property lines, or combustible storage.

5706.5.4.5.2 Refueling Operator Requirements.

1. The owner of a mobile fueling operations shall provide to the jurisdiction a written response plan which demonstrates readiness to respond to a fuel

spill, carry out appropriate mitigation measures, and to indicate its process to properly dispose of contaminated materials when circumstances require.

2. The tank vehicle shall comply with the requirements of NFPA 385 and Local, State and Federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.
3. Signs prohibiting smoking or open flames within 25 feet (7.62 m) of the tank vehicle or the point of fueling shall be prominently posted on 3 sides of the vehicle including the back and both sides.
4. A fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.
5. The dispensing nozzles and hoses shall be of an approved and listed type.
6. The dispensing hose shall not be extended from the reel more than 100 feet (30.48m) in length.
7. Absorbent materials, non-water absorbent pads, a 10 foot (3.048 m) long containment boom, an approved container with lid, and a non-metallic shovel shall be provided to mitigate a minimum 5-gallon fuel spill.
8. Tanker vehicles shall be equipped with a fuel limit switch such as a count-back switch, limiting the amount of a single fueling operation to a maximum of 500 gallons (1893 L) between resetting of the limit switch.

Exception: Tankers utilizing remote emergency shut-off device capability where the operator constantly carries the shut-off device which, when activated, immediately causes flow of fuel from the tanker to cease.

9. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak, or spill. Training records shall be maintained by the dispensing company and shall be made available to the fire code official upon request.
10. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.

5706.5.4.5.3 Operational Requirements.

1. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

2. Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.
3. The engines of vehicles being fueled shall be shut off during dispensing operations.
4. Night time fueling operations shall only take place in adequately lighted areas.
5. The tank vehicle shall be positioned with respect to vehicles being fueled so as to preclude traffic from driving over the delivery hose and between the tank vehicle and the motor vehicle being fueled.
6. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.
7. Motor vehicle fuel tanks shall not be topped off.
8. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle.
9. The Code Official and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

(126) Section 5806.2; change to read as follows:

Section 5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited in accordance with the City of Sachse Code of Ordinances.

(127) Section 6103.2.1; add Section 6103.2.1.8 to read as follows:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

(128) Section 6104.2, change to read as follows:

Section 6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any

one installation shall not exceed a water capacity of 2,000 gallons (7570L) in accordance with the City of Sachse Code of Ordinances.

- (129) Section 6104.2, Exception; add exception to read as follows:

Exceptions:

1. {existing text unchanged}
2. Except as permitted in 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

- (130) Section 6104.3; add Section 6104.3.2 to read as follows:

6104.3.2 Spas, Pool Heaters and other listed devices. Where natural gas service is not available, an LP-Gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

Exception: Lots where LP can be off loaded wholly on the property where the tank is located; may install 500 gallon above ground or 1,000 gallon underground approved containers.

- (131) Section 6107.4; change to read as follows:

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with NFPA 58 Section 312.

- (132) Section 6109.13; delete exception and change to read as follows:

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

Exception: {delete exception}

- (133) Table B105.2; change footnote a. to read as follows:

- a. The reduced fire-flow shall be not less than 1,000 1,500 gallons per minute.

- (134) Appendix D change to read as follows:

D103.1 Access Road with a fire hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet, exclusive of shoulders (see Figure D103.1 (2015)).

D103.3 Turning radius. The minimum turning radius along all fire lanes shall be 30 feet.

...”

SECTION 10. That all provisions of the Ordinances of the City of Sachse, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 11. An offense committed before the effective date of this ordinance is governed by prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 12. That should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance, be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

SECTION 13. That any person violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Sachse as heretofore amended and, upon conviction, shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000.00).

SECTION 14. This ordinance shall take effect on **January 1, 2018**.

PASSED AND APPROVED by the City Council of the City of Sachse, Texas this the _____ day of _____, 2017.

APPROVED:

Mike J. Felix
Mayor

DULY ENROLLED:

Michelle Lewis Sirianni
City Secretary

APPROVED AS TO FORM:

Peter G. Smith
City Attorney
(11-16-2017/93365)

2015 International Building Code Overview of Changes

The scope of the International Building Code (IBC) applies to the construction, alteration, movement, enlargement, replacement, repair, use and occupancy, location, maintenance, and removal or demolition of buildings and structures. The IBC establishes the minimum requirements to safeguard the public health, safety and general welfare through structural strength, proper exits, and sanitation. The IBC is also designed to provide safety for firefighters and emergency responders from fire and other hazards associated with the buildings environment.

The 2015 IBC continues to establish minimum regulations for building systems using prescriptive and performance-related provisions. The code changes in this cycle result in technical consistency with the other *International Codes*.

New in the 2015 IBC Edition

111.1, Use and Occupancy. (A change in a building's use, or a portion of a building's use, with no change in its occupancy classification now requires that a new certification of occupancy be issued by the building official.)

406.3.2, Clear Height. (In private garages and carports, the clear height in vehicle and pedestrian traffic areas shall be not less than 7 feet. Van-Accessible parking shall comply with Section 1106.5. General height was 7 feet 6 inches default.)

407.2.6, Nursing Home Cooking Facilities. (In Group I-2, Condition 1, occupancies, shared living spaces, group meeting areas, multipurpose spaces, and a cooking facility with a domestic cooking appliance are now permitted to be open to corridors when code criteria are met.)

407.5, Smoke Barriers. (Maximum allowable smoke compartment size for Group I-2, Condition 2 hospitals and similar occupancies has been increased from 22,500 sq ft to now 40,000 sq ft.)

505.2.3, Exception # 2, Openness. (Mezzanine having two or more exits or access to exits is not required to be open to the room in which the mezzanine is located.)

507.1, General. (The allowance of a single-story basement in unlimited area buildings is permitted.)

507.9, Unlimited Mixed Occupancy Buildings with Group H-5. (Group H-5 buildings are now permitted to be unlimited in area under the special provisions of Section 507. Example of H-5: High-Hazard Semiconductor fabrication facilities and other comparable research/development facilities.)

Table 509, Incidental Uses. (Incidental Uses spaces in Group I-2 occupancies and ambulatory care facilities have been added to the table or have additional fire protection requirements. Example: a Laboratory space in a hospital now requires both 1-hour separation wall and a fire sprinkler system, instead of one or the other.)

510.2, Horizontal Building Separation Allowance. (In the special provisions for podium construction buildings, there is no longer a limit of one story above grade plane allowed below the 3-hour horizontal podium separation. Now more than one story can be located below the 3-hour horizontal podium.)

705.8.5, Vertical Separation of Openings. (A fire-rated exterior wall with openings less than 3 feet vertical separation or 30 inches horizontal flame barriers shall be rated for exposure to fire from both sides. This is to address the concern of a fire spreading out of the building through the opening, then spreading through openings in the above levels.)

903.2.1.6, Assembly Occupancies on Roofs. (A fire sprinkler system is now required to be installed in buildings when the roof is used for a Group A-2 occupancy exceeding 100 occupants and other Group A occupancies exceeding 300 occupants.)

903.2.1.7, Multiple Fire Areas. (Where small Group A areas share a common means of egress, the occupant load of the spaces must be added together to determine if a sprinkler system is required.)

903.2.8, Group R. (Additional fire sprinkler protection is required for attic spaces of Group R-4 depending on the capabilities of the occupants or use of the attic space. Example: Assisted Living Facilities with occupants receiving care who require limited verbal or physical assistance while responding to an emergency situation.)

903.3.1.1.2, Bathrooms. (Group R occupancies, sprinklers shall not be required in bathrooms that do not exceed 55 square feet in area and are located within individual dwelling units with non-combustible walls and ceiling.)

904.13, Domestic Cooking Systems in Group I-2 Condition 1. (Domestic cooking equipment in nursing homes, assisted living facilities, and similar buildings requirements for domestic cooking hood with automatic fire-extinguishing system.)

907.2.3, Group E. (Manual fire alarm is required where the occupant load exceeds 50, and an emergency voice/alarm communication system must only be provided when the occupant load exceeds 100.)

907.2.11.3, Installation Near Cooking Appliances. (Ionization smoke alarms not less than 20 feet from cooking appliance; not less than 10 feet with an alarm-silencing switch; and photoelectric smoke alarm shall not be installed less than 6 feet from cooking appliance.)

907.2.11.4, Installation Near Bathrooms. (Smoke alarms shall be installed not less than 3 feet from a bathroom door or opening.)

915, Carbon Monoxide Detection. (Required in dwelling units, sleeping units, and in classrooms that the building contains or served by a fuel-burning appliance, fuel-burning fireplace, fuel-burning forced air furnace, or attached private garage.)

1004.1.1, Cumulative Occupant Loads. (When occupants egress travel path include intervening spaces or areas the combined cumulative occupant loads of these spaces shall be used to determine the egress pathway capacity design.)

Table 1004.1.2, Maximum Floor Area Allowances per Occupant. (The mercantile use occupant load factor has been revised to a rated of 60 gross sq ft per occupant regardless of the floor level of the mercantile use. Former rate on grade floor was 30 gross sq ft per occupant.)

1007.1, Exit and Exit Access Doorway Configuration. (Exit separation measurement point, required exit separation configuration from other exits, and remoteness of exit access ways have now been provided with specific information to ensure adequate egress path and required exit access separation distance.)

Significant 2012 Model Code Changes:

IBC (International Building Code – New Commercial Structures)

- Definitions and Occupancy classifications with gray areas have been clarified for better understanding
- Fire Protection, Means of Egress, Accessibility, Building Structural and Building Services have had additions, clarifications and modification to code sections for Fire, Life and Safety requirements.
- Many amendments coinciding with changes to the Fire Code to improve survivability

IMC (International Mechanical Code – Commercial HVAC, etc.)

- Maintenance inspections for existing, new and parts thereof altered systems
- Minimum ventilation rates for nail salons
- Access to roof top equipment
- Type I and Type II Hood Requirements
- Labeled Assemblies

IPC (International Plumbing Code – Commercial Plumbing)

- Grease Interceptor, Plumbing Appliance and Fixture definitions
- Minimum number of required plumbing fixtures
- Toilet facilities requirements for Family or Assisted facilities
- Water Heater and Gray Water Recycling system requirements

IFGC (International Fuel Gas Code – Commercial Gas Fired Appliances)

- Identification, Testing and Certification of gas piping
- Clearance to combustible material
- Prohibited devices

IRC (International Residential Code – All aspects of new 1- and 2-Family residential construction except electrical)

- Ventilation requirements
- The American Lumber Standard Committee (ALSC) Board of Review has approved changes to design values for all grades and all sizes of visually-graded Southern Pine and Mixed Southern Pine lumber with a recommended effective date of June 1, 2013. Which will decrease the allowed spans for joists and rafters to meet code span requirements, this will effect ceiling and floor joists, girders, headers and rafters. The American Wood Council has recommended that the 2012 IRC be amended to include this

new requirements.

- Wall lateral Bracing - Bracing requirements have been broken out into twelve (12) sub-sections from the combined form of previous versions to include a simplified wall bracing section for an alternative method to meet bracing requirements.
- Roof Uplift Resistance
- Roofing Requirements
- Energy Conservation – 15% more efficient than 2009 IECC
- Testing Air Leakage (blower door test), to verify the tightness of the building is now required on all residential and commercial buildings
- Mechanical & Plumbing - Identification and certification of Pipe, Tubing and Fittings
- Gray Water Systems requirements

IECC (International Energy Conservation Code – Energy Conservation in Commercial Structures)

- 15% more efficient than 2009 IECC
- Economizer requirements
- Make-up air and ventilation requirements
- Testing Air Leakage (blower door test), to verify the tightness of the building is now required on all residential and commercial buildings.

IPMC (International Property Maintenance Code – Upkeep of existing property)

- Updates and clarifications to enhance enforcement

2014 NEC (National Electrical Code – All electrical construction, alteration or repair)

- Concrete – Encased Electrode
- Supplemental Electrode Requirements
- Outdoor Outlets
- Foyer Receptacle outlets requirements
- Boxes at Fan Outlets
- Tamper-Resistant Receptacles locations
- Bonded parts of pools, spas and hot tubs



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4101 **Version:** 1 **Name:** 4th Qtr Investment Report September 30, 2017
Type: Agenda Item **Status:** Agenda Ready
File created: 12/12/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Accept the 4th Quarter Investment Report for September 30, 2017.
Sponsors:
Indexes:
Code sections:
Attachments: [4th Qtr FY17 Investment Report](#)

Date	Ver.	Action By	Action	Result
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Title

Quarterly Investment Report for quarter ended September 30, 2017

Background

The Finance Department releases a report quarterly on the City's finances. The attached reports represent the investment portion of the quarterly financial reports for the quarter ended September 30, 2017.

The Investment Report provides investment activity details for the Money Market, Investment Pool, and Certificate of Deposit accounts. It is the strategy of the City to maintain a high percentage of idle funds invested in safe, secure and liquid investment securities and pooled investment types in accordance with the Public Funds Investment Act (PFIA) and City policy.

Cash on hand at 09/30/2017 was \$42,965,329 in all funds; the amount allocated to SEDC was \$700,750. The average interest/yield on all investments was 1.05%, and investment earnings totaled \$100,794.

Policy Considerations

The PFIA requires that the Investment Officers prepare and submit quarterly a written report of investment transactions for all funds covered by the Investment Policy.

Budgetary Considerations

None.

Staff Recommendations

Accept the Quarterly Investment Report for the quarter ending September 30, 2017.

Memo

To: **Gina Nash, City Manager**
 From: **Berna Fitzpatrick, Finance Manager** *BFW*
 CC: **Mayor and City Council**
 Date: **December 8, 2017**
 Re: **Investment Report for period ending September 30, 2017**

Attached is the Quarterly Investment Report for the quarter ending June 30 of the fiscal year 2016-2017. This report complies with the requirements of the City's Investment Policy and the Public Funds Investment Act as amended. For this period, the City's portfolio consisted of the following investments:

Portfolio at Quarter Close:	Rate at 09/30/17	% Total	Total Investment
Money Market Account –ANB	.2%	25.60%	8,657,381
Money Market Account - BTH	1.48%	7.12%	2,409,074
Money Market Account – NexBank	1.46%	13.86%	4,686,080
Money Market Account(EDC)-ANB	.2%	6.97%	2,357,354
Money Market Account (EDC) BTH	1.48%	.34%	115,968
Money Market Account (EDC)-NexBank	1.46%	.95%	321,598
Investment Pool – Tex Pool	1.0151%	9.50%	3,212,963
CD---Legacy Bank 1810	1.40%	2.36%	1,012,602
CD---Legacy Bank 1013	1.00%	2.36%	1,012,594
CD---Legacy Bank 1311	.75%	2.35%	1,009,312
CD---Legacy Bank 1747	1.15%	2.35%	1,011,436
CD---Legacy Bank 1431	.90%	2.34%	1,006,008
CD---Legacy Bank 1432	.93%	2.34%	1,006,208
CD---Legacy Bank 1649	1.10%	2.34%	1,004,619
CD---Legacy Bank 1650	1.13%	2.34%	1,004,746
CD---Legacy Bank 1651	1.15%	2.34%	1,004,830
CD---Legacy Bank 1917	1.45%	2.33%	1,002,465
CD---Legacy Bank 1918	1.50%	2.33%	1,002,550
CD---Legacy Bank 1919	1.55%	2.33%	1,002,635
CD---Legacy Bank 1920	1.60%	2.33%	1,002,720
CD---Legacy Bank 1921	1.70%	4.67%	2,005,780
Total Invested City Funds:		100.0%	\$42,965,329

The City does not carry any security instrument (investment type) on its books that is traded on the open market; therefore all investments are listed at 100% of market value. Interest earnings on all certificate of deposit accounts are accreted quarterly or at maturity. All Funds on deposit with American National Bank, Legacy, and Investment Pools are fully secured and safeguarded. **Total investment interest earned for the quarter ending September 30 was \$100,794.**

Citywide cash and investments for the period ending September 30 was \$42,965,329. Of this amount, \$700,750 is for the Sachse EDC. It is the strategy of the Finance Department to maintain a high percentage of its idle funds invested in safe and secure investment securities and pooled investment types in accordance with the Public Funds Investment Act.

67% of the City's current portfolio has liquidity of 30 days or less, which is more than adequate for daily operations. The City investments are liquid and have same day access. The City's investment and cash management strategy will be to maintain operational and capital needs in money market accounts and liquid asset pools. The City's funds are swept into the above accounts and withdrawn as needed for operational cash flow requirements.

The average interest rate/yield on the City's investments for the period was 1.05%; weighted average maturity of 98 days. The Texpool Prime Fund interest rate was 1.2644% and the Texpool interest rate was 1.0151% at September 30, 2017. The rolling three month Treasury yield was .75% with the rolling six month Treasury yield at .78%.



QUARTERLY INVESTMENT REPORT

For the Quarter Ended

September 30, 2017

Prepared by
Valley View Consulting, L.L.C.

The investment portfolio of the City is in compliance with the Public Funds Investment Act and the Investment Policy and strategies.


Director of Finance


Finance Manager

Disclaimer: These reports were compiled using information provided by the City of Sachse. No procedures were performed to test the accuracy or completeness of this information. The market values included in these reports were obtained by Valley View Consulting, L.L.C. from sources believed to be accurate and represent proprietary valuation. Due to market fluctuations these levels are not necessarily reflective of current liquidation values. Yield calculations are not determined using standard performance formulas, are not representative of total return yields and do not account for investment advisor fees.

Annual Comparison of Portfolio Performance

FYE Results by Investment Category:

Asset Type	September 30, 2017			September 30, 2016		
	Ave. Yield	Book Value	Market Value	Ave. Yield	Book Value	Market Value
Bank/Pool	0.93%	\$ 27,876,827	\$ 27,876,827	0.28%	\$ 21,079,054	\$ 21,079,054
CDs / Securities	1.27%	15,088,502	15,088,502	0.68%	9,041,152	9,041,152
Totals		\$ 42,965,329	\$ 42,965,329		\$ 30,120,206	\$ 30,120,206
Fourth Quarter-End Yield	1.05%			0.40%		
Average Quarter-End Yields - Fiscal Year (1):						
Sachse	0.68%			0.36%		
Rolling Three Month Treasury	0.75%			0.25%		
Rolling Six Month Treasury	0.78%			0.37%		
TexPool	0.74%			0.31%		
Fiscal YTD Interest Earnings-City		\$ 214,353			\$ 77,391	
Fiscal YTD Interest Earnings-EDC		\$ 4,814			\$ 7,893	

(1) Average Quarterly Yield calculated using quarter-end report average yield and adjusted book value.

Summary

Quarter End Results by Investment Category:

Asset Type	September 30, 2017			June 30, 2017		
	Ave. Yield	Book Value	Market Value	Book Value	Market Value	Market Value
Bank/Pool	0.93%	\$ 27,876,827	\$ 27,876,827	\$ 21,760,417	\$ 21,760,417	\$ 21,760,417
CDs/Securities	1.27%	15,088,502	15,088,502	12,059,202	12,059,202	12,059,202
Totals		\$ 42,965,329	\$ 42,965,329	\$ 33,819,619	\$ 33,819,619	\$ 33,819,619

Current Quarter Average Yield ⁽¹⁾

Total Portfolio 1.05%

Fiscal Year-to-Date Average Yield ⁽²⁾

Total Portfolio 0.68%

Weighted Average Maturity 98 days

Rolling Three Mo. Treas. Yield 1.05%
Rolling Six Mo. Treas. Yield 1.09%

Rolling Three Mo. Treas. Yield 0.75%
Rolling Six Mo. Treas. Yield 0.78%
Average Quarterly TexPool Yield 0.74%

	City	EDC
Interest Earnings QTR	\$ 99,478	\$ 1,317
Interest Earnings YTD	\$ 214,353	\$ 4,814

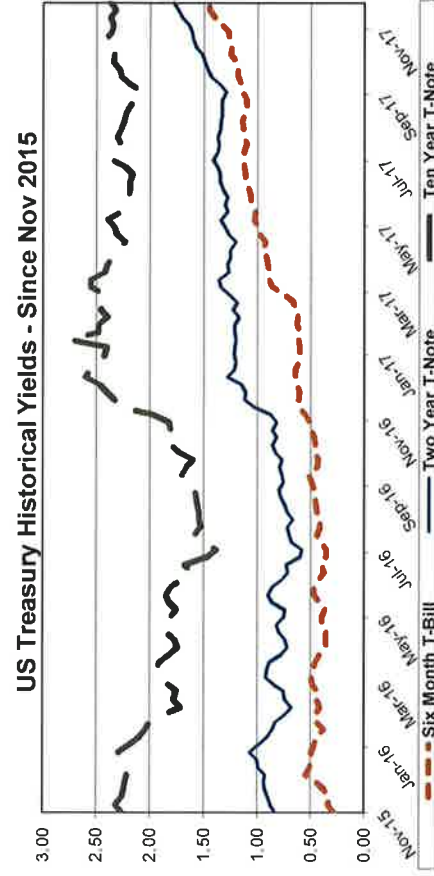
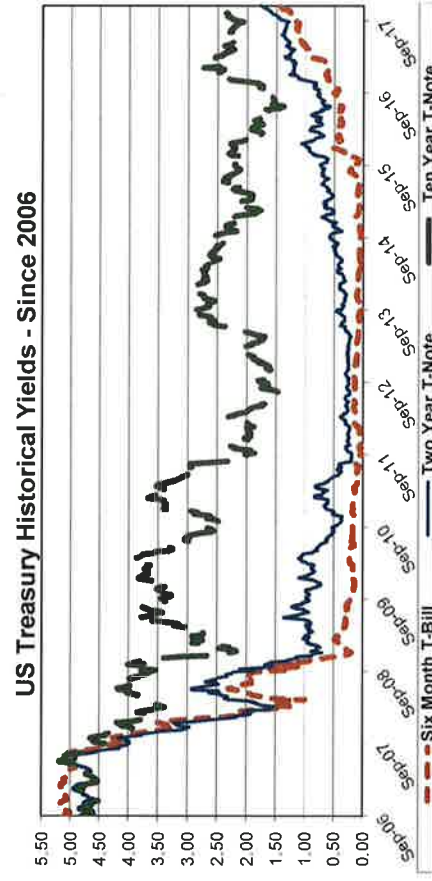
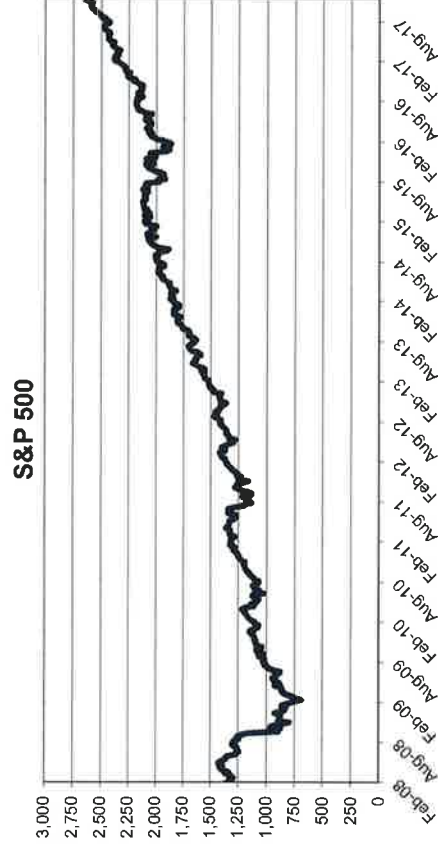
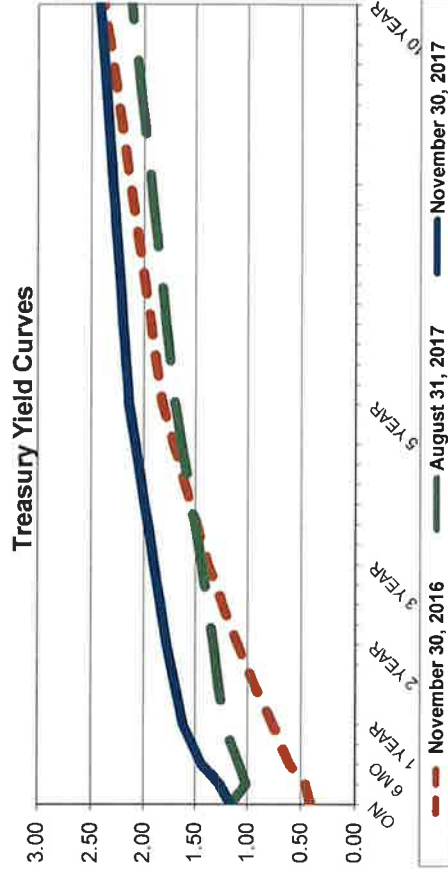
(1) Average Yield calculated using quarter end report yields and adjusted book values and does not reflect a total return analysis or account for advisory fees.

(2) Fiscal Year-to-Date Average Yields calculated using quarter end report yields and adjusted book values and does not reflect a total return analysis or account for advisory fees.

Economic Overview

11/30/2017

The Federal Open Market Committee (FOMC) maintained the Fed Funds target range of 1.00% - 1.25% (Effective Fed Funds are trading +/- 1.16%) since the June FOMC meeting. An range increase to 1.25%-1.50% at the December 13 meeting press conference is widely expected and priced in the market. Gradual portfolio reduction continues by limiting reinvestment of maturing holdings. Second Quarter 2017 GDP measured 3.1%. Third Quarter (second estimate) GDP increased 3.3%. November Non Farm Payroll data recorded +228k. Other US data generally showed positive with a few negative numbers. The Stock Markets achieved new highs. Jerome Powell was nominated to replace Fed Chair Janet Yellen early next year.



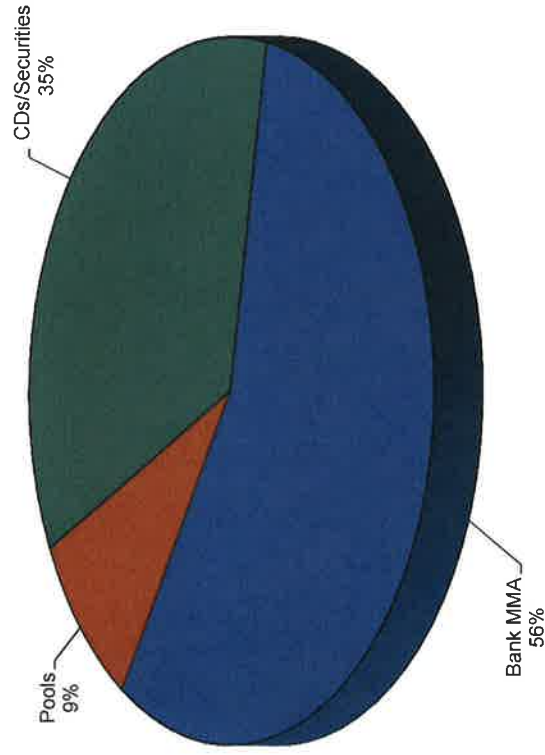
**Investment Holdings
September 30, 2017**

Description	Rating	Coupon/ Discount	Maturity Date	Settlement Date	Original Face/ Par Value	Book Value	Market Price	Market Value	Life (days)	Yield
ANB MMA		0.20%	10/01/17	09/30/17	\$ 10,577,105	\$ 10,577,105	1.00	\$ 10,577,105	1	0.20%
BTH Bank MMA		1.49%	10/01/17	09/30/17	2,534,490	2,534,490	1.00	2,534,490	1	1.49%
NexBank MMA		1.47%	10/01/17	09/30/17	11,043,665	11,043,665	1.00	11,043,665	1	1.47%
TexPool	AAA	1.02%	10/01/17	09/30/17	3,721,568	3,721,568	1.00	3,721,568	1	1.02%
LegacyTexas Bank CD		0.90%	10/10/17	01/10/17	1,006,008	1,006,008	100.00	1,006,008	10	0.90%
LegacyTexas Bank CD		0.75%	11/10/17	11/10/16	1,009,312	1,009,312	100.00	1,009,312	41	0.75%
LegacyTexas Bank CD		0.93%	11/10/17	01/10/17	1,006,208	1,006,208	100.00	1,006,208	41	0.93%
LegacyTexas Bank CD		1.00%	12/20/17	06/20/16	1,012,594	1,012,594	100.00	1,012,594	81	1.00%
LegacyTexas Bank CD		1.10%	01/20/18	04/20/17	1,004,619	1,004,619	100.00	1,004,619	112	1.10%
LegacyTexas Bank CD		1.13%	02/20/18	04/20/17	1,004,746	1,004,746	100.00	1,004,746	143	1.13%
LegacyTexas Bank CD		1.15%	03/20/18	04/20/17	1,004,830	1,004,830	100.00	1,004,830	171	1.15%
LegacyTexas Bank CD		1.15%	05/10/18	05/01/17	1,011,436	1,011,436	100.00	1,011,436	222	1.15%
LegacyTexas Bank CD		1.40%	06/20/18	06/20/17	1,012,602	1,012,602	100.00	1,012,602	263	1.40%
LegacyTexas Bank CD		1.45%	07/25/18	07/25/17	1,002,465	1,002,465	100.00	1,002,465	298	1.45%
LegacyTexas Bank CD		1.50%	10/25/18	07/25/17	1,002,550	1,002,550	100.00	1,002,550	390	1.50%
LegacyTexas Bank CD		1.55%	01/25/19	07/25/17	1,002,635	1,002,635	100.00	1,002,635	482	1.55%
LegacyTexas Bank CD		1.60%	04/25/19	07/25/17	1,002,720	1,002,720	100.00	1,002,720	572	1.60%
LegacyTexas Bank CD		1.70%	07/25/19	07/25/17	2,005,780	2,005,780	100.00	2,005,780	663	1.70%
					\$ 42,965,329	\$ 42,965,329				
								\$ 42,965,329	98	1.05%
									(1)	(2)

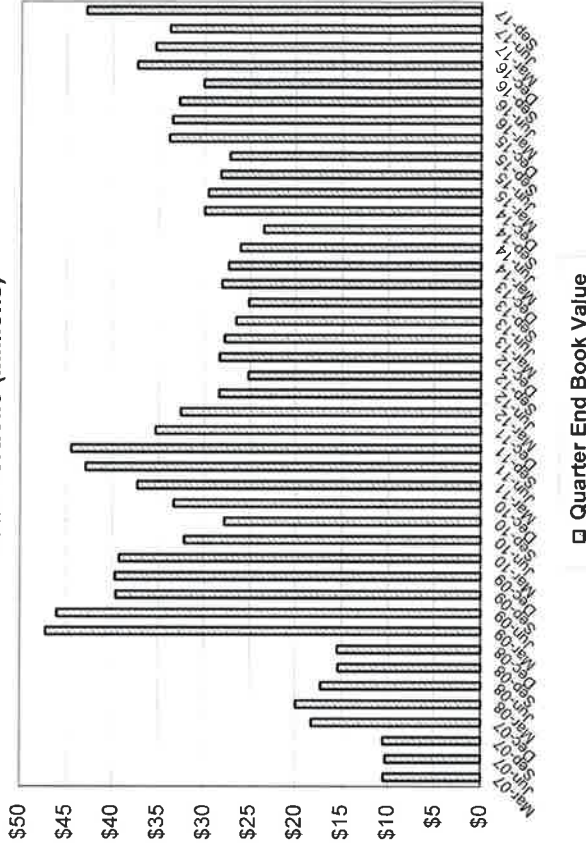
(1) Weighted average life - For purposes of calculating weighted average life, pool investments are assumed to have a one day maturity.

(2) Weighted average yield to maturity - The weighted average yield to maturity is based on adjusted book value, realized and unrealized gains/losses and investment advisory fees are not considered.

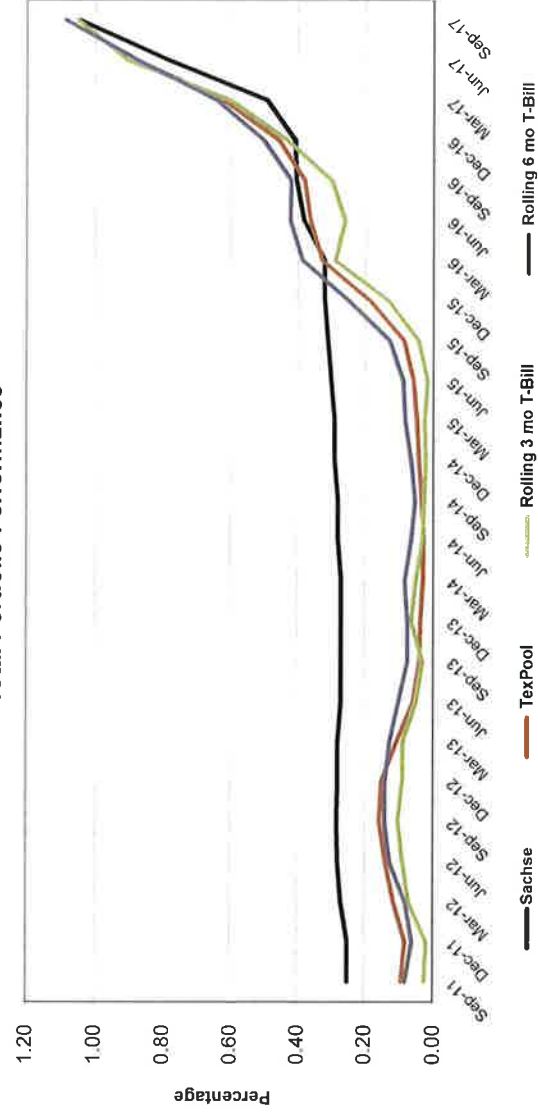
Portfolio Composition



Total Portfolio (Millions)



Total Portfolio Performance



Book Value Comparison

Description	Coupon/ Discount	Maturity Date	June 30, 2017			September 30, 2017		
			Original Face/Par Value	Book Value	Purchases/ Accretions	Amortizations/ Sales/Maturities	Original Face/Par Value	Book Value
ANB MMA	0.20%	10/01/17	\$ 11,014,735	\$ 11,014,735	\$ —	\$ (437,630)	\$ 10,577,105	\$ 10,577,105
BTH Bank MMA	1.49%	10/01/17	2,525,042	2,525,042	9,448		2,534,490	2,534,490
NexBank MMA	1.47%	10/01/17	5,007,678	5,007,678	6,035,987		11,043,665	11,043,665
TexPool	1.02%	10/01/17	3,212,963	3,212,963	508,605		3,721,568	3,721,568
Southside Bank CD	0.72%	07/20/17	1,003,575	1,003,575		(1,003,575)	—	—
Southside Bank CD	0.78%	08/21/17	1,003,873	1,003,873		(1,003,873)	—	—
LegacyTexas Bank CD	0.85%	09/11/17	1,003,521	1,003,521		(1,003,521)	—	—
LegacyTexas Bank CD	0.90%	10/10/17	1,003,729	1,003,729	2,278		1,006,007	1,006,007
LegacyTexas Bank CD	0.75%	11/10/17	1,007,406	1,007,406	1,906		1,009,312	1,009,312
LegacyTexas Bank CD	0.93%	11/10/17	1,003,853	1,003,853	2,355		1,006,208	1,006,208
LegacyTexas Bank CD	1.00%	12/20/17	1,010,046	1,010,046	2,548		1,012,594	1,012,594
LegacyTexas Bank CD	1.10%	01/20/18	1,001,839	1,001,839	2,780		1,004,619	1,004,619
LegacyTexas Bank CD	1.13%	02/20/18	1,001,889	1,001,889	2,857		1,004,746	1,004,746
LegacyTexas Bank CD	1.15%	03/20/18	1,001,923	1,001,923	2,907		1,004,830	1,004,830
LegacyTexas Bank CD	1.15%	05/10/18	1,008,510	1,008,510	2,926		1,011,436	1,011,436
LegacyTexas Bank CD	1.40%	06/20/18	1,009,037	1,009,037	3,565		1,012,602	1,012,602
LegacyTexas Bank CD	1.45%	07/25/18	—	—	1,002,464		1,002,464	1,002,464
LegacyTexas Bank CD	1.50%	10/25/18	—	—	1,002,549		1,002,549	1,002,549
LegacyTexas Bank CD	1.55%	01/25/19	—	—	1,002,635		1,002,635	1,002,635
LegacyTexas Bank CD	1.60%	04/25/19	—	—	1,002,720		1,002,720	1,002,720
LegacyTexas Bank CD	1.70%	07/25/19	—	—	2,005,779		2,005,779	2,005,779
TOTAL			\$ 33,819,619	\$ 33,819,619	\$ 12,594,309	\$ (3,448,599)	\$ 42,965,329	\$ 42,965,329

Market Value Comparison

Description	Coupon/ Discount	Maturity Date	June 30, 2017			September 30, 2017		
				Original Face/Par Value	Market Value	Qtr to Qtr Change	Original Face/Par Value	Market Value
ANB MMA	0.20%	10/01/17		\$ 11,014,735	\$ 11,014,735	\$ (437,630)	\$ 10,577,105	\$ 10,577,105
BTH Bank MMA	1.49%	10/01/17		2,525,042	2,525,042	9,448	2,534,490	2,534,490
NexBank MMA	1.47%	10/01/17		5,007,678	5,007,678	6,035,987	11,043,665	11,043,665
TexPool	1.02%	10/01/17		3,212,963	3,212,963	508,605	3,721,568	3,721,568
Southside Bank CD	0.72%	07/20/17		1,003,575	1,003,575	(1,003,575)	-	-
Southside Bank CD	0.78%	08/21/17		1,003,873	1,003,873	(1,003,873)	-	-
LegacyTexas Bank CD	0.85%	09/11/17		1,003,521	1,003,521	(1,003,521)	-	-
LegacyTexas Bank CD	0.90%	10/10/17		1,003,729	1,003,729	2,278	1,006,007	1,006,007
LegacyTexas Bank CD	0.75%	11/10/17		1,007,406	1,007,406	1,906	1,009,312	1,009,312
LegacyTexas Bank CD	0.93%	11/10/17		1,003,853	1,003,853	2,355	1,006,208	1,006,208
LegacyTexas Bank CD	1.00%	12/20/17		1,010,046	1,010,046	2,548	1,012,594	1,012,594
LegacyTexas Bank CD	1.10%	01/20/18		1,001,839	1,001,839	2,780	1,004,619	1,004,619
LegacyTexas Bank CD	1.13%	02/20/18		1,001,889	1,001,889	2,857	1,004,746	1,004,746
LegacyTexas Bank CD	1.15%	03/20/18		1,001,923	1,001,923	2,907	1,004,830	1,004,830
LegacyTexas Bank CD	1.15%	05/10/18		1,008,510	1,008,510	2,926	1,011,436	1,011,436
LegacyTexas Bank CD	1.40%	06/20/18		1,009,037	1,009,037	3,565	1,012,602	1,012,602
LegacyTexas Bank CD	1.45%	07/25/18		-	-	1,002,464	1,002,464	1,002,464
LegacyTexas Bank CD	1.50%	10/25/18		-	-	1,002,549	1,002,549	1,002,549
LegacyTexas Bank CD	1.55%	01/25/19		-	-	1,002,635	1,002,635	1,002,635
LegacyTexas Bank CD	1.60%	04/25/19		-	-	1,002,720	1,002,720	1,002,720
LegacyTexas Bank CD	1.70%	07/25/19		-	-	2,005,779	2,005,779	2,005,779
TOTAL				\$ 33,819,619	\$ 33,819,619	\$ 9,145,710	\$ 42,965,329	\$ 42,965,329

Allocation
September 30, 2017

Book & Market Value	Total	GO I&S	General Fund	W/S Restricted	W/S Operations	Capital Project	2009 GO Bonds	Restricted Park Development
ANB MMA	\$ 10,577,105	\$ 45,259	\$ 580,595	\$ 235,879	\$ 3,694,586	\$ 459,274	\$ 2,533,956	\$ 411,916
BTH Bank MMA	2,534,490	234,134	755,440		681,495	29,708	163,907	132,839
NexBank MMA	11,043,665	181,342	1,364,986		7,008,575	32,813	181,039	
TexPool	3,721,568		2,215,493		1,506,075			
10/10/17-LegacyTexas Bank CD	1,006,008				1,006,008			
11/10/17-LegacyTexas Bank CD	1,009,312		1,009,312					
11/10/17-LegacyTexas Bank CD	1,006,208							
12/20/17-LegacyTexas Bank CD	1,012,594		1,012,594					
01/20/18-LegacyTexas Bank CD	1,004,619		1,004,619					
02/20/18-LegacyTexas Bank CD	1,004,746							
03/20/18-LegacyTexas Bank CD	1,004,830							
05/10/18-LegacyTexas Bank CD	1,011,436		1,011,436					
06/20/18-LegacyTexas Bank CD	1,012,602				1,012,602			
07/25/18-LegacyTexas Bank CD	1,002,465				1,002,465			
10/25/18-LegacyTexas Bank CD	1,002,550				1,002,550			
01/25/19-LegacyTexas Bank CD	1,002,635				1,002,635			
04/25/19-LegacyTexas Bank CD	1,002,720				1,002,720			
07/25/19-LegacyTexas Bank CD	2,005,780				2,005,780			
Totals	\$ 42,965,329	\$ 460,734	\$ 8,954,475	\$ 235,879	\$ 20,925,488	\$ 521,795	\$ 2,878,901	\$ 544,755

Allocation
September 30, 2017

(continued)

Book & Market Value	Restricted General	Restricted Water Impact	Restricted Sewer Impact	Restricted Roadway	Street Maintenance	Health Insurance	EDC
ANB MMA	\$ 410,508	\$ 518,683	\$ 501,747	\$ 392,371	\$ 188,023	\$ 342,197	\$ 262,111
BTH Bank MMA	135,541	71,506	69,171	54,093	42,635	47,619	116,402
NexBank MMA		716,886	693,479	542,307			322,237
TexPool							
10/10/17–LegacyTexas Bank CD							
11/10/17–LegacyTexas Bank CD							
11/10/17–LegacyTexas Bank CD				1,006,208			
12/20/17–LegacyTexas Bank CD							
01/20/18–LegacyTexas Bank CD							
02/20/18–LegacyTexas Bank CD							
03/20/18–LegacyTexas Bank CD							
05/10/18–LegacyTexas Bank CD							
06/20/18–LegacyTexas Bank CD							
07/25/18–LegacyTexas Bank CD							
10/25/18–LegacyTexas Bank CD							
01/25/19–LegacyTexas Bank CD							
04/25/19–LegacyTexas Bank CD							
07/25/19–LegacyTexas Bank CD							
Totals	\$ 546,050	\$ 1,307,075	\$ 1,264,398	\$ 4,004,555	\$ 230,658	\$ 389,816	\$ 700,750

Allocation

June 30, 2017

Book & Market Value	Total	GO I&S	General Fund	W/S Restricted	W/S Operations	Capital Project	2009 GO Bonds	Restricted Park Development
ANB MMA	\$ 11,014,735	\$ 590,462	\$ 844,628	\$ 234,139	\$ 1,229,094	\$ 763,918	\$ 2,878,194	\$ 398,543
BTH Bank MMA	2,525,042	233,261	752,624		678,954	40,458	152,434	129,079
NexBank MMA	5,007,678	180,982	2,160,905		680,980	44,766	168,663	
TexPool	3,212,963		2,210,125		1,002,838			
07/20/17-Southside Bank CD	1,003,575				1,003,575			
08/21/17-Southside Bank CD	1,003,873							
09/11/17-LegacyTexas Bank CD	1,003,521		1,003,521					
10/10/17-LegacyTexas Bank CD	1,003,729				1,003,729			
11/10/17-LegacyTexas Bank CD	1,007,406		1,007,406					
11/10/17-LegacyTexas Bank CD	1,003,853							
12/20/17-LegacyTexas Bank CD	1,010,046		1,010,046					
01/20/18-LegacyTexas Bank CD	1,001,839		1,001,839					
02/20/18-LegacyTexas Bank CD	1,001,889							
03/20/18-LegacyTexas Bank CD	1,001,923							
05/10/18-LegacyTexas Bank CD	1,008,510		1,008,510					
06/20/18-LegacyTexas Bank CD	1,009,037				1,009,037			
Totals	\$ 33,819,619	\$ 1,004,705	\$10,999,605	\$ 234,139	\$ 6,608,207	\$ 849,142	\$ 3,199,291	\$ 527,622

Allocation

June 30, 2017

(continued)

Book & Market Value

	Restricted General	Restricted Water Impact	Restricted Sewer Impact	Restricted Roadway	Street Maintenance	Health Insurance	EDC
ANB MMA	\$ 433,728	\$ 272,924	\$ 269,042	\$ 204,714	\$ 138,990	\$ 399,004	\$ 2,357,354
BTH Bank MMA	138,301	70,077	70,569	53,398	42,476	47,442	115,968
NexBank MMA		523,573	527,252	398,959			321,598
TexPool							
07/20/17-Southside Bank CD							
08/21/17-Southside Bank CD				1,003,873			
09/11/17-Legacy Texas Bank CD							
10/10/17-Legacy Texas Bank CD							
11/10/17-Legacy Texas Bank CD							
11/10/17-Legacy Texas Bank CD				1,003,853			
12/20/17-Legacy Texas Bank CD							
01/20/18-Legacy Texas Bank CD							
02/20/18-Legacy Texas Bank CD							
03/20/18-Legacy Texas Bank CD				1,001,889			
05/10/18-Legacy Texas Bank CD				1,001,923			
06/20/18-Legacy Texas Bank CD							
Totals	\$ 572,029	\$ 866,574	\$ 866,864	\$ 4,668,610	\$ 181,466	\$ 446,446	\$ 2,794,920

Portfolio Summary
City of Sachse, TX
September 30, 2017

Safety - Investment Type

Investment Type	Book Value	Percent
Money Market Account*	\$ 24,155,257	56.2%
Investment Pools	3,721,568	8.7%
CD's	15,088,505	35.1%
Total*	\$ 42,965,329	100%

*(Includes Sachse EDC Money Market)

Liquidity - Investments by Maturity Date

Under 30 days	\$ 28,882,834	67%
30 - 90 days	3,028,114	7%
91 - 180 days	3,014,195	7%
181 - 365 days	3,026,503	7%
366 - 760 days	5,013,685	12%
Total Principal Invested	\$ 42,965,329	100%

Portfolio Yield	Fiscal YTD Interest	Int Earned this QTR	(FYTD) Percent of total
Portfolio			
Debt Service	\$ 4,276	\$ 1,408	1.95%
General Fund	\$ 71,080	24,677	32.43%
Water and Sewer Fund	\$ 83,415	56,563	38.06%
Capital Project Fund	\$ 16,796	2,053	7.66%
Special Revenue Fund	\$ 3,242	1,001	1.48%
Impact Fee Fund	\$ 34,454	13,439	15.72%
Street Maintenance Fund	\$ 515	159	0.23%
Health Insurance Fund	\$ 575	177	0.26%
Sachse EDC	\$ 4,814	1,317	2.20%
Total Portfolios	\$ 219,167	\$ 100,794	100.00%

Portfolio Balance	Beginning Balances	Ending Book Balances	Change
Portfolio			
Debt Service	\$ 1,004,705	\$ 460,734	\$ (543,970.47)
General Fund	10,999,605	8,954,475	(2,045,129.53)
Water and Sewer Fund	5,838,771	21,161,367	15,322,595.98
Capital Project Fund	4,048,432	3,400,696	(647,736.00)
Special Revenue Fund	1,099,651	1,090,805	(8,846.00)
Impact Fee Fund	6,402,047	6,576,028	173,981.00
Street Maintenance Fund	181,466	230,658	49,192.00
Health Insurance Fund	446,446	389,816	(56,630.00)
Sachse EDC	2,794,920	700,750	(2,094,169.85)
Total Portfolios	\$ 32,816,043	\$ 42,965,329	\$ 10,149,287

Historical Interest Rates

	July	August	September
Pooled Money Market Account			
2017	0.2000%	0.2000%	0.2000%
2016	0.2000%	0.2000%	0.2000%
2015	0.2500%	0.2500%	0.2500%
Tex Pool			
2017	0.9714%	0.9989%	1.0151%
2016	0.3690%	0.3737%	0.3799%
2015	0.0630%	0.0524%	0.0575%

City of Sachse, TX
Investment Portfolios
July 31, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value			
							Principal Invested	Beginning of Month	Change 1	End of Month	Beginning of Month	Change	End of Month
Water and Sewer Fund													
GO Bond I&S Fund	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	590,462	590,462	32,667	623,129	590,462	32,667	623,129
GO Bond I&S Fund	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	233,261	233,261	294	233,555	233,261	294	233,555
GO Bond I&S Fund	Money Market	NexBank	07/31/2017	08/01/2017	1.4700%	1	180,982	180,982	159	181,141	180,982	159	181,141
Total							1,004,705	1,004,705	33,120	1,037,825	1,004,705	33,120	1,037,825
General Fund													
General Fund	TexPool	1111-000	07/31/2017	08/01/2017	0.8817%	1	2,210,125	2,210,125	1,823	2,211,948	2,210,125	1,823	2,211,948
General Fund	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	844,628	844,628	(515,195)	329,433	844,628	(515,195)	329,433
General Fund	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	752,624	752,624	950	753,574	752,624	950	753,574
General Fund	Money Market	NexBank	07/31/2017	08/01/2017	1.4700%	1	2,160,905	2,160,905	1,890	2,162,795	2,160,905	1,890	2,162,795
General Fund	CD	60050001311	11/10/2016	11/10/2017	0.7500%	102	1,003,028	1,007,406	621	1,008,027	1,007,406	621	1,008,027
General Fund	CD	60050001747	05/01/2017	05/10/2018	1.1500%	283	1,007,526	1,008,510	953	1,009,463	1,008,510	953	1,009,463
General Fund	CD	1013	06/20/2016	12/20/2017	1.0000%	142	1,000,000	1,010,046	830	1,010,876	1,010,046	830	1,010,876
General Fund	CD	1649	04/20/2017	01/20/2018	1.1000%	173	1,000,000	1,001,839	906	1,002,745	1,001,839	906	1,002,745
General Fund	CD	1430	01/10/2017	09/11/2017	0.8500%	42	1,000,000	1,003,521	701	1,004,222	1,003,521	701	1,004,222
Total							10,978,836	10,999,605	(506,521)	10,493,084	10,999,605	(506,521)	10,493,084
Water and Sewer Fund													
W/S Restricted Fund	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	234,139	234,139	234,139	0	234,139	0	234,139
W/S Operations	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	1,229,094	1,229,094	2,446,670	3,675,764	1,229,094	2,446,670	3,675,764
W/S Operations	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	678,954	678,954	857	679,811	678,954	857	679,811
W/S Operations	Money Market	NexBank	07/31/2017	08/01/2017	1.4900%	1	680,980	680,980	2,626	683,606	680,980	2,626	683,606
W/S Operations	Money Market	lexBank 3886	07/31/2017	08/01/2017	1.4700%	1	0	0	6,002,680	6,002,680	0	6,002,680	6,002,680
W/S Operations	TexPool	1111-000	03/31/2017	04/01/2017	0.8817%	1	1,002,838	1,002,838	827	1,003,665	1,002,838	827	1,003,665
W/S	CD	1917	07/25/2017	07/25/2018	1.4500%	359	1,000,000	0	1,000,000	1,000,000	0	1,000,000	1,000,000
W/S	CD	1918	07/25/2017	10/25/2018	1.5000%	451	1,000,000	0	1,000,000	1,000,000	0	1,000,000	1,000,000
W/S	CD	1919	07/25/2017	01/25/2019	1.5500%	543	1,000,000	0	1,000,000	1,000,000	0	1,000,000	1,000,000
W/S	CD	1920	07/25/2017	04/25/2019	1.6000%	633	1,000,000	0	1,000,000	1,000,000	0	1,000,000	1,000,000
W/S	CD	1921	07/25/2017	07/25/2019	1.7000%	724	2,000,000	0	2,000,000	2,000,000	0	2,000,000	2,000,000
W/S	CD	1431	01/10/2017	10/10/2017	0.9000%	71	1,000,000	1,003,729	742	1,004,471	1,003,729	742	1,004,471
W/S	CD	1810	06/20/2017	06/20/2018	1.4000%	324	1,000,000	1,009,037	1,161	1,010,198	1,009,037	1,161	1,010,198
Total							11,826,005	5,838,771	14,455,563	20,294,335	5,838,772	14,455,563	20,294,335
Capital Project Funds													
Capital Project Funds	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	763,918	763,918	(34,827)	729,091	763,918	(34,827)	729,091
Capital Project Funds	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	40,458	40,458	1,158	41,616	40,458	1,158	41,616
Capital Project Funds	Money Market	NexBank	07/31/2017	08/01/2017	1.4900%	1	44,766	44,766	1,263	46,029	44,766	1,263	46,029
2009 GO Bonds	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	2,878,194	2,878,194	(223,676)	2,654,518	2,878,194	(223,676)	2,654,518
2009 GO Bonds	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	152,434	152,434	(915)	151,520	152,434	(915)	151,520
2009 GO Bonds	Money Market	NexBank	07/31/2017	08/01/2017	0.2000%	1	168,663	168,663	(1,077)	167,586	168,663	(1,077)	167,586
Total							4,048,432	4,048,432	(258,074)	3,790,360	4,048,434	(258,074)	3,790,360
Special Revenue Funds													
Restricted Park Development Fee	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	398,543	398,543	663	399,206	398,543	663	399,206
Restricted Park Development Fee	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	129,079	129,079	(485)	128,594	129,079	(485)	128,594
Restricted General Fund	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	433,728	433,728	(1,836)	431,892	433,728	(1,836)	431,892
Restricted General Fund	Money Market	BTH	07/31/2017	08/01/2017	1.4900%	1	138,301	138,301	822	139,123	138,301	822	139,123
Total							1,099,651	1,099,651	(836)	1,098,815	1,099,651	(836)	1,098,815
Impact Fee Fund													
Restricted Water Impact Fee	Money Market	114512	07/31/2017	08/01/2017	0.2000%	1	272,924	272,924	36,584	309,508	272,924	36,584	309,508

City of Sachse, TX
Investment Portfolios
July 31, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value			
							Principal Invested	Beginning of Month	Change ¹	End of Month	Beginning of Month	Change	End of Month
Street Maintenance Fund	Restricted Water Impact Fee	BTH	07/31/2017	08/01/2017	1.49000%	1	70,077	70,077	1,040	71,117	70,077	1,040	71,117
	Restricted Water Impact Fee	NexBank	07/31/2017	08/01/2017	1.49000%	1	523,573	523,573	7,566	531,139	523,573	7,566	531,139
	Restricted Sewer Impact Fee	114512	07/31/2017	08/01/2017	0.20000%	1	269,042	269,042	34,063	303,105	269,042	34,063	303,105
	Restricted Sewer Impact Fee	BTH	07/31/2017	08/01/2017	1.49000%	1	70,569	70,569	(923)	69,646	70,569	(923)	69,646
	Restricted Sewer Impact Fee	NexBank	07/31/2017	08/01/2017	1.49000%	1	527,252	527,252	(7,102)	520,150	527,252	(7,102)	520,150
	Restricted Roadway Impact Fee	114512	07/31/2017	08/01/2017	0.20000%	1	204,714	204,714	28,237	232,951	204,714	28,237	232,951
	Restricted Roadway Impact Fee	BTH	07/31/2017	08/01/2017	1.49000%	1	53,398	53,398	128	53,526	53,398	128	53,526
	Restricted Roadway Impact Fee	NexBank	07/31/2017	08/01/2017	1.49000%	1	398,959	398,959	803	399,762	398,959	803	399,762
	Impact Fee Fund	1650	04/20/2017	02/20/2018	1.13000%	204	1,000,000	1,001,889	931	1,002,820	1,001,889	931	1,002,820
	Impact Fee Fund	1651	04/20/2017	03/20/2018	1.15000%	232	1,000,000	1,001,923	947	1,002,870	1,001,923	947	1,002,870
Health Insurance Fund	Impact Fee Fund	1432	01/10/2017	11/10/2017	0.93000%	102	1,000,000	1,003,853	768	1,004,621	1,003,853	768	1,004,621
	Impact Fee Fund	236687	12/20/2016	08/21/2017	0.78000%	21	1,000,000	1,003,873	644	1,004,517	1,003,873	644	1,004,517
	Street Maintenance Tax						6,390,508	6,402,047	103,686	6,505,731	6,402,045	103,686	6,505,731
	Street Maintenance Tax	114512	07/31/2017	08/01/2017	0.20000%	1	138,990	138,990	(15,855)	123,135	138,990	(15,855)	123,135
Health Insurance	Street Maintenance Tax	BTH	07/31/2017	08/01/2017	1.49000%	1	42,476	42,476	54	42,530	42,476	54	42,530
	Total						181,466	181,466	(15,801)	165,665	181,466	(15,801)	165,665
EDC Fund	Money Market	114512	07/31/2017	08/01/2017	0.20000%	1	399,004	399,004	18,826	417,830	399,004	18,826	417,830
	Money Market	BTH	07/31/2017	08/01/2017	1.49000%	1	47,442	47,442	60	47,502	47,442	60	47,502
	Total						446,446	446,446	18,886	465,332	446,446	18,886	465,332
EDC PMMKT	Money Market	114512	07/31/2017	08/01/2017	0.27000%	1	2,357,354	2,357,354	(718,240)	1,639,114	2,357,354	(718,240)	1,639,114
	Money Market	BTH	07/31/2017	08/01/2017	1.49000%	1	115,968	115,968	146	116,114	115,968	146	116,114
	Money Market	NexBank	07/31/2017	08/01/2017	1.47000%	1	321,598	321,598	281	321,879	321,598	281	321,879
							2,794,920	2,794,920	(717,813)	2,077,108	2,794,920	(717,813)	2,077,108
							38,770,969	32,816,043	13,112,210	45,928,255	32,816,043	13,112,210	45,928,255

Summary of Portfolios by Security Type
07/31/17

Security Type	Percent of Total (Book Value)	Average # of days	Average Yield	Book Value			Market Value			
				Principal Invested	Beginning of Month	Change	End of Month	Beginning of Month	Change	End of Month
Money Market Account	55.84%	1	0.9668%	18,547,453	18,547,453	7,100,356	25,647,812	18,547,453	7,100,356	25,647,812
TexPool	7.00%	1	0.8817%	3,212,963	3,212,963	2,650	3,215,613	3,212,963	2,650	3,215,613
CD's	37.16%	275	1.1838%	12,010,554	11,055,626	6,009,204	17,064,830	11,055,626	6,009,204	17,064,830
Total	100.00%			33,770,971	32,816,043	13,112,210	45,928,255	32,816,043	13,112,210	45,928,255
1Change = Investment activity including earnings deposits and withdrawals.										

¹Change = Investment activity including earnings deposits and withdrawals.

City of Sachse, TX
Investment Portfolios
August 31, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value			
							Principal Invested	Beginning of Month	Change ¹	End of Month	Beginning of Month	Change	End of Month
Debt Service													
GO Bond I&S Fund	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	623,129	623,129	(583,987)	39,142	623,129	(583,987)	39,142
GO Bond I&S Fund	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	233,555	233,555	294	233,849	233,555	294	233,849
GO Bond I&S Fund	Money Market	NexBank	08/31/2017	09/01/2017	1.4700%	1	181,141	181,141	102	181,243	181,141	102	181,243
Total							1,037,825	1,037,825	(583,591)	454,233	1,037,825	(583,591)	454,233
General Fund													
General Fund	TexPool	1111-000	08/31/2017	09/01/2017	0.8817%	1	2,211,948	2,211,948	1,698	2,213,646	2,211,948	1,698	2,213,646
General Fund	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	329,433	329,433	(299,100)	30,333	329,433	(299,100)	30,333
General Fund	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	753,574	753,574	948	754,522	753,574	948	754,522
General Fund	Money Market	NexBank	08/31/2017	09/01/2017	1.4700%	1	2,162,795	2,162,795	(298,818)	1,863,977	2,162,795	(298,818)	1,863,977
General Fund	CD	60050001311	11/10/2016	11/10/2017	0.7500%	71	1,003,028	1,008,027	642	1,008,669	1,008,027	642	1,008,669
General Fund	CD	60050001747	05/01/2017	05/10/2018	1.1500%	252	1,007,526	1,009,463	986	1,010,449	1,009,463	986	1,010,449
General Fund	CD	1013	06/20/2016	12/20/2017	1.0000%	111	1,000,000	1,010,876	859	1,011,735	1,010,876	859	1,011,735
General Fund	CD	1649	04/20/2017	01/20/2018	1.1000%	142	1,000,000	1,002,745	937	1,003,682	1,002,745	937	1,003,682
General Fund	CD	1430	01/10/2017	09/11/2017	0.8500%	11	1,000,000	1,004,222	725	1,004,947	1,004,222	725	1,004,947
Total							10,468,304	10,493,084	(591,123)	9,901,960	10,493,084	(591,123)	9,901,960
Water and Sewer Fund													
W/S Restricted Fund	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	234,139	234,139	0	234,139	234,139	0	234,139
W/S Operations	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	3,675,764	3,675,764	(418,278)	3,257,486	3,675,764	(418,278)	3,257,486
W/S Operations	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	679,811	679,811	855	680,666	679,811	855	680,666
W/S Operations	Money Market	NexBank	08/31/2017	09/01/2017	1.4700%	1	683,606	683,606	303,812	987,418	683,606	303,812	987,418
W/S Operations	Money Market	lexBank 3886	08/31/2017	09/01/2017	1.4700%	1	6,002,680	6,002,680	7,443	6,010,123	6,002,680	7,443	6,010,123
W/S Operations	TexPool	1111-000	03/31/2017	04/01/2017	0.8817%	1	1,003,665	1,003,665	501,154	1,504,819	1,003,665	501,154	1,504,819
W/S	CD	1917	07/25/2017	07/25/2018	1.4500%	328	1,000,000	1,000,000	1,232	1,001,232	1,000,000	1,232	1,001,232
W/S	CD	1918	07/25/2017	10/25/2018	1.5000%	420	1,000,000	1,000,000	1,274	1,001,274	1,000,000	1,274	1,001,274
W/S	CD	1919	07/25/2017	10/25/2019	1.5500%	512	1,000,000	1,000,000	1,316	1,001,316	1,000,000	1,316	1,001,316
W/S	CD	1920	07/25/2017	04/25/2019	1.6000%	602	1,000,000	1,000,000	1,359	1,001,359	1,000,000	1,359	1,001,359
W/S	CD	1921	07/25/2017	07/25/2019	1.7000%	693	2,000,000	2,000,000	2,888	2,002,888	2,000,000	2,888	2,002,888
W/S	CD	1431	01/10/2017	10/10/2017	0.9000%	40	1,000,000	1,004,471	768	1,005,239	1,004,471	768	1,005,239
W/S	CD	1810	06/20/2017	06/20/2018	1.4000%	293	1,000,000	1,010,198	1,201	1,011,399	1,010,198	1,201	1,011,399
Total							20,279,665	20,294,335	405,024	20,699,359	20,294,335	405,024	20,699,359
Capital Project Funds													
Capital Project Funds	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	729,091	729,091	(171,866)	557,225	729,091	(171,866)	557,225
Capital Project Funds	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	41,616	41,616	(9,153)	32,463	41,616	(9,153)	32,463
Capital Project Funds	Money Market	NexBank	08/31/2017	09/01/2017	1.4900%	1	46,029	46,029	(10,148)	35,881	46,029	(10,148)	35,881
2009 GO Bonds	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	2,654,518	2,654,518	107,565	2,762,083	2,654,518	107,565	2,762,083
2009 GO Bonds	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	151,520	151,520	9,396	160,916	151,520	9,396	160,916
2009 GO Bonds	Money Market	NexBank	08/31/2017	09/01/2017	0.2000%	1	167,586	167,586	10,269	177,855	167,586	10,269	177,855
Total							3,790,360	3,790,360	(63,937)	3,726,422	3,790,360	(63,937)	3,726,422
Special Revenue Funds													
Restricted Park Development Fee	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	399,206	399,206	13,864	413,070	399,206	13,864	413,070
Restricted Park Development Fee	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	128,594	128,594	4,263	132,857	128,594	4,263	132,857
Restricted General Fund	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	431,892	431,892	(11,545)	420,347	431,892	(11,545)	420,347
Restricted General Fund	Money Market	BTH	08/31/2017	09/01/2017	1.4900%	1	139,123	139,123	(3,926)	135,197	139,123	(3,926)	135,197
Total							1,098,815	1,098,815	2,656	1,101,472	1,098,815	2,656	1,101,472
Impact Fee Fund													
Restricted Water Impact Fee	Money Market	114512	08/31/2017	09/01/2017	0.2000%	1	309,508	309,508	386,531	696,039	309,508	386,531	696,039

City of Sachse, TX
Investment Portfolios
August 31, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value		
							Principal Invested	Beginning of Month	Change ¹	End of Month	Beginning of Month	End of Month
Street Maintenance Fund	Restricted Water Impact Fee	BTH	08/31/2017	09/01/2017	1.49000%	1	71,117	71,117	259	71,376	71,117	71,376
	Restricted Water Impact Fee	NexBank	08/31/2017	09/01/2017	1.49000%	1	531,139	531,139	1,568	532,707	531,139	532,707
	Restricted Sewer Impact Fee	114512	08/31/2017	09/01/2017	0.20000%	1	303,105	303,105	372,542	675,647	303,105	675,647
	Restricted Sewer Impact Fee	BTH	08/31/2017	09/01/2017	1.49000%	1	69,646	69,646	(361)	69,285	69,646	69,285
	Restricted Sewer Impact Fee	NexBank	08/31/2017	09/01/2017	1.49000%	1	520,150	520,150	(3,049)	517,101	520,150	517,101
	Restricted Roadway Impact Fee	114512	08/31/2017	09/01/2017	0.20000%	1	232,951	232,951	292,386	525,337	232,951	525,337
	Restricted Roadway Impact Fee	BTH	08/31/2017	09/01/2017	1.49000%	1	53,526	53,526	346	53,872	53,526	53,872
	Restricted Roadway Impact Fee	NexBank	08/31/2017	09/01/2017	1.49000%	1	399,762	399,762	2,300	402,062	399,762	402,062
	Impact Fee Fund	1650	04/20/2017	02/20/2018	1.13000%	173	1,000,000	1,002,820	962	1,003,782	1,002,820	1,003,782
	Impact Fee Fund	1651	04/20/2017	03/20/2018	1.15000%	201	1,000,000	1,002,870	979	1,003,849	1,002,870	1,003,849
Health Insurance Fund	Impact Fee Fund	1432	01/10/2017	11/10/2017	0.93000%	71	1,000,000	1,004,621	793	1,005,414	1,004,621	1,005,414
	Impact Fee Fund	236687	12/20/2016	08/21/2017	0.78000%	0	1,000,000	1,004,517	(1,004,517)	0	1,004,517	(1,004,517)
							6,490,904	6,505,731	50,739	6,556,473	6,505,731	6,556,473
Street Maintenance Tax	Street Maintenance Tax	114512	08/31/2017	09/01/2017	0.20000%	1	123,135	123,135	37,927	161,062	123,135	161,062
	Street Maintenance Tax	BTH	08/31/2017	09/01/2017	1.49000%	1	42,530	42,530	53	42,583	42,530	42,583
	Total						165,665	165,665	37,980	203,645	165,665	203,645
Health Insurance	Health Insurance	114512	08/31/2017	09/01/2017	0.20000%	1	417,830	417,830	9,910	427,740	417,830	427,740
	Health Insurance	BTH	08/31/2017	09/01/2017	1.49000%	1	47,502	47,502	59	47,561	47,502	47,561
	Total						465,332	465,332	9,969	475,302	465,332	475,302
EDC PMMKT	EDC PMMKT	114512	08/31/2017	09/01/2017	0.27000%	1	1,639,114	1,639,114	(631,344)	1,007,770	1,639,114	1,007,770
	EDC PMMKT	BTH	08/31/2017	09/01/2017	1.49000%	1	116,114	116,114	146	116,260	116,114	116,260
	EDC PMMKT	NexBank	08/31/2017	09/01/2017	1.47000%	1	321,879	321,879	182	322,061	321,879	322,061
							2,077,108	2,077,108	(631,016)	1,446,091	2,077,108	1,446,091
							45,873,978	45,928,255	(1,363,299)	44,564,956	45,928,255	44,564,956

Summary of Portfolios by Security Type
08/31/17

Security Type	Percent of Total (Book Value)	Average # of days	Average Yield	Book Value			Market Value		
				Principal Invested	Beginning of Month	Change	End of Month	Beginning of Month	End of Month
Money Market Account	55.58%	1	0.9668%	19,645,130	25,647,812	-878,555	24,769,257	25,647,812	24,769,257
TexPool	8.34%	1	0.8817%	3,215,613	3,215,613	502,852	3,718,465	3,215,613	3,718,465
CD's	36.08%	245	1.1838%	12,010,554	17,064,830	-987,596	16,077,234	17,064,830	16,077,234
Total	100.00%			34,871,298	45,928,255	-1,363,299	44,564,956	45,928,255	44,564,956

¹Change = Investment activity including earnings deposits and withdrawals.

City of Sachse, TX
Investment Portfolios
September 30, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value			
							Principal Invested	Beginning of Month	Change ¹	End of Month	Beginning of Month	Change	End of Month
Debt Service													
GO Bond I&S Fund	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	39,142	39,142	6,117	45,259	39,142	6,117	45,259
GO Bond I&S Fund	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	233,849	233,849	285	234,134	233,849	285	234,134
GO Bond I&S Fund	Money Market	NexBank	09/30/2017	10/01/2017	1.4700%	1	181,243	181,243	99	181,342	181,243	99	181,342
Total							454,233	454,233	6,501	460,734	454,233	6,501	460,734
General Fund													
General Fund	TexPool	1111-000	09/30/2017	10/01/2017	1.0151%	1	2,213,646	2,213,646	1,847	2,215,493	2,213,646	1,847	2,215,493
General Fund	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	30,333	30,333	550,262	580,595	30,333	550,262	580,595
General Fund	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	754,522	754,522	918	755,440	754,522	918	755,440
General Fund	Money Market	NexBank	09/30/2017	10/01/2017	1.4700%	1	1,863,977	1,863,977	(498,991)	1,364,986	1,863,977	(498,991)	1,364,986
General Fund	CD	60050001311	11/10/2016	11/10/2017	0.7500%	41	1,003,028	1,008,669	643	1,009,312	1,008,669	643	1,009,312
General Fund	CD	60050001747	05/01/2017	05/10/2018	1.1500%	222	1,007,526	1,010,449	987	1,011,436	1,010,449	987	1,011,436
General Fund	CD	1013	06/20/2016	12/20/2017	1.0000%	81	1,000,000	1,011,735	859	1,012,594	1,011,735	859	1,012,594
General Fund	CD	1649	04/20/2017	01/20/2018	1.1000%	112	1,000,000	1,003,682	937	1,004,619	1,003,682	937	1,004,619
General Fund	CD	1430	01/10/2017	09/11/2017	0.8500%	0	1,000,000	1,004,947	(1,004,947)	0	1,004,947	(1,004,947)	0
Total							9,873,032	9,901,960	(947,485)	8,954,475	9,901,960	(947,485)	8,954,475
Water and Sewer Fund													
W/S Restricted Fund	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	234,139	234,139	1,740	235,879	234,139	1,740	235,879
W/S Operations	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	3,257,486	3,257,486	437,100	3,694,586	3,257,486	437,100	3,694,586
W/S Operations	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	680,666	680,666	829	681,495	680,666	829	681,495
W/S Operations	Money Market	NexBank	09/30/2017	10/01/2017	1.4900%	1	987,418	987,418	3,821	991,239	987,418	3,821	991,239
W/S Operations	Money Market	JexBank 3886	09/30/2017	10/01/2017	1.4700%	1	6,010,123	6,010,123	7,212	6,017,335	6,010,123	7,212	6,017,335
W/S Operations	TexPool	1111-000	03/31/2017	04/01/2017	1.0151%	1	1,504,819	1,504,819	1,256	1,506,075	1,504,819	1,256	1,506,075
W/S	CD	1917	07/25/2017	07/25/2018	1.4500%	298	1,000,000	1,001,232	1,233	1,002,465	1,001,232	1,233	1,002,465
W/S	CD	1918	07/25/2017	10/25/2018	1.5000%	390	1,000,000	1,001,274	1,276	1,002,550	1,001,274	1,276	1,002,550
W/S	CD	1919	07/25/2017	01/25/2019	1.5500%	482	1,000,000	1,001,316	1,319	1,002,635	1,001,316	1,319	1,002,635
W/S	CD	1920	07/25/2017	04/25/2019	1.6000%	572	1,000,000	1,001,359	1,361	1,002,720	1,001,359	1,361	1,002,720
W/S	CD	1921	07/25/2017	07/25/2019	1.7000%	663	2,000,000	2,002,888	2,892	2,005,780	2,002,888	2,892	2,005,780
W/S	CD	1431	01/10/2017	10/10/2017	0.9000%	10	1,000,000	1,005,239	769	1,006,008	1,005,239	769	1,006,008
W/S	CD	1810	06/20/2017	06/20/2018	1.4000%	263	1,000,000	1,011,399	1,203	1,012,602	1,011,399	1,203	1,012,602
Total							20,674,651	20,699,359	462,011	21,161,367	20,699,359	462,011	21,161,367
Capital Project Funds													
Capital Project Funds	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	557,225	557,225	(97,951)	459,274	557,225	(97,951)	459,274
Capital Project Funds	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	32,463	32,463	(2,755)	29,708	32,463	(2,755)	29,708
Capital Project Funds	Money Market	NexBank	09/30/2017	10/01/2017	1.4900%	1	35,881	35,881	(3,068)	32,813	35,881	(3,068)	32,813
2009 GO Bonds	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	2,762,083	2,762,083	(228,127)	2,533,956	2,762,083	(228,127)	2,533,956
2009 GO Bonds	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	160,916	160,916	2,991	163,907	160,916	2,991	163,907
2009 GO Bonds	Money Market	NexBank	09/30/2017	10/01/2017	0.2000%	1	177,855	177,855	3,184	181,039	177,855	3,184	181,039
Total							3,726,422	3,726,422	(325,726)	3,400,696	3,726,422	(325,726)	3,400,696
Special Revenue Funds													
Restricted Park Development Fee	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	413,070	413,070	(1,154)	411,916	413,070	(1,154)	411,916
Restricted Park Development Fee	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	132,857	132,857	(18)	132,839	132,857	(18)	132,839
Restricted General Fund	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	420,347	420,347	(9,839)	410,508	420,347	(9,839)	410,508
Restricted General Fund	Money Market	BTH	09/30/2017	10/01/2017	1.4900%	1	135,197	135,197	344	135,541	135,197	344	135,541
Total							1,101,472	1,101,472	(10,667)	1,090,805	1,101,472	(10,667)	1,090,805
Impact Fee Fund													
Restricted Water Impact Fee	Money Market	114512	09/30/2017	10/01/2017	0.2000%	1	696,039	696,039	(177,356)	518,683	696,039	(177,356)	518,683

City of Sachse, TX
Investment Portfolios
September 30, 2017

Source	Description	Cusip/ Ref	Purchase Date	Maturity Date	Coupon (Int. Rate)	Days to Maturity	Book Value			Market Value			
							Principal Invested	Beginning of Month	Change ¹	End of Month	Beginning of Month	Change	End of Month
Street Maintenance Fund	Restricted Water Impact Fee	BTH	09/30/2017	10/01/2017	1.49000%	1	71,376	71,376	130	71,506	71,376	130	71,506
	Restricted Water Impact Fee	NexBank	09/30/2017	10/01/2017	1.49000%	1	532,707	532,707	184,179	716,886	532,707	184,179	716,886
	Restricted Sewer Impact Fee	114512	09/30/2017	10/01/2017	0.20000%	1	675,647	675,647	(173,900)	501,747	675,647	(173,900)	501,747
	Restricted Sewer Impact Fee	BTH	09/30/2017	10/01/2017	1.49000%	1	69,285	69,285	(114)	69,171	69,285	(114)	69,171
	Restricted Sewer Impact Fee	NexBank	09/30/2017	10/01/2017	1.49000%	1	517,101	517,101	176,378	693,479	517,101	176,378	693,479
	Restricted Roadway Impact Fee	114512	09/30/2017	10/01/2017	0.20000%	1	525,337	525,337	(132,966)	392,371	525,337	(132,966)	392,371
	Restricted Roadway Impact Fee	BTH	09/30/2017	10/01/2017	1.49000%	1	53,872	53,872	221	54,093	53,872	221	54,093
	Restricted Roadway Impact Fee	NexBank	09/30/2017	10/01/2017	1.49000%	1	402,062	402,062	140,245	542,307	402,062	140,245	542,307
	Impact Fee Fund	1650	04/20/2017	02/20/2018	1.13000%	143	1,000,000	1,003,782	964	1,004,746	1,003,782	964	1,004,746
	Impact Fee Fund	1651	04/20/2017	03/20/2018	1.15000%	171	1,000,000	1,003,849	981	1,004,830	1,003,849	981	1,004,830
	Impact Fee Fund	1432	01/10/2017	11/10/2017	0.93000%	41	1,000,000	1,005,414	794	1,006,208	1,005,414	794	1,006,208
							6,543,426	6,556,473	19,556	6,576,028	6,556,473	19,556	6,576,028
Health Insurance Fund	Street Maintenance Tax	114512	09/30/2017	10/01/2017	0.20000%	1	161,062	161,062	26,961	188,023	161,062	26,961	188,023
	Street Maintenance Tax	BTH	09/30/2017	10/01/2017	1.49000%	1	42,583	42,583	52	42,635	42,583	52	42,635
	Total						203,645	203,645	27,013	230,658	203,645	27,013	230,658
EDC Fund	Health Insurance	114512	09/30/2017	10/01/2017	0.20000%	1	427,740	427,740	(85,543)	342,197	427,740	(85,543)	342,197
	Health Insurance	BTH	09/30/2017	10/01/2017	1.49000%	1	47,561	47,561	58	47,619	47,561	58	47,619
	Total						475,302	475,302	(85,485)	389,816	475,302	(85,485)	389,816
EDC PMMKT	Money Market	114512	09/30/2017	10/01/2017	0.27000%	1	1,007,770	1,007,770	(745,659)	262,111	1,007,770	(745,659)	262,111
	Money Market	BTH	09/30/2017	10/01/2017	1.49000%	1	116,260	116,260	142	116,402	116,260	142	116,402
	Money Market	NexBank	09/30/2017	10/01/2017	1.47000%	1	322,061	322,061	176	322,237	322,061	176	322,237
							1,446,091	1,446,091	(745,341)	700,750	1,446,091	(745,341)	700,750
							44,498,274	44,564,956	(1,599,622)	42,965,329	44,564,956	(1,599,622)	42,965,329

Summary of Portfolios by Security Type
09/30/17

Security Type	Percent of Total (Book Value)	Average # of days	Average Yield	Principal Invested	Book Value			Market Value		
					Beginning of Month	Change	End of Month	Beginning of Month	Change	End of Month
Money Market Account	56.22%	1	0.9668%	18,759,132	24,769,257	-613,996	24,155,257	24,769,257	-613,996	24,155,257
TexPool	8.66%	1	1.0151%	3,718,465	3,718,465	3,103	3,721,568	3,718,465	3,103	3,721,568
CD's	35.12%	249	1.2107%	11,010,554	16,077,234	-988,729	15,088,505	16,077,234	-988,729	15,088,505
Total	100.00%			33,488,151	44,564,956	-1,599,622	42,965,329	44,564,956	-1,599,622	42,965,329

¹Change = Investment activity including earnings deposits and withdrawals.



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4104 **Version:** 1 **Name:** Monthly Budget October 2017
Type: Agenda Item **Status:** Agenda Ready
File created: 12/13/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Accept the Monthly Revenue and Expenditure Report for the period ending October 31, 2017.
Sponsors:
Indexes:
Code sections:
Attachments: [GF 10-31-17](#)
[UF 10-31-17](#)
[DS 10-31-17](#)
[SEDC 10-31-17](#)
[Sales Tax Analysis Dec 17](#)

Date	Ver.	Action By	Action	Result
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Title

Monthly Revenue and Expenditure Report for the period ending October 31, 2017.

Background

The Finance Department prepares a report each month to update the City Council regarding revenues and expenditures for the City. Included in the report are unaudited summaries for the General Fund, Utility Fund, Debt Service Fund, and Sachse Economic Development Corporation for the period ended October 31, 2017, as well as an analysis of sales tax revenues received year-to-date.

Policy Considerations

City Charter requires that the City Manager submit monthly a report covering revenues and expenditures.

Staff Recommendations

Accept the Monthly Revenue and Expenditure Report for the period ending October 31, 2017.

City of Sachse
Monthly Revenue and Expenditure Report
October 31, 2017
(Unaudited)

GENERAL FUND

8% of Year Completed

	Annual Budget	Current Month Actual	Actual YTD	YTD Actual as a Percent of Budget	Note Reference 8%
Revenue Summary					
Property Tax	\$ 11,107,591	\$ 228,462	\$ 228,462	2.06%	A
Sales Tax	1,434,000	109,723	109,723	7.65%	
Franchise Fees	1,694,233	223,911	223,911	13.22%	
Licenses and Permits	615,500	54,393	54,393	8.84%	
Service Fees	676,000	24,881	24,881	3.68%	
Fines	250,000	19,767	19,767	7.91%	
Interest Income	25,000	5,260	5,260	21.04%	
Miscellaneous Income	281,118	35,496	35,496	12.63%	
Intergovernmental Revenue	1,078,989	89,916	89,916	8.33%	
Total Revenue	\$ 17,162,431	\$ 791,809	\$ 791,809	4.61%	
Expenditure Summary					
City Manager	\$ 409,060	\$ 33,723	\$ 33,723	8.24%	B
City Secretary	166,672	32,588	32,588	19.55%	
Human Resources	361,047	31,537	31,537	8.73%	
Finance	546,930	77,249	77,249	14.12%	
Municipal Court	245,179	17,865	17,865	7.29%	
Parks & Recreation	1,660,984	85,110	85,110	5.12%	
Senior Programs	151,626	11,643	11,643	7.68%	
Library Services	470,203	54,824	54,824	11.66%	
Community Development	879,108	87,056	87,056	9.90%	
Streets & Drainage	1,944,286	107,423	107,423	5.53%	
Facility Maintenance	539,325	37,557	37,557	6.96%	
Police	5,123,381	544,262	544,262	10.62%	
Animal Control	220,972	19,609	19,609	8.87%	
Fire/EMS	4,047,667	431,766	431,766	10.67%	
Combined Services	389,672	166,988	166,988	42.85%	
City Engineer	241,594	23,806	23,806	9.85%	
Information Technology	428,270	24,307	24,307	5.68%	
Total Expenditures	\$ 17,825,976	\$ 1,787,313	\$ 1,787,313	10.03%	
Total Revenue Over/Under Expenses	\$ (663,545)	\$ (995,504)	\$ (995,504)		

Explanation of Major Variances:

- A** Property Tax receipts peak in December and January
B Total annual property and liability premium paid in October

City of Sachse

Monthly Revenue and Expenditure Report

October 31, 2017

(Unaudited)

UTILITY FUND

8% of Year Completed

	Annual Budget	Current Month Actual	Actual YTD	YTD Actual as a Percent of Budget	Note Reference 8%
Revenue Summary					
Water Revenue	\$ 6,204,912	\$ 689,332	\$ 689,332	11.11%	
Sewer Revenue	4,565,736	386,563	386,563	8.47%	
Fees	158,500	18,789	18,789	11.85%	
Interest Income	10,000	18,520	18,520	185.20%	
Transfer In-Debt Service					
Miscellaneous Income	-				
Total Revenue	\$ 10,939,148	\$ 1,113,203	\$ 1,113,203	10.18%	
Expenditure Summary					
Utility Administration	\$ 350,365	\$ 19,916	\$ 19,916	5.68%	
Water Operations	7,822,028	128,640	128,640	1.64%	A
Sewer Operations	15,687,032	97,741	97,741	0.62%	A
Meter Reading	2,457,045	20,593	20,593	0.84%	A
Total Expenditures	\$ 26,316,470	\$ 266,889	\$ 266,889	1.01%	
Total Revenue Over/Under Expenses	\$ (15,377,322)	\$ 846,314	\$ 846,314		

Explanation of Major Variances:

A Budget includes capital allocations

Monthly Revenue and Expenditure Report
October 31, 2017
(Unaudited)

Debt Service Fund

8% of Year Completed

	Annual Budget	Current Month Actual	Actual YTD	YTD Actual as a Percent of Budget	Note Reference 8%
Revenue Summary					
Property Tax	\$ 3,522,138	\$ 80,196	\$ 80,196	2.28%	
Interest Income	1,000	-	-	0.00%	
Miscellaneous Receipts		3,393	3,393		
Total Revenue	\$ 3,523,138	\$ 83,589	\$ 83,589	2.37%	
Expenditure Summary					
Fees	\$ 3,500	\$ 1,050	\$ 1,050	30.00%	
Principal	2,330,000	-	-	0.00%	A
Interest	1,433,496			0.00%	A
Transfer Out-Utility Fund					
Total Expenditures	\$ 3,766,996	\$ 1,050	\$ 1,050	0.03%	
Total Revenue Over/Under Expenses	\$ (243,858)	\$ 82,539	\$ 82,539		

A Principal payments are due in February and interest payments in February and August

City of Sachse

Monthly Revenue and Expenditure Report

October 31, 2017

(Unaudited)

SACHSE ECONOMIC DEVELOPMENT CORPORATION

8% of Year Completed

	Annual Budget	Current Month Actual	Actual YTD	YTD Actual as a Percent of Budget	Note Reference 8%
Revenue Summary					
Sales Tax	\$ 700,000	\$ 54,861	\$ 54,861	7.84%	A
Other Income	\$ -	\$ -	\$ -		
Interest Income	1,500	37	37	2.44%	
Total Revenue	\$ 701,500	\$ 54,898	\$ 54,898	7.83%	
Expenditure Summary					
Expenditures	701,609	28,995	28,995	4.13%	
Total Expenditures	\$ 701,609	\$ 28,995	\$ 28,995	4.13%	
Total Revenue Over/Under Expenses	\$ (109)	\$ 25,903	\$ 25,903		

Explanation of Major Variances:

CITY OF SACHSE

2017/2018 SALES TAX ANALYSIS

	Total	General Fund	General Fund	YTD Percent		Total	General Fund	General Fund	YTD Percent
FY 2017	Sales Tax	Sales Tax	Year-To-Date	of Budget	FY 2018	Sales Tax	Sales Tax	Year-To-Date	of Budget
October	204,011	116,572	116,572	9.56%	October	192,025	109,723	116,572	9.56%
November	269,073	153,748	270,320	19.53%	November	419,139	239,496	356,068	25.43%
December	195,780	111,868	382,188	27.62%	December	192,626	110,067	466,135	33.30%
January	198,694	113,534	495,722	35.82%	January				
February	295,944	169,102	664,824	48.04%	February				
March	202,397	115,649	780,473	56.40%	March				
April	169,232	96,699	877,172	63.38%	April				
May	248,537	142,014	1,019,186	73.65%	May				
June	190,343	108,762	1,127,948	81.51%	June				
July	196,493	112,276	1,240,224	89.62%	July				
August	265,411	151,656	1,391,880	100.58%	August				
September	188,666	107,804	1,499,683	108.37%	September				
TOTAL	2,624,580	1,499,683			TOTAL	803,790	459,286		
BUDGET		1,383,888			BUDGET		1,400,000		



City of Sachse, Texas

Legislation Details (With Text)

File #:	17-4107	Version:	1	Name:	NCTCOG Presentation
Type:	Agenda Item	Status:		Status:	Agenda Ready
File created:	12/15/2017	In control:		In control:	City Council
On agenda:	12/18/2017	Final action:		Final action:	
Title:	Discuss partnership with the North Central Texas Council of Governments (NCTCOG) to fund transportation improvements to Merritt Road and the offset intersection of Merritt Road and Woodbridge Parkway.				

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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Title

Discuss partnership with the North Central Texas Council of Governments (NCTCOG) to fund transportation improvements to Merritt Road and the offset intersection of Merritt Road and Woodbridge Parkway.

Background

As the growth of Sachse and our region has increased over the past several years, the need for improvements to Merritt Road has become more apparent. In particular, the dangerous off-set intersection at Sachse Road, where Merritt Road and Woodbridge Parkway do not intersect, has been shown to cause both transportation safety problems and significant traffic congestion. In addition, this congestion is also impacting the residents that live on Merritt Road, as making a left turn onto Sachse Road has become nearly impossible during peak traffic times.

On March 6, 2017, the City Council approved a new Comprehensive Plan for the City of Sachse. The top recommendation in the plan was improvements to the Merritt Road corridor - for safety, traffic efficiencies, and as a direct need for commercial development along the PGBT corridor.

On March 31, 2017, City staff attended a presentation by the NCTCOG regarding potential transportation improvements in Collin County. In April 2017, the City Manager and Director of Public Works and Engineering met with Michael Morris, the NCTCOG Executive Director of Transportation and his staff. At that meeting, City staff presented the Merritt Road alignment project to the NCTCOG staff, in hope of receiving NCTCOG funding for the project. NCTCOG staff posed the concept of not only funding the Merritt Road alignment but also the potential for funding the widening of Merritt Road to the PGBT. Since the April meeting, City staff have provided to the NCTCOG additional information including: cost estimates, traffic and accident data and pre-engineering for the alignment prepared in 2012. NCTCOG staff have continued to refine the traffic models and data as well as hold meetings with staff and elected officials in Dallas County and Collin County to present the project and opportunities for funding partnership on the entire project.

On September 18, 2017, the City Council approved funding for design and construction of the alignment of Merritt Road and Woodbridge Parkway ONLY. The project the NCTCOG will present to the City Council tonight is for funding the alignment project as well as the reconstruction of Merritt Road from the alignment project to the PGBT.

Policy Considerations

Consideration of the reconstruction of Merritt Road to the PGBT in addition to the alignment project.

Budgetary Considerations

Partnership with the NCTCOG will allow for funding from Dallas County and the NCTCOG thereby significantly reducing the City of Sachse's financial participation in a \$21 million project.

Staff Recommendations

No recommendation. This item is for presentation by Michael Morris, Executive Director of Transportation for the NCTCOG.



City of Sachse, Texas

Legislation Details (With Text)

File #:	17-4105	Version:	1	Name:	No U-Turn signs on Miles Road for Hunters Ridge Drive.
Type:	Agenda Item	Status:		Status:	Agenda Ready
File created:	12/14/2017	In control:		In control:	City Council
On agenda:	12/18/2017	Final action:			
Title:	Consider an ordinance directing the City Manager to erect No U-Turn signs for northbound and southbound traffic on Miles Road at Hunters Ridge Drive.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	Location Map Ordinance				

Date	Ver.	Action By	Action	Result
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Title

No U-Turn signs for northbound and southbound traffic on Miles Road at the median opening for Hunters Ridge Drive

Background

City staff has witnessed drivers attempt to make a U-Turn on Miles Road at Hunters Ridge Drive at the main entrance into Sachse High School. Miles Road is a 4-lane divided road, and larger vehicles are unable to make this turning movement. This results in vehicles coming to a near stop and reversing course in the intersection when they are unable to complete the turning movement.

The City Engineer and City Manager have reviewed the situation and received input and recommendations from the Sachse Police Department, Sachse High School executive staff, and the traffic engineer that completed the design of the traffic and pedestrian improvements in front of Sachse High School.

There are intersections along Miles Road to the north and south of this intersection, where there are less turning movements, and a U-turn maneuver is more practical and safer to make. In particular, this is true at the intersection of Rosewood Circle and at the median break in Miles Road between Bunker Hill Road and Hudson Drive.

Creating an enforceable No U-Turn for the northbound and southbound traffic on Miles Road at Hunters Ridge Drive will achieve the goal of reducing the impediments to traffic of motorists attempting to enter the Sachse High School property.

If the ordinance is adopted by the City Council, staff will install the appropriate signage and work with the City Secretary and Police Department staff to publicly notify the community and provide education to motorists.

Policy Considerations

Provide for efficient movement of traffic into Sachse High School.

Budgetary Considerations

The City of Sachse will be responsible for the purchase and installation of the sign. The material cost is anticipated to be \$150.00. The funds for the materials will come from the Public Works Street Maintenance budget. Public Works staff will install the sign.

Staff Recommendations

Approve adopting an ordinance of the City of Sachse, Texas, directing the City Manager to erect No U-Turn signs for northbound and southbound traffic on Miles Road at the median opening for Hunters Ridge Drive; providing a repealing clause; providing a severability clause; and providing an effective date.

Location Map

Proposed



Miles Road

Hunters Ridge Drive

Sachse High School

Proposed



Briarcrest Ln

Haverhill Ln

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF SACHSE, TEXAS, DIRECTING THE CITY MANAGER TO ERECT NO U-TURN SIGNS FOR NORTHBOUND AND SOUTHBOUND TRAFFIC ON MILES ROAD AT THE MEDIAN OPENING FOR HUNTERS RIDGE DRIVE; PROVIDING A REPEALING CLAUSE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, The Code of Ordinances of the City of Sachse provides that the City Manager shall install traffic control devices when directed to do so by ordinance of the City Council ; and

WHEREAS, the City Council has determined that, to protect the health and safety of its citizens, no u-turn signs should be erected in the median of Miles Road, at the median opening for Hunters Ridge Drive;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SACHSE, TEXAS, THAT:

SECTION 1. The City Council hereby designates no u-turn signs in the median of Miles Road at Hunters Ridge Drive, and such no u-turn signs to conform to the manual and specification adopted under Texas Transportation Code § 544.001 and located in accordance with Texas Transportation Code § 544.003.

SECTION 2. All provisions of the Ordinances of the City of Sachse, Texas, in conflict with the provisions of this ordinance are hereby repealed, and all other provisions not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 3. If any article, paragraph, subdivision, clause or provision of this ordinance be adjudged invalid or held unconstitutional for any reason, such judgment or holding shall not affect the validity of this ordinance as a whole or any part or provision thereof, other than the part so declared to be invalid or unconstitutional.

SECTION 4. This ordinance shall take effect immediately from and after its passage, and publication of the caption, as the law and charter in such cases provide.

DULY RESOLVED AND PASSED by the City Council of the City of Sachse, Texas, the _____
day of _____, 2017.

CITY OF SACHSE, TEXAS

Mike J. Felix, Mayor

DULY ENROLLED:

Michelle Lewis Sirianni, City Secretary



City of Sachse, Texas

Legislation Details (With Text)

File #: 17-4103 **Version:** 1 **Name:** Fire Truck
Type: Agenda Item **Status:** Agenda Ready
File created: 12/12/2017 **In control:** City Council
On agenda: 12/18/2017 **Final action:**
Title: Presentation of new Fire Truck.

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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Title

Fire Truck

Background

The purchase of this fire truck was presented and approved to replace the existing 75 Ft American LaFrance Quint (Truck 1). The new 107 Ft Pierce Ascendant Quint is a state of the art piece of equipment that ensures effective, efficient, and reliable response and suppression capabilities. It also includes a Compressed Air Foam System (CAFS) that applies directly toward the ISO Rating.

Policy Considerations

None.

Budgetary Considerations

Funds were budgeted in the Vehicle and Equipment Replacement Fund (VERF) for the purchase of the vehicle.

Staff Recommendations

Presentation only.



City of Sachse, Texas

Legislation Details (With Text)

File #:	17-4102	Version:	1	Name:	Executive Session: Real Property
Type:	Agenda Item	Status:		Status:	Agenda Ready
File created:	12/12/2017	In control:		In control:	City Council
On agenda:	12/18/2017	Final action:		Final action:	
Title:	The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.072: Deliberation of the sale of real property generally located along SH 78.				

Consider any action as a result of Executive Session.

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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Title

Executive Session pursuant to the Texas Government Code, Section §551.072

Background

This agenda item is provided for the City Council to meet in Executive Session to deliberate sale of real property generally located along SH 78.

Policy Considerations

None.

Budgetary Considerations

None.

Staff Recommendations

Conduct Executive Session and take any action appropriate.



City of Sachse, Texas

Legislation Details (With Text)

File #:	17-4099	Version:	1	Name:	Executive session- City Manager review
Type:	Agenda Item	Status:		Status:	Agenda Ready
File created:	12/11/2017	In control:		In control:	City Council
On agenda:	12/18/2017	Final action:		Final action:	
Title:	The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.074: Personnel: regarding the mid-year review of the City Manager.				

Consider any action as a result of Executive Session.

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
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Title

The City Council shall convene into Executive Session pursuant to the Texas Government Code, Section §551.074: Personnel: regarding the mid-year review of the City Manager.

Background

The City Council annually performs a mid-year review of the City Manager.

Policy Considerations

None

Budgetary Considerations

None

Staff Recommendations

Conduct Executive Session as appropriate.