

STATE OF TEXAS
CITY OF FRIENDSWOOD
COUNTIES OF
GALVESTON/HARRIS
FEBRUARY 3, 2020



AGENDA

NOTICE IS HEREBY GIVEN OF A FRIENDSWOOD CITY COUNCIL REGULAR MEETING TO BE HELD AT 6:00 PM ON MONDAY, FEBRUARY 3, 2020, AT FRIENDSWOOD CITY HALL, COUNCIL CHAMBERS, 910 S. FRIENDSWOOD DRIVE, FRIENDSWOOD, TEXAS, REGARDING THE ITEMS OF BUSINESS ACCORDING TO THE AGENDA LISTED BELOW:

6 PM – REGULAR MEETING

1. Call to order
2. Invocation – Mike Cervantes, New Hope Church
3. Pledge of Allegiance to the United States and Texas Flags – Makayla Dicely and Logan Kleinpeter with Girl Scout Daisy Troop #143155
(HONOR THE TEXAS FLAG; I PLEDGE ALLEGIANCE TO THEE, TEXAS, ONE STATE UNDER GOD, ONE AND INDIVISIBLE)
4. Communications from the Public
Communications from the Public (To comply with provisions of the Open Meetings Act, the City Council may not deliberate on items discussed under this agenda item. The Council may refer this item to the City Manager or direct this item to be placed on the next regular Council agenda. Out of respect for those speaking during public comment, please refrain from any outbursts or interjections to include, but not limited to, applause and/or disparaging noises from the audience. Doing so discourages others from voicing their thoughts and opinions, and disrupts the meeting. Furthermore, any personnel complaints against a City employee aside from the City Manager, City Secretary, City Attorney or Municipal Judge cannot be discussed under this section. Please contact the City Manager's office for concerns involving a City employee.)
5. **WORK SESSION**
 - A. Capital Improvement Projects and Drainage Update
6. **CLOSED EXECUTIVE SESSION**
 - A. Communications from the Public regarding Executive Session topics.

- B. Council may convene into Executive Session in accordance with Texas Government Code, pursuant to Section 551.087: Deliberation regarding economic development negotiations; to deliberate the offer of a financial or other incentive to a business prospect with possible discussion and action related thereto in open session.

7. RECONVENE INTO OPEN SESSION

8. Special Recognition and Acknowledgements

- A. Platinum Scenic City Designation presented by Scenic Houston Finance Chair Derrick Mitchell

9. Public Hearing

To receive comments from the public, both oral and written, regarding:

- A. To review the City of Friendswood Infrastructure application for the Community Development Block Grant - Disaster Recovery (CDBG-DR) funds for Hurricane Harvey and the allocation of \$2,691,517 to the city for infrastructure projects. The U.S. Department of Housing and Urban Development (HUD) allocated the State of Texas \$5.024 Billion in CDBG-DR funding through the Texas General Land Office (GLO). Of which, the HGAC has developed a MOD to allocate more than \$240 million of funding to local cities.

10. Communications from the Public

Communications from the Public (To comply with provisions of the Open Meetings Act, the City Council may not deliberate on items discussed under this agenda item. The Council may refer this item to the City Manager or direct this item to be placed on the next regular Council agenda. PowerPoint presentations are not conducted during the citizen comment period. Out of respect for those speaking during public comment, please refrain from any outbursts or interjections to include, but not limited to, applause and/or disparaging noises from the audience. Doing so discourages others from voicing their thoughts and opinions, and disrupts the meeting. Furthermore, any personnel complaints against a City employee aside from the City Manager, City Secretary, City Attorney or Municipal Judge cannot be discussed under this section. Please contact the City Manager's office for concerns involving a City employee.)

11. City Manager's Report

- A. Keep Friendswood Beautiful Tree Giveaway Results
- B. Hurricane Harvey Update

12. Communications from Committees and Special Reports

- A. Annual Report from the Animal Shelter Advisory Committee

13. Discussion and Possible Action

- A. Discussion and possible action regarding approving an Economic Development Agreement with Coastal Bend Property Development, LP. and Contractor.
- B. Discussion and possible action regarding approving an inter-local cooperation contract with Texas Department of Public Safety Galveston County for Failure to Appear (FTA) Program of the Friendswood Municipal Court.

14. Resolutions

Consideration and possible action regarding the following:

- A. Resolution No. R2020-01: A resolution of the City Council of the City of Friendswood, Texas, designating the Mayor as the City's representative in seeking eligible grant funds under General Victim Assistance Direct Services Program; and authorizing the submission of such grant application to the Criminal Justice Division of the Office of Governor.
- B. Resolution No. R2020-02: A resolution of the City of Friendswood, Texas, authorizing aerial spraying over Friendswood by the Galveston County Mosquito Control District for the County-Wide Mosquito Control Program.
- C. Resolution No. R2020-03: A resolution of the City Council of the City of Friendswood, Texas, amending and replacing Resolution No. R2019-24 with this resolution; authorizing and approving the 2018 Community Development Block Grant – Disaster Recovery (CDBG-DR); designating authorized officials and approving and implementing a citizen participation plan.

15. Ordinances

Consideration and possible action regarding the following:

- A. Ordinance No. T2020-01: Second and Final reading of an ordinance repealing Ordinance No. 97-20, Ordinance No. 2000-06, Ordinance No. 2003-17, that adopted and amended the Municipal Court Building Security Fund and the Municipal Court Building Technology Fund.
- B. Ordinance No. T2020-03: Second and Final reading of an ordinance amending Appendix B, "Subdivision Ordinance," "Section III.k.3 – Sidewalks" to add exceptions to sidewalk requirements for existing residential subdivisions; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.

- C. Ordinance No. T2020-04: Second and Final reading of an ordinance amending Appendix C “Zoning Ordinance,” “Sections 7. Schedule of District Regulations,” “Section 7.5. Community Overlay District,” and “Section 8. N. Downtown District Supplemental Requirements” to change building material requirements per House Bill 2439; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.
- D. Ordinance No. T2020-05: Second and Final reading of an ordinance amending Appendix C, “Zoning,” Section 3. “Provision for Official Zoning Map,” to update and adopt the Official Zoning Map of the city, incorporating approved changes in district boundaries and other matters portrayed on the Official Zoning Map; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances in conflict herewith; and providing for severability.
- E. Ordinance No. T2020-06: First and Final reading of an ordinance of the City Council of the City of Friendswood, Texas, calling for the holding of a General Election on May 02, 2020, for the purpose of electing two (2) Councilmembers (Position Numbers 2 and 5); ordering a Runoff Election on June 13, 2020, if necessary; and making other provisions related to the subject.
- F. Ordinance No. T2020-07: First and Final reading an ordinance of the City Council of the City of Friendswood, Texas, calling for the holding of a Special Election on May 02, 2020, for the purpose of reauthorizing the local sales and use tax at the rate of three-eighths (3/8) of one percent (1%) to continue providing revenue for maintenance and repair of municipal streets; and making other provisions related to the subject.
- G. Ordinance No. T2020-08: First reading of an ordinance granting to CenterPoint Energy Resources Corp., DBA CenterPoint Energy Texas Gas Operations, the right, privilege and franchise to construct, install, extend, remove, replace, abandon, operate and maintain its facilities within the public rights-of-way of the City of Friendswood, Texas, for the transportation, delivery, sale and distribution of natural gas; providing for a term of 30 years; containing other provisions relating to the foregoing subject; providing for severability and providing an effective date.
- H. Ordinance No. T2020-09: First and Final reading of an ordinance amending City of Friendswood, Texas, Ordinance No. 2019-38, passed and approved October 7, 2019, same being an ordinance approving and adopting the City’s General Budget for Fiscal Year 2019-2020 by approving “Budget Amendment III” to the “Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2019-2020”; providing for supplemental appropriation and/or transfer of certain funds; providing for severability; and providing other matters related to the subject.

16. Communications from the Mayor and Councilmembers

17. Consent Agenda

Consideration and possible action regarding the following:

- A. Ratify the Mayor's signature on a contract transferring ownership of retired K-9 Officer Ajay from the Friendswood Police Department to Officer Brandon Blair
- B. Approve the purchase of a vac-truck and skid steer for the Public Works Department
- C. Approving a Memorandum of Understanding (MOU) with Clear Creek Community Church to define limits and perform drainage modeling of possible drainage project
- D. Approving water line, sewer line, lift station, and drainage easements on FM 528 from Clear Creek Community Church
- E. Approving the disposal of two decommissioned police vehicles through Houston Auto Auction
- F. Approve the December 2019 Tax Report
- G. Approving the minutes of the January 6, 2020, Council Meeting

18. Adjournment

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive service must be made two (2) business days or more prior to this meeting. Please contact the City Secretary's Office at (281) 996-3270 for further information.

I, MELINDA WELSH, CITY SECRETARY OF THE CITY OF FRIENDSWOOD DO HEREBY CERTIFY THAT THE ABOVE NOTICE OF MEETING OF THE FRIENDSWOOD CITY COUNCIL WAS POSTED IN A PLACE CONVENIENT TO THE GENERAL PUBLIC IN COMPLIANCE WITH CHAPTER 551, TEXAS GOVERNMENT CODE, ON

DATE

AT TIME

**MELINDA WELSH, TRMC
CITY SECRETARY**

****All meetings of City Council are open to the public, except when there is a necessity to meet in an Executive Session (closed to the public) under the provisions of Section 551, Texas Government Code. The City Council reserves the right to convene into Executive Session to hear any of the above described agenda items that qualify for an executive session by publicly announcing the applicable section number of the Open Meetings Act.**

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/7/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Capital Improvement Projects and Drainage Update

Originating Department: Engineering

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

The City Council will be updated on the latest news regarding ongoing Capital Improvement Projects in the City. Updates will include projects such as the Blackhawk Boulevard Phase II-A Project, the rehabilitation of Lift Station #23, the 2019-2020 Street Maintenance Program, flood mitigation efforts, and more.

The update will be in the form of a Power Point presentation to be provided at the Council Meeting.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

1. CIP Update
2. CIP-Drainage Update

City of Friendswood

Capital Improvement Projects Update

February 2020

2018-2019 Street Maintenance Program



In the process of being closed
out

Crack seal only item remaining

Final acceptance anticipated by
March

2019-2020 Street Maintenance Program



Notice to Proceed given
to Contractor

\$4 Million in 2020

3/8th cent sales tax

2019-2020 Street Maintenance Program

First streets will be concrete

Asphalt streets will begin as weather warms

1st list of streets released

2019-2020 Street Maintenance Program

First streets will be concrete

Asphalt streets will begin as weather warms

1st list of streets to be repaired released

2019-2020 Street Maintenance Program



Engineering staff investigating pilot program for pavement preservation

Preservation would help keep high PCI values

Work in addition to the \$4 million contract

Blackhawk Boulevard Phase II



Construction:
\$4.5MM

Expended:
\$3.9MM

Blackhawk Boulevard Phase II



Majority of road reopened

Remaining work located
near Friendswood Link
Road

Anticipated finish late
March

Lift Station #23 (FM 518 & Oak Dr.)

Construction: \$3.2MM



Notice to Proceed:
February 1, 2020

Expected
Construction: 9-12
months

Other Agency Projects

HARRIS COUNTY

Beamer Road/FM 2351 Intersection Upgrades

Installation of water line completed

Road work to commence in February

Other Agency Projects

Texas Department of Transportation

FM 518 Medians

Pre-construction meeting to be held soon, work soon thereafter

FM 518 Curb Ramp, Sidewalk, & Traffic Signal Upgrades \$3.5 Million

Surveying work under way, design work beginning
Let in February 2021

Questions

City of Friendswood Drainage Update

February 3, 2020

Samantha Haritos – Deputy Director of Engineering

sharitos@friendswood.com

281-996-3297



Coordination/Partnering



Galveston County
Consolidated Drainage
District



Coordination/Partnering

HCFCDD

- City staff corresponding with HCFCDD regarding requirements for joint projects
- Forest Bend Detention project possibly expanded if H&H modeling meets HCFCDD requirements
- Currently working with HCFCDD Meteorologist for additional stream gauges in Clear Creek Watershed

GCCDD

- Multiple inter-agency meetings
- City assisting GCCDD by providing in-house modeling of Imperial Estates project
- 300+ acre-feet removed to date at Imperial Estates

Rice University

- City Staff meeting with Dr. Bedient 1/28

Coordination/Partnering

Galveston County

- Galveston County updating its Master Drainage Plan

Houston-Galveston Area Council

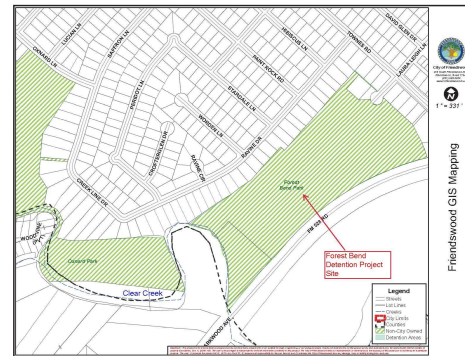
- H-GAC providing Benefit-Cost Analysis tools for CDBG and other grants

Lower Clear Creek and Dickinson Bayou Federal Study (League City Study)

- Attended first stakeholder meeting (12/11)
- Public meetings will begin soon (COF citizens encouraged to attend)

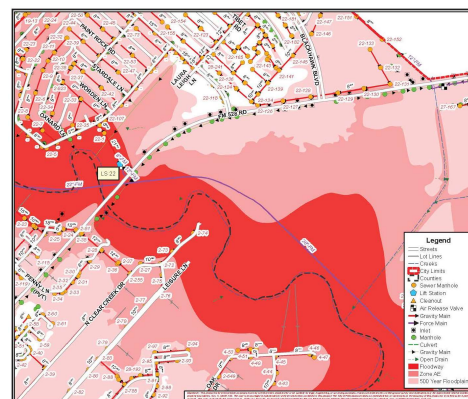
Forest Bend Detention

- Awarded CDBG-DR Grant for \$3,451,022
- HCFCDD owns ROW and infrastructure along two existing storm drains
- Consultant to model offline detention basin
 - Modeling Alternative I – Design detention for CDBG funding (original submission for approximately 7 acre footprint)
 - Modeling Alternative II – Optimize project for entire 17 acre park site with terracing option
- Timeline
 - Environmental/Engineering RFP in Spring 2020
 - Construction RFP in Spring 2021/Summer 2021



Clear Creek Community Church (Whitcomb Property) Terracing

- Memorandum of Understanding to be considered in Council's Consent Agenda for modeling
- Wetland mitigation is anticipated
- Engineering consultant to perform H&H design/impact analysis (HEC-HMS/HEC-RAS) to maximize terracing in the floodway, determine any needed mitigation, and provide Opinion of Probable Cost for a project at this location



Master Drainage Plan

- State Proposition 8 passed November 2018 providing \$793 million for a Flood Infrastructure Fund
- Fund to be used by the Texas Water Development Board (TWDB) for grant projects related to flood drainage, mitigation, and control
- City to submit an abridged application to fund an update to the City's Master Drainage Plan

Master Drainage Plan

- Possible benefits of updated Drainage Plan:
 - Assessment of localized street drainage problems
 - Real estate plan
 - Benefit/Cost Assessment
 - Detailed H&H Modeling
 - Mitigation for Environmental Impacts or Projects with Downstream Impacts
 - Prioritization of Projects
- Timeline
 - TWDB Grant application anticipated Spring 2020
 - If awarded, Plan update could begin in Spring or Summer 2021
- Additional projects identified through Master Drainage Plan could utilize bond money, grant money, and partnering opportunities

Questions

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

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Date requested for City Council consideration: February 3, 2020

Date submitted: 1/15/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Communications from the Public regarding Executive Session topics.

Originating Department: City Attorney

Degree of importance: Choose an Option

SUMMARY / ORIGINATING CAUSE

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

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Subject: Council may convene into Executive Session in accordance with Texas Government Code, pursuant to Section 551.087: Deliberation regarding economic development negotiations; to deliberate the offer of a financial or other incentive to a business prospect with possible discussion and action related thereto in open session.

Originating Department: City Attorney

Degree of importance: Choose an Option

SUMMARY / ORIGINATING CAUSE

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FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

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Date requested for City Council consideration: February 3, 2020

Date submitted: 1/6/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Platinum Scenic City Designation presented by Scenic Houston Finance Chair Derrick Mitchell

Originating Department: Community Development

Degree of importance: Elective

SUMMARY / ORIGINATING CAUSE

Derrick Mitchell, Finance Chair of Scenic Houston will be present to recognize the City's re-certification from Bronze Status to Platinum Status.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The mission of the Scenic City Certification Program is to support and recognize Texas municipalities that implement high-quality scenic standards for public roadways and public spaces.

On July 16, 2019 the City was recognized as 1 of 22 Texas Cities award recipients through the Scenic City Certification Program. A reception was held on October 10, 2019 to award the City with the Certified Scenic City Platinum status designation making an impressive jump from the previous Bronze status.

Following the award the City has installed new "Certified Scenic City Platinum" signage at some of the main entries to the City.

RECOMMENDATIONS

ATTACHMENTS

1. 22 TEXAS CITIES EARN PROMINENT SCENIC CITY CERTIFICATION IN 2019 – Scenic City Certification
2. SC photo certificate 2



22 TEXAS CITIES EARN PROMINENT SCENIC CITY CERTIFICATION IN 2019

Posted on July 19, 2019 at 3:21 pm.

Written by [Scenic City](https://sceniccitycertification.org/author/scenic-city/) (https://sceniccitycertification.org/author/scenic-city/)

HOUSTON, TX – July 16, 2019 – Today, 22 Texas cities have been recognized as 2019 Certified Scenic City award recipients through the Scenic City Certification Program, a program of Scenic Texas and its 17 partner organizations. The Scenic City Certification Program recognizes cities for their demonstrated commitment to high-quality scenic standards for public roadways and spaces. Nine cities have earned certification for the first time and 13 are re-certifying or upgrading existing status, bringing the total number of certified cities across Texas to 83.

The Scenic City Certification Program, is a nationally recognized one-of-a-kind model, developed to provide communities with a comprehensive set of standards and evaluations for the design and development of public roadways and spaces. Any Texas city may apply to the Scenic City Certification Program for an objective review of its existing municipal infrastructure ordinances as they relate to the model standards. Assessment is points-based, and every city applicant receives a detailed, scored evaluation that identifies both strengths and areas for improvement. Official certification is earned by cities that score points in the upper range and meet threshold standards for landscaping, tree planting, and sign regulation.

"Through the Scenic City Certification Program, cities access a low cost, high rate-of-return diagnostic tool," said Sarah Tober, Scenic Texas Executive Director. "The detailed evaluation of existing infrastructure standards provides cities with a roadmap for future growth and development. As municipalities continue to aspire to certification and our highest level of recognition, platinum, it is a reflection of communities working to make a more scenic Texas for citizens and visitors."

Cities earning first-time certification or recertification in 2019 and their rankings are:

Argyle (First-Time) | **Silver**

Arlington (First-Time) | **Gold**

Beaumont (Re-certified) | **Bronze**

Dayton (First-Time) | **Recognized**

Denton (Re-Certified) | **Gold**

Dripping Springs (Re-Certified) | **Platinum**

Flower Mound (Re-Certified) | **Platinum**

Forest Hill (First-Time) | **Recognized**

Friendswood (Re-Certified) | **Platinum**

Keller (Re-Certified) | **Platinum**

La Vernia (Re-Certified) | **Silver**

Lago Vista (First-Time) | **Gold**

Lakeway (Re-Certified) | **Gold**

League City (First-Time) | **Gold**

Mesquite (Re-Certified) | **Gold**

Princeton (First-Time) | **Recognized**

Richmond (Ranked Up) | **Platinum**

Rowlett (First- Time) | **Gold**

Taylor (Re-Certified) | **Recognized**

Weatherford (First-Time) | **Bronze**

Webster (Re-Certified) | **Silver**

West Lake Hills (Re-Certified) | **Silver**

A reception to present these 21 municipalities with their Scenic City Certification awards will be held on October 10, 2019 in San Antonio during the Texas Municipal League's Annual Conference week.

The Scenic City application period for 2020 opens **January 1, 2020**. Any interested Texas municipality may go online now to review the Program standards and application process at www.sceniccitycertification.org (<http://www.sceniccitycertification.org.%0d>)

Joining Scenic Texas as partners in the Scenic City Certification Program are the Texas Municipal League, Urban Land Institute — Austin and Houston, Urban Land Institute — San Antonio, American Planning Association Texas, Houston-Galveston Area Council, American Council of Engineering Companies Houston, Hill Country Alliance, Keep Texas Beautiful, Texas Downtown Association, Texas Economic Development Council, Texas Historical Commission, Association of Rural Communities in Texas (ARCIT), Texas Association of Regional Councils, North Central Texas Council of Governments, Scenic Houston, and Scenic America.

Through the Scenic City Certification Program, Scenic Texas provides educational resources to Texas cities that are establishing or revising ordinances that impact the streetscapes. Additionally, Scenic Texas supports urban forestry projects, tree planting and preservation initiatives, the creation of scenic roads and districts, the establishment and funding of parks and green space, the forestation of our highways, and the preservation of historic areas.

Click [here](https://sceniccitycertification.org/wp-content/uploads/2019ScenicTexasCityCertificationPressRelease.pdf) (<https://sceniccitycertification.org/wp-content/uploads/2019ScenicTexasCityCertificationPressRelease.pdf>) for printable copy of press release

###

Scenic Texas, Inc., is a 501(c)(3) non-profit organization dedicated to the preservation and enhancement of our state's visual environment, particularly as seen by the traveling public.

Scenic Texas (<https://www.scenictexas.org/>) is an affiliate of Scenic America (<http://scenic.org/>).

Click [here](https://sceniccitycertification.org/wp-content/uploads/2010-2019-Scenic-Cities.jpg) (<https://sceniccitycertification.org/wp-content/uploads/2010-2019-Scenic-Cities.jpg>) to see full list of Certified Scenic Cities.

13 Texas Cities Earn Prominent Scenic City Certification in 2018 (<https://sceniccitycertification.org/13-texas-cities-earn-prominent-scenic-city-certification-in-2018/>)

RESOURCES

[Scenic City 2019 Info & Standards \(http://www.sceniccitycertification.org/wp-content/uploads/Scenic-City-2019-Info-Standards.pdf\)](http://www.sceniccitycertification.org/wp-content/uploads/Scenic-City-2019-Info-Standards.pdf)

[Glossary \(http://www.sceniccitycertification.org/glossary/\)](http://www.sceniccitycertification.org/glossary/)

[FAQ \(http://www.sceniccitycertification.org/faq/\)](http://www.sceniccitycertification.org/faq/)

ABOUT US

The Scenic City Certification Program encourages municipalities to implement high quality scenic standards for public roadways and public spaces, by providing a proven, highly-regarded and economical assessment tool to Texas cities. Cities with strong scenic standards reflect local government leadership, civic pride, benefit from a solid sense of community character and are well-positioned for economic growth.

CONTACT US

info@sceniccitycertification.org (<mailto:info@sceniccitycertification.org>)

5615 Kirby Drive, Suite 645
Houston, Texas 77005
713-979-4374



FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/8/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: To review the City of Friendswood Infrastructure application for the Community Development Block Grant - Disaster Recovery (CDBG-DR) funds for Hurricane Harvey and the allocation of \$2,691,517 to the city for infrastructure projects. The U.S. Department of Housing and Urban Development (HUD) allocated the State of Texas \$5.024 Billion in CDBG-DR funding through the Texas General Land Office (GLO). Of which, the HGAC has developed a MOD to allocate more than \$240 million of funding to local cities.

Originating Department: Fire Marshal

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Public Hearing to receive input from the community for project applications for the 2018 Community Development Block Grant – Disaster Recovery (CDBG-DR) funds allocated to the Galveston County portion of Friendswood.

HGAC (excluding Harris County) has developed a Method of Distribution (MOD) to distribute \$240,000,000 in Community Development Block Grant – Disaster Recovery (CDBG-DR) funds for Galveston County cities devastated by Harvey. Friendswood has been allocated \$2,691,517 in infrastructure projects and \$2,762,650 for buyouts and acquisitions.

On December 20, 2019, the Community Development Block Grant – Disaster Recovery (CDBG-DR) applications was made available for public comment via the City website for 30 days. Comments will be taken from the public at the February 3, 2020 council meeting.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

This public workshop allows the staff to present proposed Galveston County CDBG-DR projects and hear input from the council and the community.

RECOMMENDATIONS

Staff recommends council adopt the resolution supporting the CDBG application later in the agenda.

ATTACHMENTS

1. Friendswood Public CDBG Meeting - HGAC Hurricane Harvey MOD

City of Friendswood Hurricane Harvey

H-GAC CDBG-DR Allocation

Background

- Following Hurricane Harvey, Texas was awarded \$5.024 Billion in CDBG-DR funds through HUD.
- HGAC developed a MOD to distribute more than \$240 million to local cities in the HGAC region. (Excludes Harris County and Houston)
- Harris County received a direct Community Development Block Grant (CDBG) allocation of \$1,115,386,830 The direct allocation was made due to Harris County being one of the most impacted counties.
- This meeting and use of funds refers only to the Galveston County side of Friendswood.

Background

- The City has previously submitted Infrastructure and Acquisitions applications to the GLO.
- The City's previous infrastructure application contained two projects, Deepwood Flood Control and the Combination of Lift Stations 1 & 17.
- Since the Infrastructure application was submitted, further engineering analysis showed that the combination of LS 1 & 17 was not feasible. Revised flood maps would mean the facility would remain in a flood zone.
- The GLO is allowing the City to submit a revised infrastructure application.
- This meeting only applies to the revised Infrastructure application.

Key Terminology

- **CDBG-DR**– Community Development Block Grant –Disaster Recovery program
- **H-GAC** – Houston Galveston Area Council
- **MOD**—Method Distribution: process by which the region must develop the formula to allocate funding to affected jurisdictions
- **LMI**- Low and Moderate income; the primary national objective of the CDBG program under which CDBG-DR funding must also comply

Method of Distribution (MOD)

H-GAC has developed a MOD used to distribute CDBG-DR infrastructure funding (\$240,000,000) to local cities due to Hurricane Harvey.

- Under this MOD: Friendswood was calculated to receive \$2,691,517 for infrastructure projects and \$2,762,650 for buyouts and acquisitions.

Method of Distribution (MOD)

- Eligible Activities under CDBG-DR Infrastructure/Non-housing funding:
 - Flood control and drainage repair and improvements, including the construction or rehabilitation of storm water management systems;
 - Restoration of publically owned infrastructure (such as water and sewer facilities, streets/bridges, provision of generators, etc.)
 - Demolition, rehabilitation/reconstruction of publicly-owned commercial, institutional, or industrial buildings and code enforcement
- Ineligible Activities under CDBG-DR Infrastructure/Non-housing funding:
 - To enlarge a dam or levee beyond the original footprint of the structure
 - To assist privately-owned utility for any purpose
 - To assist building/facilities used for the general conduct of government (e.g. city halls, courthouses, and emergency operation centers)

Friendswood Projects - Infrastructure

- **Deepwood Flood Control project:** This project would see an area of land between Deepwood Drive, Clear Creek, and Cowart Creek terraced / shelved. The goal of the project is to lower the risk of flooding within the City.
 - Cost: \$1,572,797
- **Burial of Utility Lines Crossing Clear Creek:** This project would see three utility lines that currently cross Clear Creek via an elevated pipe rack buried. Burial of the lines, via directional drilling, would see the lines permanently mitigated from the risk of washout and debris impacts. Furthermore, the burying of lines will allow for future flood mitigation projects along this segment of Clear Creek.
 - Cost: \$1,118,720

LMI

- HUD requires that 70% of funds be used on LMI projects. To qualify as a LMI project, 50% or more of the project's service area must be LMI.
- Friendswood has no LMI qualifying neighborhoods or projects.
- City projects will have to rely on other jurisdictions having enough LMI projects to cover the 70% LMI use of funds.
- Due to LMI requirements, the City may not receive all or any of the funds allocated to the City.

Public Comment

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/14/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Keep Friendswood Beautiful Tree Giveaway Results

Originating Department: City Manager

Degree of importance: Elective

SUMMARY / ORIGINATING CAUSE

Keep Friendswood Beautiful's annual tree giveaway took place January 18, 2020, here at City Hall. Residents were lined up as early as 6 am, the tree giveaway started with an educational presentation on descriptions of each tree along with tips of how to plan your tree from Justin Estopinal with Friendswood Firewood, all 200 trees were gone within 30 minutes. We appreciate the efforts of Keep Friendswood Beautiful as well as the City's Parks and Recreation Department for making this event a huge success.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/14/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Hurricane Harvey Update

Originating Department: City Manager

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

- **HMGP Acquisition Grant** - Since last month, the City has partially closed on four properties of the fourteen or so remaining in the program.
- **TWDB** -Staff recently received word that FEMA has obligated this project and awarded our grant application to acquire four Severe Repetitive Loss Properties along Clear and Cowards Creek. The State anticipates an executable contract for the City's consideration in late February.
- **CDBG-DR (Harris County)** - As reported last month, conditional approvals have been granted for both the Blackhawk Facility and the Forest Bend flood mitigation project. Staff is working toward the procurement of professional services for architectural, engineering, and environmental activities associated with these projects once Harris County Commissioners Court authorizes us to proceed.
- **CDBG-DR (Galveston County)** - Still awaiting GLO approval of our acquisition and flood mitigation project applications.
- **FEMA Disaster Assistance** - Enlisted the assistance of both Congressman Weber's and Olson's office to finalize the Deepwood facility claim. Both offices responded quickly and said they'll follow up with FEMA.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/28/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Annual Report from the Animal Shelter Advisory Committee

Originating Department: Police Department

Degree of importance: Elective

SUMMARY / ORIGINATING CAUSE

Presentation of the Animal Shelter Advisory Committee annual report given by Chair Dr. Donald Stran.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

1. Animal Control 2019 Report

Friendswood Animal Control 2019 report

Overview

In 2019, Friendswood Animal Control saved 271 lives through adoption, reunited 183 lost pets with their owners and transferred 12 pets to shelters or breed-specific rescues.

Volunteers provide an animal behavior and enrichment program to ensure the emotional health of all of our animals during their stay in the facility. This increases the likelihood of animals being adopted quickly and reducing their length of stay in the facility.

As a result of the work of staff and volunteers, our animals are both physically and emotionally healthier and our adoptions continue to increase. In 2017 we facilitated 246 adoptions. In 2018, that number increased to 265 and in 2019 we facilitated 271 adoptions.

Adoptions	2015	2016	2017	2018	2019
Dogs	98	143	124	112	103
Cats	141	149	122	153	168
Total	239	292	246	265	271

Returned to owner	2015	2016	2017	2018	2019
Dogs	198	239	196	144	165
Cats	15	11	12	12	17
Total	213	250	208	156	182

Intake

In 2019, Friendswood Animal Control staff provided life-saving care to 535 dogs and cats. They worked hard every day of the year, ensuring that each of our animals received the very best care.

When pets are running at large in the neighborhoods and roadways, Animal Control staff try to immediately return the pets to their owners. This is accomplished only when pet owners tag and microchip their animals. In 2019, 79 pets were captured in the field and immediately taken to their homes and/or released to their owners without ever seeing the inside of the Animal Control Facility.

Each Animal Control officer is equipped with a microchip detection device in their trucks. The purchase of this equipment is, and has been, vital to returning lost pets to their owners. If a pet is not tagged and microchipped it is taken to the Animal Control Facility. Before the animal is released to its owner, the owner is given an opportunity to receive free microchipping at a local veterinarian.

Intake	2015	2016	2017	2018	2019*
Dogs	400	389	358	275	290
Cats	257	257	201	250	245
	657	646	559	525	535

*In 2019, 12 wildlife animals and 3 domestic farm animals were also taken into the facility.

Field Services

Animal Control officers play an important role for people and animals within our community. Their job encompasses public safety, enforcement of animal ordinances, animal care and rescue, nuisance abatement and community outreach along with pet owner support. In 2019, Animal Control received two new, fully-outfitted, animal control trucks. These were budgeted purchases through the City's Vehicle Replacement Fund. They included new, bed-mounted animal carrying cages, lighting and on-board computers.

Animal Control officers are dispatched through the Friendswood Police Department public safety dispatch center. In 2019, they answered 1,771 calls for service. Animal Control officers prioritize their response according to the safety issues involved for humans and animals.

The Animal Control Facility is located at 3000 W. Parkwood Avenue (next to the water tower). The facility is open to the public Monday through Saturday. The facility is closed on Sundays and some holidays.

	2015	2016	2017	2018	2019
Calls for service	1442	1725	1502	1500	1771

Investigations

In 2019, Animal Control staff investigated 30 animal bite cases. An animal control officer conducts an investigation each time they are notified of an animal biting a human. By State law, the animal must be quarantined for a specific amount of time. This is done in order to safeguard the community from the rabies virus. Depending on the situation and whether the animal has a current rabies vaccination and license tag will decide how the animal is to be quarantined. It is the Animal Control officer who evaluates the situation and makes the final determination of what needs to be done.

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. The vast majority of rabies cases reported each year occur in wild animals like raccoons, skunks, bats and foxes. In 2019, Animal Control investigated one bat case resulting in a positive diagnosis for rabies. Once the diagnosis was received, persons who may have been in contact with the bat were notified and the general public was warned using the City's email notification system and social media.

	2015	2016	2017	2018	2019
Animal Bite cases	46	27	29	29	30

Feral Cats and Wildlife

Feral cats are not socialized to people, which means they cannot be adopted. As a result, they are likely to be euthanized if picked up by animal control. Animal control officers allow all of our trapped cats time to relax and show their level of socialization before a determination is made about the cat's adoptability.

Trapped wildlife are picked up by Animal Control officers daily. In most cases, the animals are released away from residential areas. If the wildlife are sick or injured, they are humanely euthanized at the Animal Control Facility. In 2019, Animal Control staff picked up and released 519 raccoons, skunks and opossums. There were 11 sick or injured wildlife that were not able to be released.

Volunteers

We owe an enormous debt of gratitude to our volunteers. They assist staff with nearly every aspect of animal care, they are humane educators, fundraisers and ambassadors. They open their hearts and homes to special needs animals and are experts when it comes to TLC.

In 2019, our dedicated volunteers logged 606 volunteer hours at the Animal Control Facility. We are extremely fortunate to have a group of talented, passionate volunteers and we are grateful for all they do for the animals. Here are some of the special events from 2019 coordinated by volunteers and staff:

Black Cat Adoption Special	Week of January 2, 2019
Volunteer meeting and orientation	March 23, 2019
Kitten Kaboodle Special	Week of July 23, 2019
Clear the Shelters event	August 17, 2019
Foster Pet Showcase Saturday	September 14 and 28, 2019
Foster Pet Showcase Saturday	October 11, 2019
October "Adopt a Shelter Dog Month" social media campaign	October 2019
Friendswood Chamber of Commerce Health Expo	October 24, 2019
Howl-o-Wine fundraiser, sponsored by volunteers	October 26, 2019
Fostering Information Session	November 9, 2019
Foster Pet Showcase Saturday	November 9 and 16, 2019
Holiday Adoption Special – 2 for 1	December 2019
Holiday Open House	December 19, 2019

Statewide Leadership

Animal Control Supervisor Robert Lee has been a member of the Texas Animal Control Association since 1992 and was elected President of the Texas Animal Control Association in November 2019 and will serve as President until November 2020. The Texas Animal Control Association (TACA) is a non-profit organization, established in 1974, dedicated to the advancement of animal control and animal welfare personnel. Membership in TACA shows the highest degree of commitment to the animal control and welfare field. TACA works to make sure its member's voices are heard at the local, state, and national levels and protects the best interests of the profession.

Animal Shelter Advisory Committee

The Animal Shelter Advisory Committee met three times during 2019 – January 31st, September 18th and December 18th. The Committee consists of the following: Dr. Donald Stran, DPM, Dr. Donna Coleman, DVM, Margaret Pickell, Amy Castro, Robert Lee, and Lt. Matthew Wise.

If you haven't visited the Animal Control Facility lately, stop by and check it out – we think you'll be impressed!

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 12/12/2019

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Discussion and possible action regarding approving an Economic Development Agreement with Coastal Bend Property Development, LP. and Contractor.

Originating Department: City Manager

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Coastal Bend Property Development, LP requested that the City enter into an Economic Development Agreement which will allow the City to participate in the construction of public improvements (approx. 2,300 L.F. of 8" PVC & HDPE water line) along the southeast side of Beamer Rd. which will provide access to water in an area not currently served by the City. Upon completion of the road the City will reimburse an amount that does not exceed \$100,000 from unencumbered working capital for the City's portion of the waterline construction.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Entering into the Economic Development Agreement and constructing approx. 2,300 L.F. of 8" PVC & HDPE water line will provide access to water in an area not currently served more quickly and at a cost significantly less than if the City constructed the water line independently.

RECOMMENDATIONS

Staff recommends Council approve the agreement and authorize the Mayor to sign the Economic Development Agreement.

ATTACHMENTS

1. Beamer WL
2. EXHIBIT A - EASEMENT
3. Economic Dev Agreement -CBPD WL Signed
4. Exhibit B



City of Friendswood
910 South Friendswood Drive
Friendswood, Texas 77546
(281) 996-3200
www.ci.friendswood.tx.us



1" = 437'

Friendswood GIS Mapping

**PROPOSED 2300LF
8" WATER LINE**

Legend

- Streets
- Creeks
- City Limits
- Counties
- Water Plants
- Fire Hydrants
- Water Valves
- Water Mains

Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. Gov. C. §2501.102. The user is encouraged to independently verify all information contained in this product. The City of Friendswood makes no representation or warranty as to the accuracy of this product or to its fitness for a particular purpose. The user: (1) accepts the product AS IS, WITH ALL FAULTS; (2) assumes all responsibility for the use thereof; and (3) releases the City of Friendswood from any damage, loss, or liability arising from such use.

EXHIBIT "A"

Page 1 of 2

**DESCRIPTION OF A
10 FOOT WATERLINE EASEMENT
0.4693 Acre Tract
HOIDALE-COFFMAN ADDITION
OUT OF LOT 65 DIVISION C AND E
HARRIS COUNTY, TEXAS**

Being a 10 foot wide Waterline Easement tract of land located in the Perry and Austin League, Abstract 55, Harris County, Texas being out of and a part of Lot 65 Division C and E in the HOIDALE- COFFMAN ADDITION recorded in Volume 3 Page 6 of the Harris County Map Records and being known as the 110.47 acre tract described in the deed to Coastal Bend Property Development Recorded in Film Code 545040958 of the Harris County Deeds Records and being more particularly described by metes and bounds as follows:

BEGINNING at a set 5/8 inch iron rod with Orange cap stamped Scott D Ellis 6261 at the intersection of the southwesterly right of way line of Beamer Road (60 foot Right of Way) and the northerly right of way line of a 40 foot platted unopened road of said Lot 65 Division C in the HOIDALE - COFFMAN ADDITION;

THENCE North 48° 16' 30" West along and with the said southwesterly right of way line of Beamer Road (60 foot Right of Way) a distance of 2043.57 feet to a found 5/8 inch capped iron rod in the southeasterly line of a 3.197 acre tract by Judgment to Harris County Flood Control District recorded in Harris County Clerk File No. J062379 Harris County Deed Record;

THENCE South 51° 13' 25" West along the southeasterly line of a said 3.197 acre tract a distance of 10.14 to a point for corner;

THENCE South 48° 16' 30" East parallel to the said southwesterly right of way line of Beamer Road a distance of 2045.13 feet to a point for corner in the said northerly right of way line of a 40 foot platted unopened road of said Lot 65 Division C in the HOIDALE - COFFMAN ADDITION;

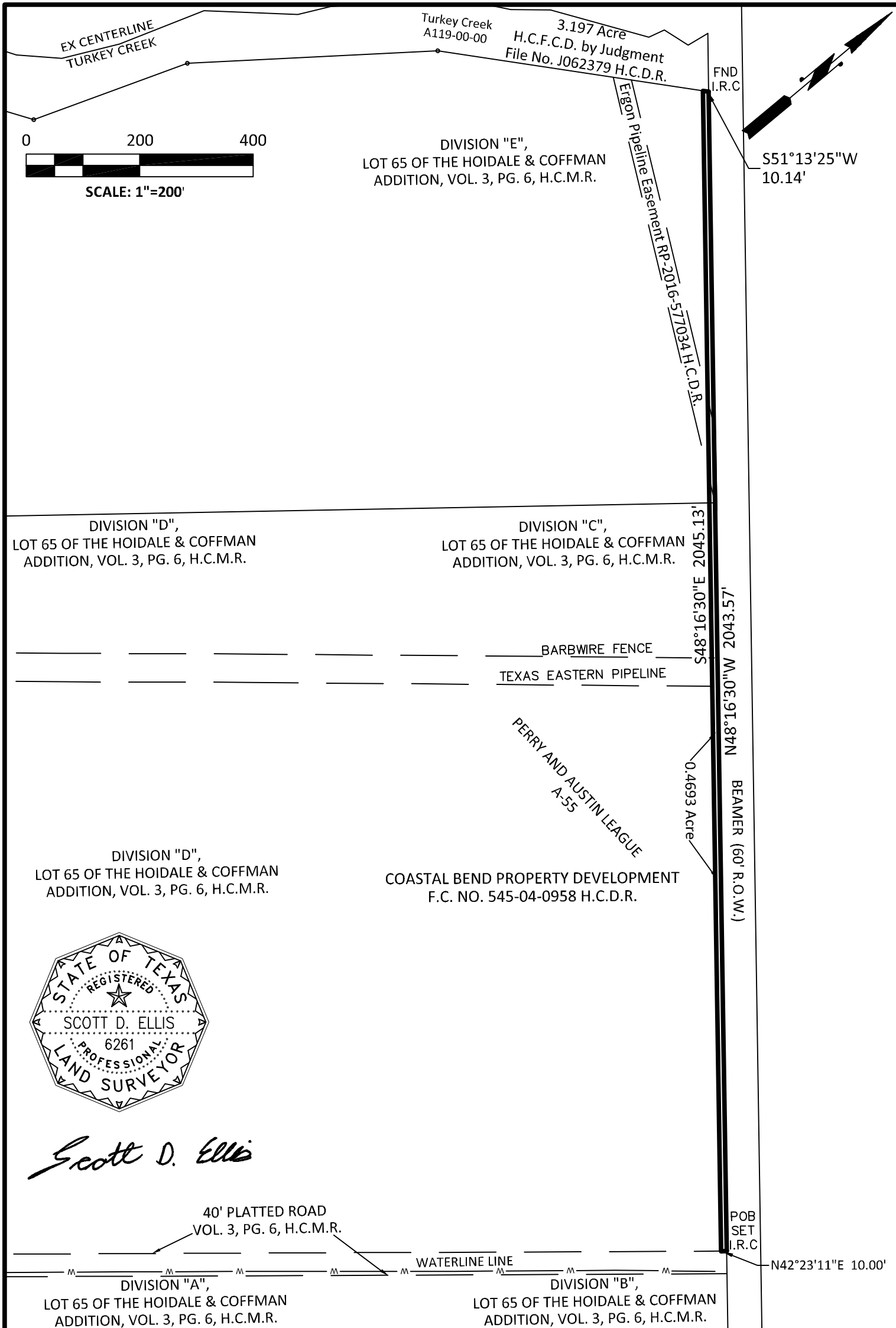
THENCE North 42° 23' 11" East along and with said northerly right of way line of a 40 foot platted unopened road of said Lot 65 Division C in the HOIDALE - COFFMAN ADDITION a distance of 10.00 feet to the **PLACE OF BEGINNING**.

Bearing Reference: to Grid North, Texas State Coordinate System NAD83, Texas South Central Zone.

NOTE: THIS PROPERTY DESCRIPTION HAS BEEN PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF SCOTT D. ELLIS REGISTERED PROFESSIONAL LAND SURVEYOR REG. NO. 6261 DATED JANUARY 24, 2020 AS DEPICTED ON SURVEY PLAT ATTACHED HERETO AND TO WHICH REFERENCE IS HEREBY MADE.



ELLIS SURVEYING SERVICES, LLC
2805 25th Ave. North
Texas City, TX 77590
Tel.: 409-938-8700
Texas Firm Reg No. 100340-00



ECONOMIC DEVELOPMENT AGREEMENT

THIS ECONOMIC DEVELOPMENT AGREEMENT (“Agreement”) is made and entered into as of the 3rd of February, 2020, by and between the **City of Friendswood**, a home-rule municipality situated in Galveston and Harris Counties, Texas (“City”), and **Coastal Bend Property Development, LP** (“Developer”), and **SER Construction Partners, LLC**, a limited liability company, hereinafter referred to as “Contractor”, collectively referred to herein as the “Parties.”

WITNESSETH:

WHEREAS, Developer has published an Invitation for Bidders in the Reporter News seeking competitive bids for the construction of an 8” water distribution system extension; and

WHEREAS, Developer proposes to enter into an agreement with Contractor to construct approximately 2,300 LF of new 8” water line within the water line easement described in **Exhibit A** and an existing public right-of-way along the southwest side of Beamer Road; and

WHEREAS, upon completion of such construction, the City will benefit from the extension of City water infrastructure, allowing existing businesses along Beamer Road to connect to the City water system, increasing opportunities for investment and new developments along Beamer Road and

WHEREAS, in order to construct the water line now, rather than at some undetermined time in the future, Developer requested that the City reimburse Developer a lump sum amount that is less than what the City would otherwise be responsible for in the future, and;

WHEREAS, the City and Developer agree it is in their best interest to enter into this Agreement at this time to complete the water line; and

WHEREAS, pursuant to Article III, §52a, Texas Constitution, and Chapter 380, Texas Local Government Code, municipalities are authorized to establish programs to promote local economic development and to stimulate business and commercial activity in the municipality; and

WHEREAS, in accordance with such enabling laws, City has adopted a “Chapter 380 Economic Development Program” (the “Program”); and

WHEREAS, City hereby finds and determines that the granting of public funds for the public purpose of promoting local economic development and to stimulate business and commercial activity in the City and satisfies the Economic Development Policy of the City;

NOW THEREFORE, in consideration of the mutual promises, covenants, obligations and benefits of this Agreement, the City, Developer and Contractor agree as follows:

COVENANTS OF DEVELOPER AND CONTRACTOR

1. Developer will construct or cause to construct approximately 2,300 LF of a new 8” water line within the water line easement described in **Exhibit A** and an existing public right-of-way along the southwest side of Beamer Road, known as “the Project”. Construction shall commence within 30 days following the date hereof, and shall be substantially complete within 120 days hereof. Upon completion of the Project, Developer shall deliver, or cause to be delivered the “as-built” plans to the City, and Developer shall dedicate and convey all of its interest in the Project and any easements required by the City for maintenance and operation of the water line.
2. Developer shall enter into a construction contract with Contractor to construct the Project and the construction contract is attached hereto as **Exhibit B** and made a part hereof for all purposes.
3. The water line described in Section 1 above, shall be designed by Developer’s own engineer, according to the plans and specifications for the construction of such water line as approved by the City.
4. Developer shall provide to the City a copy of the construction contract between the Developer and the Contractor, identifying the total costs for construction of the water line.
5. Developer shall be responsible for all costs associated with the construction of the water line, including all engineering services, construction plans, permits, labor, inspections and construction management.

6. The Developer shall ensure that all federal, state and local laws are complied with during the progress of construction, a representative of the City may conduct periodic, on-the-ground inspections.

7. The Developer and the Contractor shall make this Agreement and the plans and specifications released for construction of the water line, an integral part of the construction contract between the Developer and the Contractor. The provisions of this Agreement shall control over any conflicting provision of the construction contract between the Developer and the Contractor. Before commencing construction, the Developer shall deliver to the City Manager or his designee, a signed copy of the construction contract between the Developer and the Contractor. The Developer shall pay the Contractor for construction of the water line in accordance with the provisions of the construction contract. It is agreed that the City has an interest in the proper performance of the construction contract and may bring suit for failure to comply with the plans and specifications. The Developer and Contractor shall provide the City with access to the water line for the purpose of inspection of the water line.

8. Prior to initiating any construction of the water line, the Developer shall require that the Contractor provide the City with the following construction bonds which shall name the City and the Developer as beneficiaries:

a) Contractor's Performance Bond.

The Contractor shall provide a good and sufficient Performance Bond in an amount equal to 100 percent of the total contract price, (between the Developer and the Contractor) guaranteeing the full and faithful execution of the work and performance of the contract and for the protection of the City and the Developer against any improper execution of the work or the use of inferior materials. The Performance Bond is to be made in favor of the City and the Developer and shall guarantee completion of the water line within 120 days of execution of this Agreement.

b) Contractor's Payment Bond.

The Contractor shall provide a good and sufficient Payment Bond in an amount equal to 100 percent of the total contract price (between the Developer and the Contractor), guaranteeing Contractor's payment for all labor, materials and equipment used in the construction of the water line. The Payment Bond shall be made in favor of the City and the Developer and all persons, firms or corporations may furnish materials for or perform labor upon the water line hereunder.

Each bond shall be in a form acceptable to the City and shall be written by a surety company duly authorized to do business in the State of Texas, provided that the City Manager shall have the right to reject any surety company for any work under this Agreement.

9. Prior to initiating any construction of the water line, the Developer shall require that the Contractor provide to the City at his own expense, purchase, maintain and keep in force during the term of this Agreement, the insurance set forth below. Contractor shall not commence work on the water line until the Contractor has obtained all of the insurance required under this Agreement and such insurance has been approved by the City, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance of the subcontractor has been obtained and approved. All insurance policies provided under this Agreement shall be written on an "occurrence" basis.

Worker's Compensation Insurance (with Waiver of Subrogation in favor of the City of Friendswood, its officers, agents and employees), with statutory limits.

Commercial General Liability occurrence type insurance (No "XCU" restrictions shall be applicable). Products/completed operations coverage must be included.

- a. Bodily injury five hundred thousand dollars (\$500,000) single limit per occurrence or five hundred thousand dollars (\$500,000) each person/ five hundred thousand dollars (\$500,000) per occurrence.
- b. Property Damage one hundred thousand dollars (\$100,000) per occurrence.

- c. Minimum aggregate policy year limit one million dollars (\$1,000,000).

Commercial Automobile Liability Insurance (including owned, non-owned and hired vehicles coverages).

- a. Minimum combined single limit of five hundred thousand dollars (\$500,000) per occurrence for bodily injury and property damage.
- b.. If individual limits are provided minimum limits are three hundred thousand dollars (\$300,000) per person, five hundred thousand dollars (\$500,000) per occurrence for bodily injury and one hundred thousand dollars (\$100,000) per occurrence for property damage.

All insurance shall be written by an insurer licensed to conduct business in the State of Texas, unless otherwise permitted by City. The City of Friendswood shall be named as an additional insured.

The Parties agree that the insurance required herein shall waive subrogation rights for loss or damage so that the insureds have no right to recovery or subrogation against the City of Friendswood, it being the intention of this Agreement that the required insurance policies shall protect all parties to this Agreement and be primary coverage for all losses covered by the policies.

The Parties shall provide a certificate of insurance evidencing the required coverages to:

City of Friendswood
City Manager
910 South Friendswood Drive.
Friendswood, Texas 77546

CITY'S REIMBURSEMENT OBLIGATION

1. Upon completion of the water line, proof of payment to all persons, firms or corporations who furnished materials and/or performed labor upon the water line, delivery of the "as-built" plans to the City, Developer's dedication and conveyance of its interest in the Project and any easements required by the City for maintenance and operation of the water line and acceptance of the improvements by the City, the City shall reimburse Developer an amount that does not exceed \$123,620.23.
2. The City will designate a contact person available to answer questions on behalf of the City. The contact person for this Agreement is Steven Rhea.

INDEMNIFICATION

The Developer and Contractor must indemnify, hold harmless, and defend the City, its officers, agents and employees, from and against liability for any claims, liens, suits, demands, and/or actions for damages, injuries to persons (including death), property damage (including loss of use), and expenses, including court costs and attorneys' fees and other reasonable costs arising out of the Developer's or Contractor's work and activities conducted in connection with this Agreement, including all causes of action based upon common, constitutional, or statutory law, or based in whole or in part upon negligent or intentional acts or omissions of Developer or Contractor, its officers, agents, employees, sub-contractors, licensees, invitees and other persons, whether or not such injuries, death or damages are caused, in whole or in part by the alleged negligence of the City, its officers, agents or employees.

Developer and Contractor must at all times exercise reasonable precautions on behalf of and be solely responsible for the safety of its officers, agents, employees, sub-contractors, licensees, invitees and other persons, as well as their property, while in the vicinity where the work is being done. The City is not liable or responsible for the negligence or

intentional acts or omissions of the Developer or Contractor, its officers, agents, employees, subcontractors, licensees, invitees, and other persons.

The City assumes no responsibility or liability for harm, injury, or any damaging events, which are directly or indirectly attributable to premise defects, whether real or alleged, which may now exist or which may hereafter arise upon the premises responsibility for all such defects being expressly assumed by the Developer or Contractor. The Developer and the Contractor agree that this indemnity provision applies to all claims, suits, demands, and actions arising from all premise defects or conditions over which Developer or Contractor has dominion and control but not otherwise.

The City, Developer and Contractor must provide the others prompt and timely notice of any event covered which in any way affects or might affect the Developer, Contractor or City, and the City has the right to compromise and defend the same to the extent of its own interests.

DEFAULT AND TERMINATION

1. The following shall be considered an event of default by Developer under this Agreement:
 - a) Developer fails to comply with any of its duties under this Agreement;
 - b) Developer becomes insolvent;
 - c) All or a substantial part of Developer's assets are assigned for the benefit of its creditors;
 - d) A receiver or trustee is appointed for Developer;
 - e) Developer becomes delinquent on ad valorem tax payments for any property Developer owns in the City of Friendswood; or
2. It shall be a default of this Agreement if Developer fails to cure an event of default within ten (10) days of written notice to the City. If the Developer defaults under this Agreement, the City may terminate this Agreement with no further obligation to the City. If the nature of the event of default is that it cannot reasonably be cured within ten (10) days of the written notice, but the Developer begins reasonable efforts to cure the event of default within ten (10) days and diligently continues in its efforts to cure the event of default, no default of this Agreement will have occurred.

3. Upon termination due to Developer's default, City shall not be responsible for any reimbursement required hereunder.
4. The City's failure to pay the reimbursement amount set out herein is a default of this Agreement.
5. The non-defaulting party may use any action available in equity or law as a remedy to the default. No action taken by a party pursuant to provision in this Agreement shall be deemed to constitute an election of remedies. All remedies set forth in this Agreement and available in equity and law shall be cumulative and non-exclusive of any other remedy. Each of the parties has the duty to mitigate its damages.

RECAPTURE FOR DEFAULT

Grant funds provided hereunder by City shall be contingent on compliance with the Covenants of Developer and Contractor provisions. In the event of default on any of such requirements, and failure to completely cure any such default within thirty (30) days following written notice thereof by City to Developer, Developer shall refund to City the full amount of Grant funds provided hereunder.

Any required refund payment shall be remitted to City within thirty (30) days following the expiration of the cure period set forth above, and any delinquent payment shall bear interest at the maximum rate allowed by law.

MISCELLANEOUS TERMS

1. Independent Contractor

Developer and Contractor are engaged as independent contractors, and all of the services provided for herein shall be accomplished by Developer and Contractor in such capacity. The City will have no control or supervisory powers as to the detailed manner or method of the Developer's and Contractor's performance of the subject of this Agreement. All personnel supplied or used by Developer or Contractor shall be deemed employees of subcontractors of Developer or Contractor and will not be considered employees, agents or subcontractors of the

City for any purpose whatsoever. Developer and/or Contractor shall be solely responsible for the compensation of all such personnel, for the withholding of income, social security and other payroll taxes and for the coverage of all worker's compensation benefits.

2. Venue and Choice of Law

Venue for any cause of action arising under this Agreement is Harris County, Texas. This Agreement is governed by the laws of the State of Texas both as to interpretation and performance.

3. Assignment

The Developer and the Contractor may not assign in whole or in part any rights, duties, obligations or interest arising from this Agreement.

4. Amendment or Modification

This Agreement, including schedules, exhibits and attachments, constitutes the entire agreement of the parties. Any statements, promises, or agreements made by the City, Developer or the Contractor or their agents, which are not contained in this Agreement, are of no effect. This Agreement may be amended only by a written instrument signed by the City, Developer and the Contractor.

5. Compliance with Laws, Charter, Ordinances

Developer, its agents, employees, contractors and subcontractors must comply with all applicable federal and state laws, the charter and ordinances of the City of Friendswood, and with all applicable rules and regulations promulgated by local, state and national boards, bureaus and agencies. Developer and/or Contractor must obtain all necessary permits and licenses required in completing the work contracted for in this Agreement.

6. Severability

If any terms, sections, subsections, sentences, clauses, phrases, provisions, covenants or conditions of this Agreement are held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the Agreement shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

7. Notice

Each formal notice required by the terms of this Agreement shall be in writing and sent in person, by courier, by registered or certified mail at the following addresses or such future addresses as may be designated in writing:

If to Developer:

Coastal Bend Property Development, LP

4558 FM 2351

Friendswood, Texas 77546

If to Contractor:

SER Construction Partners, LLC

3636 Pasadena Blvd.

Pasadena, Texas 77503

If to City:

City Manager

City of Friendswood

910 S. Friendswood Drive

Friendswood, Texas 77546

Notice shall be deemed received upon actual receipt or upon refusal of receipt.

8. Time of the Essence

Time is of the essence of this Agreement. However, in the event the date specified or computed under this Agreement for the performance of an obligation by any party, or for the occurrence of any event provided herein, shall be a Saturday, Sunday or "legal holiday" (defined for purposes hereof as any holiday observed by the County), then the date of such performance or occurrence shall automatically be extended to the next calendar day that is not a Saturday, Sunday or legal holiday.

9. Paragraph Headings

The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraph contained herein.

IN WITNESS WHEREOF, and as authorized respectively by the City Council of the City of Friendswood and Coastal Bend Property Development, LP, and SER Construction Partners, LLC, the parties have executed this Agreement effective the day and year first written above.

ATTEST:

City of Friendswood, Texas

Melinda Welsh, City Secretary

By: _____
Mike Foreman, Mayor

ATTEST:

Coastal Bend Property Development, LP.

(Name and title) Melinda Nichols
Office Manager

By: _____
Daniel Rucker, Member

ATTEST:

SER Construction Partners, LLC

(Name and title) MIGUEL A. RAMOS
CHIEF EXECUTIVE OFFICER

By: _____

EXHIBIT B

8" WATER LINE REPLACEMENT

SPECIFICATIONS

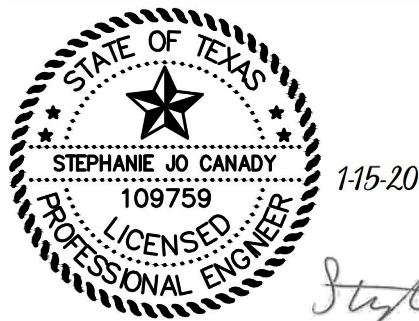
FOR

BEAMER ROAD WATER LINE IMPROVEMENTS

FOR

COASTAL BEND PROPERTY DEVELOPMENT, LP

CITY OF FRIENDSWOOD, TEXAS



A handwritten signature in cursive script, appearing to read "Stephanie Jo Canady", located to the right of the professional seal.

COASTAL BEND *Engineering*

Texas Registered Engineering Firm F-14444

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JANUARY 2020

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INSTRUCTIONS TO BIDDERS

1. **PREPARATION OF BIDS.** Unless otherwise directed in the Invitation to bidders, each Bid shall be submitted, in duplicate, on the bid forms provided or on photocopies of the forms, in conformity with the requirements of the Invitation to bidders, these instructions, and the instructions printed on the bid form.

All blanks on the bid form shall be completed, typed, or written in ink, and no change shall be made on the bid form or any other of the Contract Documents. All amounts shall be written in figures, with amounts extended and totaled. Minimum unit prices have been established for certain items shown on the bid. See Paragraph 7 of these instructions. If the bidder chooses not to bid on optional items (if any), "No Bid" shall be entered in the bid space. Any Bid may be rejected if it contains any omission, erasure, alteration, addition, irregularity of any kind, or items not called for; if it does not submit prices for each of the items in the bid form; if any of the prices are obviously unbalanced; or if it shall, in any manner, fail to conform to the conditions of the Invitation to bidders and these instructions.

The bidder shall sign its Bid in the signature space. If the Bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be shown, together with the names and addresses of the partners or officers. If the Bid is made by an individual, it must be executed by that person; if made by a partnership, it must be executed by one of the partners (and if by a limited partnership, then executed by the general partner); or if made by a corporation, it must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or assistant secretary of the corporation. The corporate address and state of incorporation must be shown below the signature.

When applicable, evidence of authority to conduct business as an out-of-state corporation in the State of Texas shall be provided in accordance with the paragraph entitled QUALIFICATION OF BIDDERS. State Contractor license number, if any, must also be shown.

The Bid and the Bid Security must be enclosed in a sealed envelope, plainly identified on the outside with the contents (i.e. Bid or Bid Security), the bidder's name, and the job name and number, and addressed to the Owner as prescribed in the Invitation to Bidders.

2. **CONTRACT DOCUMENTS.** The Contract Documents are complementary and must be read together as a whole; what is called for by one is as binding as if called for by all.

Bidders desiring further information or further interpretation of any part of the Contract Documents are hereby obligated to submit a written request for such information to Engineer via email to **scanady@cbpd.net** not less than **2 calendar days** before the Bid opening. Answers to these requests will be given, in writing, to all bidders as addenda to the Contract, and each addendum will be made a part of the Contract. No explanation or interpretation of the Contract, other than written addenda, shall be binding.

Should a bidder find discrepancies in or omissions from the Contract Documents or should the bidder be in doubt as to any meaning, the bidder is hereby obligated to notify Engineer, so a written addendum may be sent to all bidders. It is the responsibility of each bidder to determine if it has

received all addenda, complete files of which will be maintained at the Engineer's office and the office designated to receive the Bids.

Each bidder shall inform itself fully of the construction and labor conditions under which the Work will be performed and shall be presumed to have inspected the Site and to have read and to be thoroughly familiar with the Contract Documents. Failure to do so will not relieve the successful bidder of its obligation to furnish all materials and labor necessary to carry out the provision of the Contract and to complete the Work for the consideration of its Bid.

3. PRE-BID CONFERENCE. A **MANDATORY** pre-bid conference among Owner, Engineer, prospective bidders, and others will be held to discuss the scope of the Work and to answer questions concerning the Work. No addendum will be issued at this conference, but an addendum will be issued afterwards, if necessary, to answer questions. The **MANDATORY** pre-bid conference will be held at the time and place shown in the Invitation to bidders. Attendance by each prospective bidder or its representative at the pre-bid conference is **MANDATORY**, and no Bid will be opened unless the bidder or representative was present at the pre-bid conference. If an attendee fails to sign the attendance log, giving individual's name, firm represented, street address, and telephone number, Owner may treat such attendee as not having been present and as having failed to comply with the mandatory pre-bid conference requirement. No person shall represent more than one bidder at the pre-bid conference. If a person claims to represent more than one bidder at the pre-bid conference, the Bid of each bidder so represented will be returned unopened.

4. BID SECURITY. Each Bid shall be accompanied by a certified or cashier's check, acceptable to the Owner, in an amount not less than **10** percent of the total amount bid (the "Bid Security"), as a guarantee that the successful bidder will enter into the Contract and execute the Bonds on the forms provided and provide the required insurance certificates within 7 days after the date Contract Documents are received by the Contractor. Bid Securities will be returned to all but the three most qualified, responsible bidders within 5 days after opening of Bids, and the latter's Bid Securities will be returned after complete execution of the Contract. The surety company providing a bid bond must conform to the same requirements for surety companies providing the performance bonds, maintenance bonds and/or payment bonds described below.

5. BONDS. The successful bidder must furnish a Performance and Maintenance Bond and a Payment Bond, each in the sum of 100 percent of the Contract Price, from a surety company holding a permit from the State of Texas to act as surety. Unless otherwise specified, the cost of proving such Bonds shall be included in the bidders total bid amount. The surety company must have a minimum Best Key Rating of "B+" or better. The surety company, the agency and agent issuing the Bonds must be authorized to issue Bonds in Texas in an amount equal to the total Contract Price and such authorization must be recorded in the files of the Texas Department of Insurance. The Bonds must be executed by a duly appointed representative of the surety company licensed by the State of Texas as a General Lines Agent and such licensing must be recorded in the files of the Texas Department of Insurance. If the surety company does not have such a rating due to the length of time it has existed, the surety company must be eligible to participate in the surety bond guarantee program of the Small Business Administration and must be an approved surety listed in the current U.S. Department of Treasury Circular 570, and must meet all of the rules and regulations of the Treasury Department with respect to performance and payment bonds for federal jobs, including specifically the rules related to underwriting limitation. For contracts over \$100,000, the surety must also hold a certificate of authority from the United States Secretary of Treasury to qualify as a surety on obligations permitted or required under federal law, or have obtained reinsurance for any liability

in excess of \$1,000,000 from a reinsurer that is authorized and admitted as a reinsurer in the State of Texas and is the holder of a certificate of authority from the United States Secretary of Treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law. If bidder's proposed surety company, agency or agents do not meet the aforementioned requirements, then Owner may refrain from considering the bidder for Contract award and Owner may require bidder to forfeit the Bid Security.

6. DELIVERY OF BIDS. It is each bidder's responsibility to deliver its Bid and Bid Security to the location named in the Invitation to Bidders before the closing time. The fact that a Bid and Bid Security were dispatched will not be considered. The Bid and Bid Security must actually be delivered to be considered.

7. "OR EQUAL" SUBMISSIONS. Where materials or equipment are specified by a trade or brand name, it is not the intention of the Owner to discriminate against an equal product of another manufacturer, but to set a definite standard of quality or performance. In preparing his/her proposal, each bidder is expected to include in his/her base Bid the cost of the item so specified. However, in certain Technical Specification sections, manufacturers are listed followed by "or equal." In certain other Technical Specification sections, manufacturers are listed with "or equal" not included. In those items where "or equal" is not included, it is hereby added and understood to be included, even though not specifically stated in each and every Technical Specification. If a Contractor chooses to submit a suggested "or equal" product in lieu of a product by one of the named manufacturers, Owner will evaluate the item to determine if it is an equal. The Contractor is responsible for providing all data required to evaluate an item submitted as a suggested "or equal." Owner's decision on whether an unnamed manufacturer is an "equal" is to be final. No claims for additional cost, time delay, etc. will be accepted if an unnamed manufacturer is submitted by Contractor as a suggested "equal" and Owner decides the item is not "equal."

Contractor must submit list of items to be submitted as a suggested "or equal" at time of bid submission. No additional suggested "or equal" items will be considered after bid opening.

8. MINIMUM AND EXTRA UNIT PRICE ITEMS. If the approximate quantity and a minimum unit price have been established for items as shown in the Bid, the bidder may not bid a unit price less than the minimum value; however, it may bid an amount greater than the minimum unit price. If no entry is made in the spaces provided, the minimum unit prices shown shall apply. These Extra Unit Price Items are included to facilitate payment for changes and alterations that may be required to complete the Work. The Work, as provided by the Contract Documents, is described in bid items other than Extra Unit Price Items. When additional Work covered by Extra Unit Price Items is performed, payment will be based on the quantity actually constructed and the unit prices entered in the Bid.

9. TIME FOR COMPLETION. Contractor will not be allowed time extensions that are due to (i) inclement weather (not including Force Majeure); (ii) non-availability of equipment or material, when the principal units of Work and tasks on the critical path are not in progress or are not delayed by the event of delay, interference, disruption, or hindrance; (iii) when at least seven (7) hours of available working time remain out of the working day; (iv) while materials are drying and it is possible for the Contractor to enclose the area and use drying devices; (v) when an event of delay, interference, disruption, or hindrance occurs on a day other than a working day or other day when the Contractor had not originally planned to work; (vi) when an event of delay, interference, disruption, or hindrance occurs after the expiration of the time for completion; (vii) to the extent the Contractor

could have anticipated or alleviated the impact of the event of delay, interference, disruption, or hindrance through reasonable efforts; (viii) when events of concurrent delay overlap the claimed delay; and/or (ix) when an extension of time is precluded by any other provision of the Contract Documents.

10. QUALIFICATION OF BIDDERS. The apparent most qualified, responsible bidder shall submit to Owner, within **5 calendar days** of notification, either i) a fully completed Contractor's Statement of Qualification or ii) a written statement that the most recently submitted Contractor's Statement of Qualification is accurate, which statement shall be considered in the award of the Contract. Failure to accurately complete the Contractor's Statement of Qualification or to submit the Statement will, at Owner's option, disqualify the bidder from consideration in the award of the Contract. Evidence of out-of-state corporation to conduct business in the state in which the Work is to be performed, along with state contractor license number, must also be provided.

11. MODIFICATION AND WITHDRAWAL OF BIDS. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids. If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid Security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work to be provided under the Contract Documents.

12. AWARD OF CONTRACT. Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, non-responsive, unbalanced or conditional Bids and to reject the Bid of any bidder if Owner believes that it would not be in the best interest of the Project to make award to that bidder, whether because the Bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Owner also reserves the right to waive all informalities and defects in bidding, except time of submitting a Bid. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

In evaluating Bids, Owner will consider, among other things, the qualifications of bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award. Alternate bid items will not be considered unless requested in the Bid Form.

Owner may consider the qualifications and experience of subcontractors, suppliers, and other persons and organizations proposed for the Work. Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work.

Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of bidders, proposed subcontractors, suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents, to Owner's satisfaction.

BY SUBMITTING A BID, EACH BIDDER AGREES TO FULLY AND FOREVER WAIVE AND RELEASE ANY CLAIM (KNOWN OR UNKNOWN) IT HAS OR MAY HAVE AGAINST THE

OWNER, ENGINEER, DEVELOPER AND THEIR RESPECTIVE ATTORNEYS, EMPLOYEES, CONSULTANTS, REPRESENTATIVES, AND AGENTS ARISING OUT OF OR IN CONNECTION WITH THE: (I) ADMINISTRATION, EVALUATION, OR RECOMMENDATION (OR LACK THEREOF) OF ANY BID; (II) WAIVER OF ANY REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS; AND (III) ACCEPTANCE OR REJECTION OF ANY BIDS AND AWARD OF THE CONTRACT.

Owner reserves the right to award the Bid, at Owner's discretion, based on the amount of the Total Base Bid (without including "Extra Unit Price Items" or "alternate" bid items) or on the amount of the Total Amount Bid (including "Extra Unit Price Items" items or "alternate" bid items), or based on any other combination, means or method determined appropriate by Owner.

If the contract is to be awarded, it will be awarded to the responsible bidder whose evaluation by Owner indicates that the award will be most advantageous to the Owner and result in the best and most economical completion of the Work.

If the contract is to be awarded, Owner will give the successful bidder a notice of award within 60 days after the day of the Bid opening.

13. TAXES, LICENSES AND FEES. Certain taxes, licenses, fees and other similar items are part of the cost of the Work and it shall be Contractor's responsibility to familiarize itself with these costs and to observe and comply with the Laws and Regulations relating to the same. The prices, sums, rates and other charges set forth in the Contractor's Bid shall cover and include all such costs. Owner is exempt from Texas sales and use taxes pursuant to Texas Tax Code § 151.309 as a political subdivision of the State of Texas. Owner shall provide Contractor, if requested by Contractor in writing, with a completed Texas Sales and Use Tax Exemption Certification as evidence of the applicability of such exemption and Contractor shall not collect Texas sales and use taxes from Owner with respect to this contact. Contractor and all subcontractors to Contractor shall issue a Texas Sales and Used Tax Exemption Certification with respect to, and shall not pay Texas sales and use taxes on, all purchases of the following items that are exempt from Texas sales and use taxes pursuant to Texas Tax Code § 151.311: (i) tangible personal property that will be incorporated into Owner's realty; (ii) tangible personal property that is necessary and essential for the performance of this contact and is consumed entirely on the job site; and (iii) taxable services for use in the performance of this Contract that are performed at the job site and are either integral to the performance of this Contract or expressly required to be provided by this Contract. In addition, Contractor and all subcontractors to Contractor (i) shall not include any provision for Texas sales and use taxes with respect to such exempt items in any Bid or the Contract Price, and (ii) shall pass on to the Owner cost savings due to the exempt status of such exempt items. Contractor's contracts with all subcontractors to Contractor shall include the foregoing provision regarding the exemption from Texas Sales and use taxes. Contractor must pay taxes on items that are not exempt.

14. NUMBER OF SIGNED SETS OF DOCUMENTS. The Contract Documents will be prepared in at least five original sets for signature, one for delivery to the successful bidder. Owner will furnish the successful bidder up to four sets of Plans and two sets of Technical Specifications free of charge, and additional sets may be obtained from Engineer at Engineer's reproduction rates. The successful bidder shall provide five signed originals of each of the Bonds to be bound with the Contract Documents.

15. WORKER'S COMPENSATION INSURANCE. See section entitled "INSURANCE" in Special Conditions Part A of the Contract.

16. SOILS REPORT. If a soils investigation has been made for this project, the soils report and log of borings is available for bidder's information only. The report is not a warranty of subsurface conditions, nor is it a part of the Contract Documents. Bidders are expected to examine the Site and such reports and then decide for themselves the character of the materials to be encountered.

Owner and Engineer disclaim any responsibility for the accuracy, true location and extent of the surface and subsurface investigations that have been prepared by others. Owner and Engineer further disclaim responsibility for interpretation of that data by bidder, *i.e.* projecting soil-bearing values, rock profiles, soil stability and the presence, level and extent of underground water or underground facilities.

17. LABOR CLASSIFICATION AND MINIMUM WAGE SCALE.

(A) General: Chapter 2258 of the Texas Government Code provides that any political subdivision of the State of Texas shall ascertain the general prevailing wage rate received by the classes of workers employed on projects similar to this project and shall specify in the call for Bids and in the Contract the minimum wage rates which shall be paid for each type of worker. This statute further provides that the Contractor or subcontractors shall pay, as penalty, to Owner Sixty Dollars (\$60.00) for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the Contract. Owner is authorized to withhold from the Contractor the amount of this penalty from any payment due under the Contract.

The statute likewise requires that the Contractor and subcontractors keep an accurate record of the names and occupations of all persons employed by them on the construction of the Project and to show the accrual per diem wages paid to each worker. These records are open to the inspection of Owner.

(B) The minimum wage rates that apply to this Contract are specified in the Special Conditions Part A of the Contract. Contractor and subcontractors shall review and ascertain such wage rates and pay at least such minimum rates.

END OF SECTION

INVITATION TO BIDDERS

Sealed Bids, in duplicate, addressed to COASTAL BEND PROPERTY DEVELOPMENT, LP will be received at its office at 4558 FM 2351, FRIENDSWOOD, TX 77546, until 10:00 a.m. Local Time, January 29, 2020, and then publicly opened and read for “BEAMER ROAD WATER LINE IMPROVEMENTS”, Harris County, Texas”

Scope of Work of the Contract generally includes furnishing the necessary labor, material, equipment, incidentals, and operations and performing necessary work required for the proposed 8” water distribution system extension.

Bids received after the closing time will be returned unopened. A **MANDATORY** pre-bid conference will be held on January 22, 2020, at 10:00 a.m. Local Time, at the office of COASTAL BEND PROPERTY DEVELOPMENT, LP, 4558 FM 2351, FRIENDSWOOD, TX. Attendance by each prospective bidder or its representative at the pre-bid conference is **MANDATORY**, and no Bid will be opened unless the bidder or representative was present at the pre-bid conference.

Each Bid must be accompanied by a certified or cashier’s check, acceptable to the Owner, in an amount not less than 10 percent of the total amount bid, as a guarantee that the successful bidder will enter into the Contract and execute the Bonds on the forms provided and provide the required insurance certificates within 7 days after the date Contract Documents are received by the Contractor.

Electronic copies of the bidding documents may be obtained from COASTAL BEND PROPERTY DEVELOPMENT, LP, 4558 FM 2351, FRIENDSWOOD, TX 77546, through email request to Stephanie Canady at scanady@cbpd.net, or phone request at 281-648-1268x102. Bidding documents may also be examined at the above location.

The Owner reserves the right to reject any or all Bids and to waive all defects and irregularities in bidding or bidding process except time of submitting a Bid. The Successful Bidder, if any, will be the responsible Bidder which in the Owner’s judgment will be most advantageous to the Owner and result in the best and most economical completion of the Project.

SECTION 00300

PROPOSAL AND BID SCHEDULE

For furnishing necessary plant, labor, material, equipment, incidentals, and operations, and performing necessary work required for **BEAMER ROAD WATER LINE IMPROVEMENTS** for **COASTAL BEND PROPERTY DEVELOPMENT, LP**, Friendswood, Texas,

Coastal Bend Property Development, LP
4558 FM 2351
Friendswood, Texas 77546

To Whom It May Concern:

The undersigned, as bidder, declares that he has carefully examined the Instructions to Bidders, Drawings, and Specifications, Supplementary Conditions and has carefully examined the locations, conditions, and classes of materials of the proposed work, and agrees that he will provide all necessary machinery, tools, apparatus, services, and other means of construction, and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed therein and according to the requirements of the Owner as therein set forth, for the unit price amounts according to the accompanying bid schedule, which becomes part of this proposal. (Refer to Section 01026, Unit Prices.)

If, for any bid item, there is a conflict between unit price written in words and unit price in figures, or between unit price and item total price, unit price written in words will govern.

It is understood that the Owner reserves the right to award any combination of the bid items included in the Bid Schedule.

It is understood and agreed that all the work is to be complete and ready for use within 30 calendar days (to be filled by the Contractor, 30 days max.) after the date on which written notice to commence work is received.

It is understood that final payment and remaining retained percentage will not become due until acceptance of the work by the Owner.

It is understood that the Owner reserves the right to reject any or all bids, or to accept any bid considered advantageous.

COASTAL BEND PROPERTY
DEVELOPMENT, LP

PROPOSAL AND BID SCHEDULE

The undersigned certifies that the bid amounts contained in the Proposal have been carefully checked and are submitted as correct and final, and these amounts will remain firm for **30 days** following submittal.



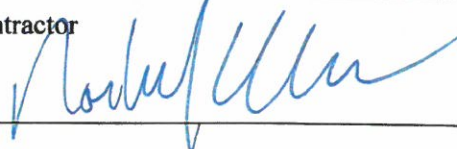
Witness

Seal

(If Bidder is a Corporation)

SER CONSTRUCTION PARTNERS, LLC.

Contractor

By 

Date 1/29/20

Title PRESIDENT

Street Address 3636 PASADENA BLVD

PASADENA, TX 77503

City, State, and Zip Code

713-473-7900

Telephone Number

Secretary of Corporation

**BID PROPOSAL
FOR
BEAMER ROAD WATER LINE IMPROVEMENTS**

JANUARY 2020

Item No.	Quantity	Unit	Item Description and Total Written Unit Price	Unit Price	Amount
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WATER DISTRIBUTION SYSTEM

- | | | | | | |
|--------------|---|------|--|---------------------------------|----------------------------------|
| 1. | 1 | L.S. | Site preparation, Mobilization, Performance, Payment & Maintenance Bonds, at
<i>Thirty-four thousand Six hundred NO</i>
Dollars
Cents | <i>34600⁰⁰</i>
\$ | <i>34,600⁰⁰</i>
\$ |
| per Lump Sum | | | | | |
| 2. | 1 | L.S. | Fuse 8" DR11 HDPE Water Line (cut to size 2-40' joints) to HDPExMJ adapters, and Install with Spacers (approx. 5.8' o/c) into 12" Casing for an approx. total length of 62.2' end-to-end with neoprene end seals, at
<i>three thousand Five hundred-thirty eight Ninety</i>
Dollars
Cents | <i>3,538⁹⁰</i>
\$ | <i>3,538⁹⁰</i>
\$ |
| per Lump Sum | | | | | |
| 3. | 1 | L.S. | Fuse 12" DR19 HDPE Casing for 8" Water Line (cut to size 2-40' joints) for an approx. total length of 58' end-to-end, and Install on Existing bridge using provided aluminum bracket system, at
<i>three thousand-three hundred sixty-eight SEVENTY-FIVE</i>
Dollars
Cents | <i>3368⁷⁵</i>
\$ | <i>3,368⁷⁵</i>
\$ |
| per Lump Sum | | | | | |
| 4. | 8 | E.A. | Install Provided Aluminum Brackets on Existing bridge bolts and Secure Water Line on brackets with provided securing system including U-Bolts, nuts, and corrosion protection, at
<i>FIVE HUNDRED SIXTY NO</i>
Dollars
Cents | <i>560⁰⁰</i>
\$ | <i>3,360⁰⁰</i>
\$ |
| per Each | | | | | |
| 5. | 2 | E.A. | Install 8" 45 Bend with Restrained Mechanical Joints to 8" HDPE Adapter and 8" C900 PVC including securing of bend on provided aluminum bracket system, at
<i>SIX HUNDRED forty FIFTY four NO</i>
Dollars
Cents | <i>654⁰⁰</i>
\$ | <i>1,308⁰⁰</i>
\$ |
| per Each | | | | | |

**BID PROPOSAL
FOR
BEAMER ROAD WATER LINE IMPROVEMENTS**

JANUARY 2020

Item No.	Quantity	Unit	Item Description and Total Written Unit Price	Unit Price	Amount
6.	2	EA.	Install 8" C900 PVC (SDR18) from suspended 45 Bend with Restrained Mechanical Joint on bridge to 45 bend with Restr. MJ 4' below NG of creek bank (cut to size 20' joint as needed) including installation of crushed rock/gravel backfill from natural ground to below ground Restr. MJ and coating of above-ground PVC, at <i>one hundred - one</i>	<i>no</i> Dollars Cents	<i>101.⁰⁰</i> \$ <i>4040.⁰⁰</i> \$
			per Each		
7.	1	L.S.	Cut existing 8" steel pipe (2 locations), Remove existing pipe as needed to replace existing 8" Tap & Sleeve with 8" Cross, Install 8" MJ-to-Flange adapter on existing 8" steel line to New 8" Gate Valve (& Box) towards Beamer Rd, Install 8" blind flange on opposite side of cross & 8" gate valve to new PVC 8" water line from bridge, at <i>FIVE thousand</i>	<i>no</i> Dollars Cents	<i>5000.⁰⁰</i> \$ <i>5000.⁰⁰</i> \$
			per Lump Sum		
8.	2,320	L.F.	Install 8" C900 (SDR 18) PVC Water Line, at <i>twenty - six</i> <i>sixty - seven</i>	<i>no</i> Dollars Cents	<i>26.⁶⁷</i> \$ <i>61,866.²⁰</i> \$
			per Linear Foot		
9.	20	L.F.	Install 12" PVC sleeve for 8" C900 Water Line over Pipeline (cut to size to avoid bells), at <i>Ninety</i>	<i>no</i> Dollars Cents	<i>90.⁰⁰</i> \$ <i>1,800.⁰⁰</i> \$
			per Linear Foot		
10.	1	EA.	Install 2" Combo Air Release Valve with SS Tapping Sleeve & Nipple to 8" HDPE, at <i>one thousand</i>	<i>no</i> Dollars Cents	<i>1000.⁰⁰</i> \$ <i>1000.⁰⁰</i> \$
			per Each		

**BID PROPOSAL
FOR
BEAMER ROAD WATER LINE IMPROVEMENTS**

JANUARY 2020

Item No.	Quantity	Unit	Item Description and Total Written Unit Price	Unit Price	Amount
11.	8	EA.	Fire Hydrant Assembly per City of Friendswood Specification, at <u>one thousand six-hundred</u> <u>NO</u> Dollars Cents	\$ <u>1,600⁰⁰</u>	\$ <u>12,800⁰⁰</u>
			per Each		
12.	1	EA.	Connect to City's existing water line by removing and 2-45 bends (with blocking) and replacing with 1-8" Tee, at <u>two-thousand</u> <u>NO</u> Dollars Cents	\$ <u>2,000⁰⁰</u>	\$ <u>2,000⁰⁰</u>
			per Each		
13.	2	EA.	8" Gate Valve & Box with Concrete Collar, at <u>one-hundred</u> <u>NO</u> Dollars Cents	\$ <u>100⁰⁰</u>	\$ <u>200⁰⁰</u>
			per Each		
14.	0.5	Ac.	Hydromulch disturbed ditch areas, at <u>two-thousand -</u> <u>two-hundred</u> <u>NO</u> Dollars Cents	\$ <u>2,200⁰⁰</u>	\$ <u>1,100⁰⁰</u>
			per Acre		
15.	0.2	Ac.	Clearing and Grubbing as needed along water line route (debris can be left in place), at <u>twenty-seven thousand</u> <u>FIVE HUNDRED</u> <u>NO</u> Dollars Cents	\$ <u>27,500</u>	\$ <u>5,500⁰⁰</u>
			per Acre		
16.	60	L.F.	Filter Fabric Fence at Turkey Creek, at <u>FIVE</u> <u>NO</u> Dollars Cents	\$ <u>5⁰⁰</u>	\$ <u>300⁰⁰</u>
			per Linear Foot		
17.	1.0	L.S.	Traffic Control, at <u>two-thousand - six hundred</u> <u>Ninety-five</u> <u>NO</u> Dollars Cents	\$ <u>2,695⁰⁰</u>	\$ <u>2,695⁰⁰</u>
			per Lump Sum		

**BID PROPOSAL
FOR
BEAMER ROAD WATER LINE IMPROVEMENTS**

JANUARY 2020

Item No.	Quantity	Unit	Item Description and Total Written Unit Price	Unit Price	Amount
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18.	1.0	L.S.	Project Material Costs (not including bedding and blocking materials), at		
			<u>Fifty-Four Thousand</u> Dollars		
			<u>Zero</u> Cents	\$ 54,000.00	\$ 54,000.00
			per Lump Sum		

WATER DISTRIBUTION SYSTEM SUBTOTAL

\$ 198,476⁸⁵

ENGINEERING, SURVEYING & PROJECT REPRESENTATION

19.	1.0	L.S.	Project Representation by Coastal Bend Property Development (100 hr @ \$90/hr), at		
			<u>Nine Thousand</u> Dollars		
			<u>Zero</u> Cents	\$ 9,000.00	\$ 9,000.00
			per Lump Sum		

20.	1.0	L.S.	Project Engineering at 7% of WATER DISTRIBUTION SYSTEM TOTAL, at		
			<u>thirteen thousand -</u> Dollars		
			<u>eight hundred - ninety - three</u> Cents	\$ 13,893 ³⁸	\$ 13,893 ³⁸
			<u>thirty - eight</u>		
			per Lump Sum		

21.	1.0	L.S.	Project Surveying by EllisSurveying Services, LLC (including control staking and easement metes & bonds), at		
			<u>Two Thousand Two Hundred Fifty</u> Dollars		
			<u>Zero</u> Cents	\$ 2,250.00	\$ 2,250.00
			per Lump Sum		

ENGINEERING, SURVEYING & PROJECT REPRESENTATION SUBTOTAL

\$ 25,143³⁸

**BID PROPOSAL
FOR
BEAMER ROAD WATER LINE IMPROVEMENTS**

JANUARY 2020

Item No.	Quantity	Unit	Item Description and Total Written Unit Price	Unit Price	Amount
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WATER DISTRIBUTION SYSTEM SUBTOTAL

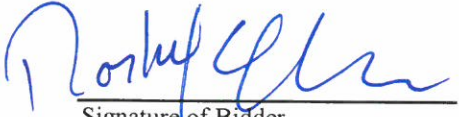
\$ 198476⁸⁵

ENGINEERING, SURVEYING & PROJECT REPRESENTATION SUBTOTAL

\$ 25143³⁸

TOTAL BID (ITEMS 1-21)

\$ 223620²³

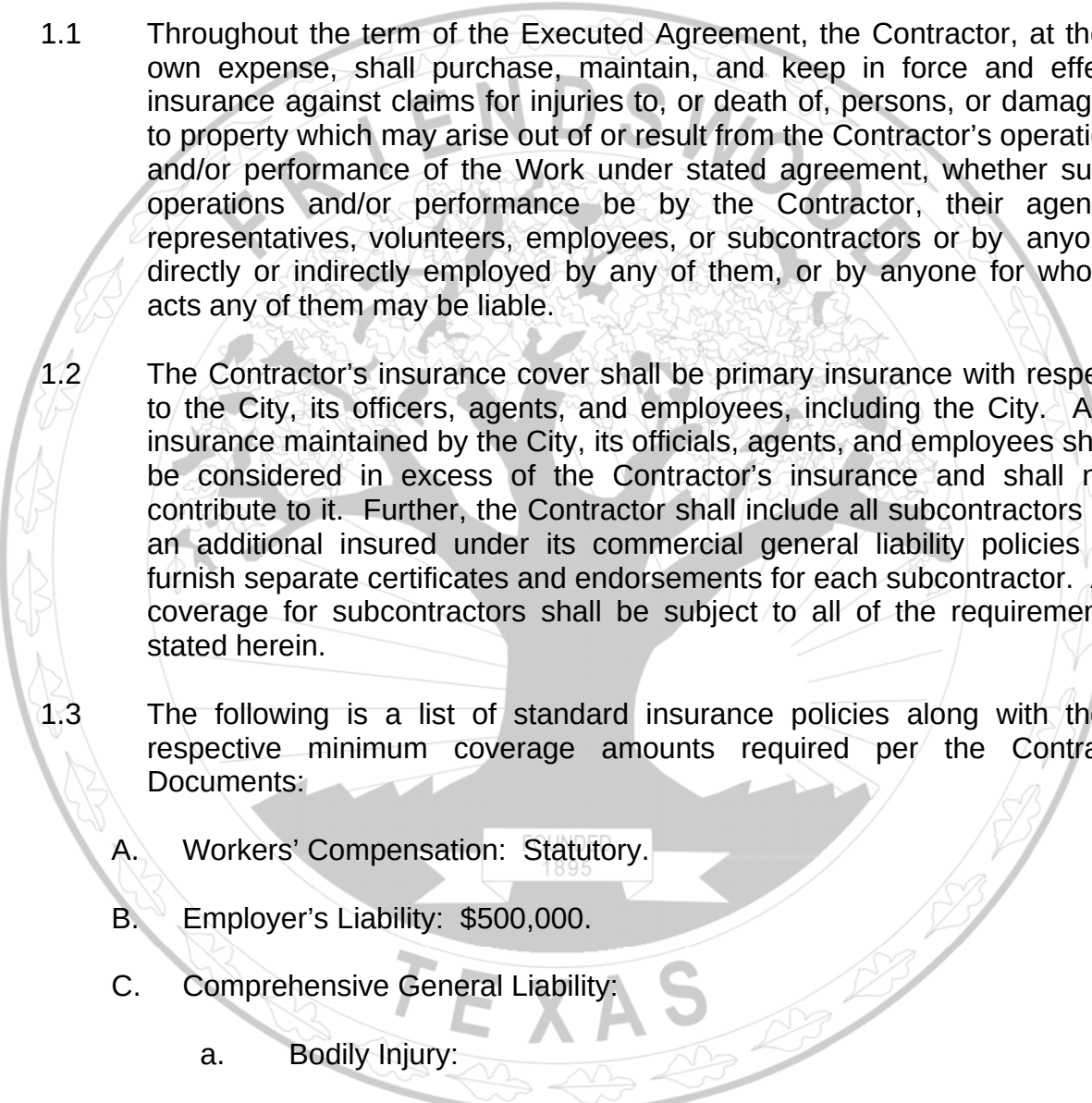


Signature of Bidder

DOCUMENT 00320

INSURANCE REQUIREMENTS

PART I: GENERAL

- 
- 1.1 Throughout the term of the Executed Agreement, the Contractor, at their own expense, shall purchase, maintain, and keep in force and effect insurance against claims for injuries to, or death of, persons, or damages to property which may arise out of or result from the Contractor's operation and/or performance of the Work under stated agreement, whether such operations and/or performance be by the Contractor, their agents, representatives, volunteers, employees, or subcontractors or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.
- 1.2 The Contractor's insurance cover shall be primary insurance with respect to the City, its officers, agents, and employees, including the City. Any insurance maintained by the City, its officials, agents, and employees shall be considered in excess of the Contractor's insurance and shall not contribute to it. Further, the Contractor shall include all subcontractors as an additional insured under its commercial general liability policies or furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.
- 1.3 The following is a list of standard insurance policies along with their respective minimum coverage amounts required per the Contract Documents:
- A. Workers' Compensation: Statutory.
 - B. Employer's Liability: \$500,000.
 - C. Comprehensive General Liability:
 - a. Bodily Injury:
 - 1. \$500,000 per Occurrence.
 - 2. \$1,000,000 per Aggregate Occurrence.
 - b. Property Damage:
 - 1. \$500,000 per Occurrence.

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2. \$1,000,000 per Aggregate Occurrence.

D. Comprehensive Automobile Liability:

a. Bodily Injury:

1. \$500,000 per Each Person.
2. \$1,000,000 per Accident; or
3. \$1,000,000 Combined Single Limit (CSL).

b. Property Damage:

1. \$500,000 per Accident.

1.4 Upon execution of Document 00400 – Standard Agreement of Contracting Services, the Contractor shall file with the City valid Certificates of Insurance and endorsements acceptable to the City. Such Certificates shall contain a provision that coverage afforded under the policies will not be canceled, suspended, voided, or reduced until at least thirty days (30 D) prior written notice has been given to the City via Certified Mail, return receipt requested.

1.5 The Contractor shall also file with the City valid Certificates of Insurance covering all Subcontractors.

1.6 The following general requirements shall apply to all policies:

- A. AM Best Rating of A- or better.
- B. Only insurance carriers licensed and admitted to do business in the State of Texas shall be accepted.
- C. The City of Friendswood, its officials, and employees are to be added as an Additional Insured to liability policies.
- D. Certificates of Insurance showing evidence of insurance coverage shall be provided to the City's representative within ten (10) Working Days after this Agreement is executed.
- E. All other requirements set in Document 000115[INSERT B, C OR P] - Instructions to [INSERT BIDDERS, OFFERORS OR PROPOSERS].

PART II: NOT USED

00320-2

PART III: NOT USED

END OF DOCUMENT



SECTION 00425

TEXAS WORKERS' COMPENSATION

In accordance with

28 TAC 110.110

**DIVISION OF TEXAS WORKERS' COMPENSATION
TEXAS DEPARTMENT OF INSURANCE**

A. DEFINITIONS

Certificate of coverage (certificate") – A copy of a certificate of authority to self-insure issued by the Texas Department of Insurance ("TDI"), or a coverage agreement showing statutory workers' compensation insurance coverage for the persons' or entity's employees providing services on a project, for the duration of the project.

Duration of the project – includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in Section 406.096 of the Texas Labor Code) includes all persons or entities performing all or part of the services the Contractor has undertaken to perform the project, regardless of whether that person has contracted directly with the Contractor and regardless of whether that person has employees. "This includes, without limitation, independent contractors, subcontractors, sole proprietors, leasing companies, motor carriers, owner-operators, employees of any such entity or employees of any entity which furnishes persons to provide services on the project. Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- B.** The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreement, which meets the statutory requirements of Texas Labor Code, §401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.
- C.** The Contractor must provide a certificate of coverage to the City prior to being awarded the Contract.
- D.** If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor shall, prior to the end of the coverage period, file a new certificate of coverage with the City, showing that the

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coverage has been extended.

- E. The Contractor shall obtain from each person providing services on the project, and provide to the City:
 - (1) a certificate of coverage, prior to that person beginning work on the project, so that the City shall have on file certificates of coverage showing coverage for all persons providing services on the project; and
 - (2) no later than seven days (7 D) after the receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- F. The Contractor shall retain all required certificates of coverage on file for the duration of the project and for one year (1 Yr) thereafter.
- G. The Contractor shall notify the City in writing by certified mail or personal delivery, within ten days (10 D) after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.
- H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the TDI, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify current coverage and report failure to provide coverage.

The sign shall include as a minimum the following:

Post a notice on each project site informing all persons providing services on the project that they are required to be covered, and stating how a person may verify current coverage and report failure to provide coverage. This notice does not satisfy other posting requirements imposed by the Act or other commission rules. This notice must be printed with a title in at least thirty point (30 pt) bold type and text in at least nineteen point (19 pt) normal type, and shall be in both English and Spanish and any other language common to the worker population. The text for the notices shall be the following text provided by the commission on sample notice, without any additional words or changes:

"REQUIRED WORKERS' COMPENSATION COVERAGE"

- I. The Contractor shall contractually require each person with whom it contracts to provide services on a project to:
 - (1) Provide coverage, based on proper reporting classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory

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requirements of Texas Labor Code §401.011(44) for all employees providing services on the project, for the duration of the project;

- (2) provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;
 - (3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (4) Obtain from each other person with whom it contracts, and provide to the Contractor:
 - (A) a certificate of coverage, prior to the other person beginning work on the project, and;
 - (B) a new certificate of coverage showing extension of the coverage period, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 - (5) retain all required certificates of coverage on file for the duration of the project and for one year (1 Yr) thereafter;
 - (6) notify the City in writing by certified mail or personal delivery, within ten days (10 D) after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
 - (7) contractually require each other person with whom it contracts to perform as required by paragraphs one (1) through seven (7), with providing certificate of coverage to be provided to the person for whom they are providing services.
- J. By signing this Contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the City that all employees of the Contractor who shall provide services on this project shall be covered by workers' compensation coverage for the duration of the project, that the coverage shall be based on proper reporting of classifications codes and payroll amounts, and that all coverage agreements shall be filed with the appropriate insurance carrier or, in case of a self-insured, with the TDI's requirements and regulations. Providing false or misleading information shall subject the Contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

- K. The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the City to declare the contract void if the Contractor does not remedy this breach within ten days (10 D) after receipt of notice of breach from the City.

END OF SECTION



DOCUMENT 00430

AFFIDAVIT OF INSURANCE

BEFORE ME, the undersigned authority, on this day personally appeared [INSERT AFFIANT], who being by me duly sworn on their oath stated that [INSERT HE OR SHE] is [INSERT TITLE] of [INSERT CONTRACTOR NAME], a representative of the Contractor named and referred to within the Contract Documents; that they are fully competent and authorized to give this affidavit and that the attached original insurance certificate(s) truly and accurately reflects the insurance coverage that is now available and will be available during the term of the Contract.

(Affiant's Signature)

(Date)

SWORN AND SUBSCRIBED by me on this ____ day of _____,
A.D. 20_____.

Notary Public in and for _____ County, _____.

Notary Public Signature

NOTARY SEAL

Print or Type Notary Public Name

My Commission Expires: _____

END OF DOCUMENT

DOCUMENT 00435

WAGE SCALE FOR ENGINEERING CONSTRUCTION

PART I: GENERAL

- 1.1 As required by Chapter 2258, Subchapter A, Government Code, Building and Procurement Commission, Vernon's Texas Civil Statutes, the City has ascertained local prevailing wage rates for the type of any Civil or Utility work to be performed under the Contract. The Classification and Minimum Rates are listed in TABLE 2.1 – LABOR CLASSIFICATION AND MINIMUM WAGE SCALE FOR HIGHWAY CONSTRUCTION (TX20080046) and TABLE 2.2 LABOR CLASSIFICATION AND MINIMUM WAGE SCALE FOR HEAVY CONSTRUCTION (TX100052) in this Document and made part of the Contract Documents.
- 1.2 The Amended Article further provides that the Contractor shall forfeit, as a penalty, to the City, One Hundred dollars (\$100.00) per day for each laborer, workman, or mechanic who is not paid the stipulated wage for the type of work being performed by him as set up in the wage scale. The City is authorized to withhold from the Contractor the amount of this penalty in any payment that might be claimed by the Contractor or subcontractor. The Act makes the Contractor responsible for the acts of the subcontractors in this respect.
- 1.3 The Article likewise requires that the Contractor and subcontractors keep an accurate record of the names and occupations of all persons employed by him and to show the actual per diem wages paid to each worker and these records are open to the inspection of the City.
- 1.4 This prevailing wage rate does not prohibit the payment of more than the rates stated.
- 1.5 The hourly cost of salary for non-exempt workers for labor in excess of forty (40) hours per worker per week shall be calculated at one and one-half (1.5) times the worker's base pay.
- 1.6 The wage scale for engineering construction is to be applied to all site work greater than five (5) feet from an exterior wall of new building under construction or from an exterior wall of an existing building.
- 1.7 Wages listed below are taken from the Department of Labor, Employment Standards Administration, General Decisions.

A. General Decision TX20080046 for Highway Construction.

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B. General Decision TX100052 for Heavy Construction.

PART II: WAGE CLASSIFICATION

**2.1 LABOR CLASSIFICATION AND MINIMUM WAGE SCALE FOR HIGHWAY
CONSTRUCTION (TX20080046).**

CLASSIFICATION	RATE	CLASSIFICATION	RATE
Asphalt Distributor Operator	\$10.94	Milling Machine Operator – Fine Grade	\$13.17
Asphalt Paving Machine Operator	\$12.01	Mixer Operator	\$10.33
Asphalt Raker	\$11.13	Motor Grader Operator – Rough	\$13.13
Asphalt Shoveler	\$9.14	Motor Grader Operator	\$11.67
Broom or Sweeper Operator	\$11.19	Oiler	\$12.12
Bulldozer Operator	\$11.81	Painter – Structures	\$15.54
Carpenter – Rough	\$14.04	Pavement Marking Machine Operator	\$8.18
Concrete Finisher – Paving	\$11.38	Pile Driver	\$12.22
Concrete Finisher – Structures	\$10.80	Pipe Layer	\$9.49
Concrete Paving – Curbing Machine Operator	\$10.00	Reinforcing Steel Setter – Paving	\$15.14
Concrete Paving – Finishing Machine Operator	\$13.07	Reinforcing Steel Setter – Structure	\$13.87
Concrete Paving – Joint Sealer Operator	\$11.00	Roller Operator, Pneumatic - Self-propelled	\$9.91
Concrete Paving – Saw Operator	\$12.75	Roller Operator, Steel Wheel, Flat Wheel/Tamping	\$10.43
Concrete Paving – Spreader Operator	\$10.44	Roller Operator, Steel Wheel, Plant Mix Pavement	\$11.07
Concrete Rubber	\$9.00	Scraper Operator	\$9.92
Crane Clamshell Backhoe Derrick, Dragline, Shovel Operator	\$12.71	Servicer	\$10.96
Crusher and Screening Plant Operator	\$11.29	Sign Installer – PGM	\$8.54
Electrician	\$21.79	Slip Form Machine Operator	\$11.07
Flagger	\$9.42	Spreader Box Operator	\$11.12
Form Builder/Setter – Structures	\$10.50	Structural Steel Worker	\$12.13
Form Liner – Paving and Curb	\$11.75	Tractor Operator – Crawler Type	\$13.00
Form Setter – Paving and Curb	\$10.51	Tractor Operator – Pneumatic	\$10.07
Foundation Drill Operator – Crawler Mounted	\$15.00	Transit Mixer Truck Driver	\$11.00
Foundation Drill Operator – Truck Mounted	\$12.73	Truck Driver, Lowboy – float	\$13.16
Front Loader Operator	\$10.65	Truck Driver, Single-Axle – Heavy	\$10.65
Laborer – Common	\$9.15	Truck Driver, Single-Axle – Light	\$10.07
Laborer – Utility	\$9.81	Truck Driver, Tandem Axle Semi-Trailer	\$10.25
Manhole Builder	\$9.00	Work Zone Barricade Servicer	\$9.94
Mechanic	\$13.72	Welders - Receive rate prescribed for craft performing operation to which welding is incidental	

**2.2 LABOR CLASSIFICATION AND MINIMUM WAGE SCALE FOR HEAVY
CONSTRUCTION (TX100052).**

CLASSIFICATION	RATE	CLASSIFICATION	RATE
Carpenter	\$14.04	Operator, Backhoe	\$13.47
Cement Mason/Concrete Finisher	\$12.50	Operator, Bulldozer	\$12.58
Electrician	\$17.00	Operator, Crane	\$15.33
Formbuilder/Formsetter	\$13.84	Operator, Excavator	\$16.37
Ironworker, Reinforcing	\$11.28	Operator, Front End Loader	\$12.16
Laborer, Common	\$8.94	Operator, Grader	\$12.20
Laborer, Landscape	\$7.35	Operator, Tractor	\$15.00
Laborer, Mason Tender Cement	\$9.94	Sprinkler Fitter (Fire Sprinklers)	\$25.90
Laborer, Pipelayer	\$10.14	Truck Driver	\$12.02
Pipefitter	\$17.00	Welders - Receive rate prescribed for craft performing operation to which welding is incidental	

END OF DOCUMENT

DOCUMENT 00445

ALCOHOL AND DRUG FREE WORKPLACE

The following document is the Alcohol Policy for the City of Friendswood.

15.09 (I) ALCOHOL AND DRUG FREE WORKPLACE POLICY AND PROCEDURE

**CITY OF FRIENDSWOOD
ALCOHOL AND DRUG FREE WORKPLACE**

I. POLICY STATEMENT

In order to effectuate an alcohol and drug free workplace, the following general policy statements are hereby adopted:

- A. Employees shall not be permitted to report to work while under the influence of alcohol or drugs, or to possess or transfer drugs or alcohol to any person while on duty. Provided however, this policy statement shall not be construed to apply to members of the City Police Department or Emergency Medical Technicians when their duties require the lawful possession of seized alcohol or drugs, or the transport thereof.
- B. Employees who are reasonably suspected of being under the influence of alcohol or drugs shall be prohibited from engaging in further work, and shall be subject to immediate testing in accordance with the procedures herein established.
- C. In recognition of serious duties and responsibilities entrusted to employees of the City and that use of alcohol or drugs hinder one's ability to perform and fulfill such duties and responsibilities, these policies are adopted to establish guidelines for the detection and deterrence of alcohol and drug abuse.
- D. When applying the policies contained herein, Management should always focus on the ability of the employee to prosecute his work. Tests and procedures outlined herein are only intended as tools to assist Management, not as a replacement of Management's responsibilities over employees in the performance of their duties.

II. PURPOSE OF POLICIES

The purpose of the alcohol and drug free workplace policies contained herein is as follows:

- A. To promote and maintain a safe, healthy, and productive work environment for all city employees.
- B. To ensure the safe and efficient delivery of services to the citizens of the city.
- C. To eliminate the abusive use of alcohol, illegal drugs, prescription drugs, or any other substance which could impair an employee's ability to perform safely and effectively the functions of any given job; and
- D. To establish compliance by the city with any and all state and federal rules and regulations relating to the establishment and maintenance of an alcohol and drug free workplace.

III. DEFINITIONS

For the purpose of these policies the following words, terms, and phrases shall have the meanings ascribed thereto:

- A. **"Alcohol"** means any beverage that contains ethyl alcohol (ethanol), including but not limited to, beer, wine and distilled spirits.
- B. **"Biological Testing"** or **"chemical testing"** or **"drug testing"** means the scientific analysis of urine, blood, breath, saliva, hair, tissue, and other specimens of the human body for the purpose of detecting alcohol or drugs.
- C. **"Chain of custody"** means procedures to account for the integrity of each urine specimen by tracking its handling and storage from point of specimen to collection to final disposition of the specimen. These procedures shall require that an approved chain of custody form be used from time to collection to receipt by the laboratory and that upon receipt of the laboratory an appropriate chain of custody form(s) account for the sample or sample aliquot within the laboratory. Chain of custody forms shall, at minimum, include an entry documenting date and purpose each time a specimen or aliquot is handled or transferred and identifying every individual in the chain of custody.
- D. **"Collection site"** means a place where individuals present themselves for the purpose of providing body fluids or tissue samples to be analyzed for specified controlled substances. A collection site will have all necessary personnel, materials, equipment, facilities and supervision to provide for collection, security, temporary storage, and transportation or shipment of the samples to a laboratory.
- E. **"Collection site person"** means a person who instructs and assists individuals as a collection site and who receives and makes initial

examination of the specimens provided by those individuals. A collection site person shall have successfully completed training to carry out this function.

- F. **“Contract vendor”** means an independent testing or administrative agency engaged for the purpose of implementing one or more procedures in the collection or testing of employees for alcohol or drug use.
- G. **“City Premises”** or **“City Facilities”** means all property of the City including, but not limited to, buildings and surrounding areas on City-owned or leased vehicles and equipment wherever located. It also includes premises where the city performs contract services.
- H. **“Confirmatory test”** means a second analytical procedure to identify the presence in urine specimen of a specific drug or metabolite which is independent of initial test and which uses a different technique and chemical principle from that of the initial test in order to ensure reliability and accuracy. Gas chromatography/mass spectrometry (GC/MS) is the only authorized confirmatory test method.
- I. **“Contraband”** means any article, the possession of which on City premises or while on City business,, causes as individual to be in violation of a City work rule. Contraband includes illegal drugs and alcohol beverages and drug paraphernalia.
- J. **“Controlled Substances”** means all substances listed in Schedule I through V of the Controlled Substances Abuse Act as those schedules may be revised from time to time.
- K. **“Drug”** means any substance that is a controlled substance.
- L. **“Employee”** means an employee, contractor, subcontractor, agent, officer, or representative of the City.
- M. **“Illegal Drug”** means any drug which is not legally obtainable; any drug which is legally obtainable but has not been legally obtained; any prescribed drug not being used for the prescribed purpose; and over-the-counter drug being used at a dosage level different than recommended by the manufacturer or being used for a purpose other than intended by the manufacturer or being used for a purpose not in accordance with bona fide medical therapy. Examples of illegal drugs are Cannabis substance such as marijuana and hashish, cocaine, heroin, phencyclidine (PCP), and so –called designer drugs and look-alike drugs.
- N. **“Initial test”** or **“screening test”** or **“preliminary test”** means in the context of drug detection an immunoassay screen to eliminate negative uria specimens from further consideration. In the context of alcohol

detection, these terms mean an analysis of breath or saliva specimens for the purpose of eliminating negative specimens from further consideration.

- O. **“Legal drug”** means any prescribed drug or over-the-counter drug, which has been legally obtained and is being used for the purpose of which prescribed or manufactured.
- P. **“Medical practitioner”** means a licensed physician.
- Q. **“Under the Influence”** means any detectable trace or amount.

**CONTRACTOR’S CERTIFICATION FOR COMPLIANCE TO
THE CITY OF FRIENDSWOOD
ALCOHOL AND DRUG FREE WORKPLACE POLICIES**

This is to certify that the officers and operating management of [INSERT CONTRACTOR NAME] have read and acknowledge understanding of and agreement with the provisions of the City of Friendswood, Texas Alcohol and Drug Free Workplace policies, and the implementing procedures related thereto.

This certification confirms our obligation to comply with the above-named policies and we further acknowledge and agree that our failure to comply with the provisions thereof shall constitute a material breach of that certain Contract dated [INSERT MONTH] [INSERT DATE], [INSERT YEAR] by and between the aforescribed and the City of Friendswood, Texas.

[INSERT CONTACT NAME]
[INSERT CONTACT TITLE]

Date

END OF DOCUMENT

DOCUMENT 00455

CONSTRUCTION STORM PREPARATION POLICY

PART I: GENERAL

- 1.1 The City of Friendswood has instituted a storm preparation policy to help protect citizens and property from damage due to loose construction materials driven by storm winds. Storms covered by this policy may be tropical disturbances, hurricanes, and systems of disturbed weather associated with weather front movements.
- 1.2 Storms from the Gulf of Mexico and systems of disturbed weather associated with fronts are preceded by a warning system from the National Weather Service that allows some time to prepare.

PART II: DEFINITIONS

2.1 WATCH

- A. A National Weather Service notice indicating that a particular hazard is possible, i.e., that conditions are more favorable than usual for its occurrence. A watch is a recommendation for planning, preparation, and increased awareness (i.e., to be alert for changing weather, listen for further information, and think about what to do if the danger materializes).

2.2 WARNING

- A. A notice issued by the National Weather Service local offices indicating that a particular weather hazard is either imminent or has been reported. A warning indicates the need to take action to protect life and property. The type of hazard is reflected in the type of warning (e.g., tornado warning, hurricane warning, etc.)

2.3 GALE AND STORM WARNINGS

- A. Gale warning may be issued when winds of 39-54 miles an hour (34-47 knots) are expected. Storm Warnings may be issued when winds of 55-73 miles an hour (48-63 knots) are expected. If a hurricane is expected to strike a costal area, gale or storm warnings will not usually precede hurricane warnings.

2.4 HURRICANE ADVISORY

- A. A notice issued by the National Hurricane Center, numbered consecutively for each storm, describing the present and forecasted position and intensity. Advisories are issued at six (6) hour intervals at midnight, 6 a.m., noon, and 6 p.m., Eastern Daylight Time. Bulletins provide additional information. Each message gives the name, eye position, and intensity and forecast movement of the storm.

2.5 HURRICANE WATCH

- A. An announcement added to a hurricane advisory that hurricane conditions pose a possible threat to a specified coastal area within thirty-six (36) hours. A watch is used to inform the public and marine interests of the storms location and intensity, and movement.

2.6 HURRICANE WARNING

- A. A warning added to a hurricane advisory that sustained winds of 74 mph (64 knots) or higher associated with a hurricane are expected in a specified coastal area within twenty-four (24) hours or less. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force. A warning is issued to inform the public and marine interest of the storms location, intensity, and movement. The NHC chooses a distance of approximately 300 miles.

2.7 SEVERE THUNDERSTORM WATCH

- A. A notice that severe thunderstorms are possible in your area.

2.8 SEVERE THUNDERSTORM WARNING

- A. A notice that severe thunderstorms are occurring.

PART III: EXECUTION

3.1 PHASE 1 – ALERT/WATCH PHASE

- A. This phase shall go into affect with a call and Fax from the City of Friendswood to the Contractor. The Contractor's superintendent on site shall also be informed and the Project Manager shall go over the steps that shall to be taken. This shall be initiated when The National Weather Service issues a watch or warning indicating a Gulf storm system or a severe weather front exists and poses a "potential" threat to the Friendswood area.

00455-2

B. The following actions shall be taken during an Alert/Watch Phase:

1. The Contractor shall immediately undertake cleanup operations at the job site.
2. Make preparations to remove all debris and trash from the site.
3. Stack and secure other materials that are subject to wind movement.
4. Make preparations to back-fill all excavations and secure all equipment.
5. Secure all facilities such as trailers, port-a-cans, tool sheds, etc.
6. Doors and windows are to be closed and locked.

3.2 Phase 2 – Threat / Warning Phase

A. When Friendswood is within the predicted impact area as in the path of a severe weather front, or in the path of a hurricane, additional preparation must be made. Phase Two (2) shall go into affect with a second (2nd) call from the City of Friendswood to the contractor.

B. The following action shall be taken during a Threat/Warning Phase:

1. The Contractor shall immediately suspend ALL building operations.
2. All materials shall be tied down to resist the reported National Weather Service probable winds. Always assume the worst-case wind.
3. Any materials that are not tied down shall be stored in heavy containers or carried off the job site.
4. If structures are partly finished, storm bracing shall be added to withstand the probable storm winds.
5. All windows are shall protected from flying debris and wind damage.
6. All equipment shall be stored or removed from the job site to a safe place.
7. Trailers, port-a-cans, and any other facilities shall be tied down.

00455-3

8. All excavations shall be covered.
9. All incomplete work shall be stabilized.
10. Take necessary precautions against rising water – some sites may be in flood prone areas.

3.3 TRAFFIC CONTROL DEVICES

- A. All Traffic Control devices for the project shall be in place and in good condition. Traffic Control Devices are **NOT** to be secured or extra weight added to hold them in place. Traffic Control Devices are to remain as originally placed and within the guidelines of the TMUTCD.
- B. All Traffic Control signage shall be cleaned for visibility, and if not up to current TMUTCD standards shall be replaced.

3.4 NOTIFICATION CONTACTS

- A. Each Contractor shall provide and maintain a contact name and two Alternates with day and night telephone numbers to The City of Friendswood for these emergency notifications.

This is to certify that the officers and operating management of [INSERT CONTRACTOR NAME] have read and acknowledge understanding of and agreement with the provisions of the City of Friendswood, Storm Policy, and the implementing procedures related thereto. The emergency contacts listed below have been given copies of this policy and instructed in the procedures contained herein.

This certification confirms our obligation to comply with the above-named policies and we further acknowledge and agree that our failure to comply with the provisions thereof shall constitute a material breach of that certain Contract dated [INSERT MONTH] [INSERT DATE], [INSERT YEAR] by and between the aforescribed and the City of Friendswood, Texas.

Signature

Print Name

Company Name

COMPANY CONTACTS:

Contact #1 Name

Contact #2 Name

Daytime Phone Number

Daytime Phone Number

Nighttime Phone Number

Nighttime Phone Number

Contact #3 Name

Daytime Phone Number

Nighttime Phone Number

CITY OF FRIENDSWOOD CONTACTS:

Contact #1 Name

[INSERT DIRECTOR NAME]
Director of [INSERT DEPARTMENT]
(281) 996-[INSERT EXTENSION]
Daytime Phone Number

Contact #2 Name

[INSERT SUPERVISOR NAME]
[INSERT TITLE]
(281) 996-[INSERT EXTENSION]
Daytime Phone Number

Contact #3 Name

[INSERT YOUR NAME]
[INSERT YOUR TITLE]
(281) 996-[INSERT YOUR EXTENSION]

Any nighttime contact will be made via Police Department Dispatch at (281) 996-3300.

END OF DOCUMENT

DOCUMENT 00460

**HAZARDOUS COMMUNICATIONS PROGRAM
REQUIREMENT AGREEMENT
For Contractors Performing Work Under Contract**

PART I: GENERAL

Whereas, the City of Friendswood desires to comply with the Texas Hazard Communications Act of the Health and Safety Code, provide and maintain a safe and healthy work environment for its employees, citizens and contractors and to provide for the free access to and communication of information pertaining to the use and storage of materials in the workplace; and

Whereas, the City of Friendswood wants to ensure that its contractors do the same.

Accordingly, the City of Friendswood's Hazard Communications Program maintains a list of all materials stored or used within its sites and facilities. Additionally, the City maintains and updates its inventories of MSDS on a routine basis so as to provide its employees, citizens and contractors with the most accurate and up-to-date information pertaining to materials that an employee or contractor might come into contact with during the course of normal operations.

The City acknowledges its obligations under these States and federal laws to make any and all such information available to the contractor, his employees, vendors and sub-contractors for sites or facilities within which its contractors, their employees, vendors and sub-contractors are engaged in work.

It is hereby understood and agreed that [INSERT CONTRACTOR NAME], performing the work of the contract for [INSERT PROJECT NAME], shall provide and maintain, within the limits of all applicable laws, a satisfactory job-site Hazard Communications program including, but not limited to, an Employer Right to Know information center, which shall have a Hazard Communication Information Binder for all chemicals, materials and substances that are required for, used, stored, or incorporated into the work of the contract and a Workplace chemical list.

The Contractor shall retain all legal responsibility for providing and maintaining this center and providing accurate and an up-to-date list of all such materials chemicals and substances and the appropriate Material Safety Data Sheets (MSDS) throughout the duration of the contract or as long as the Contractor's forces, materials, substances or chemicals remain or continue to be stored on site.

The Contractor further agrees to notify the City's representative in advance if any of the work requires the use of or storage of any "hazardous chemical."

00460-1

City of Friendswood

City Attorney Approved: 8/6/2010

The terms and conditions of this agreement shall remain a part of the Contract and in force whether attached to the Contract or not.

PART II: DEFINITIONS

2.1 "Contractor"

- A. Any entity legally contracted with the City of Friendswood for the purpose of providing services or goods of any nature in exchange for monetary consideration.

2.2 "Duration of Contract"

- A. The agreed contract time as defined and amended by the terms of the agreement.

2.3 "Employee vendor and sub-contractor"

- A. Means a person or group who may be or may have been exposed to hazardous chemicals in the person's workplace under normal operating conditions or foreseeable emergencies, and includes a person working for this state, a person working for a political subdivision of this state, or a member of a volunteer emergency service organization

2.4 "Hazardous chemical" or "chemical"

- A. Means an element, compound, or mixture of elements or compounds that is a physical hazard or health hazard as defined by the OSHA standard in 29 CFR Section 1910.1200(c), or a hazardous substance as defined by the OSHA standard in 29 CFR Section 1910.1200(d)(3), or by OSHA's written interpretations. A hazard determination may be made by employers who choose not to rely on the evaluations made by their suppliers if there are relevant qualitative or quantitative differences. A hazard determination shall involve the best professional judgment.

2.5 "Material Safety Data Sheet" ("MSDS")

- A. Means a document containing chemical hazard and safe handling information that is prepared in accordance with the requirements of the OSHA standard for that document.

2.6 "Workplace chemical list"

- A. Means a list of hazardous chemicals developed under Section 502.005(a) of the Texas Health and Safety Code.

This certification confirms our obligation to comply with the above-named policies and we further acknowledge and agree that our failure to comply with the provisions thereof shall constitute a material breach of that certain Contract dated [INSERT MONTH] [INSERT DATE], [INSERT YEAR] by and between the aforescribed and the City of Friendswood, Texas.

[INSERT CONTACT NAME]
[INSERT CONTACT TITLE]

Date

END OF DOCUMENT

DOCUMENT 00470

PERFORMANCE BOND

THAT WE, [INSERT CONTRACTOR NAME], as Principal, hereinafter called Contractor, and the other subscriber hereto, [INSERT SURETY NAME], as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Friendswood, a municipal corporation, in the sum of [INSERT WRITTEN DOLLAR AMOUNT] dollars and [INSERT WRITTEN CENTS AMOUNT] cents (\$[INSERT AMOUNT IN #'S]), for the payment of which sum well and truly to be made to the City of Friendswood and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a contract in writing with the City of Friendswood for [INSERT PROJECT NAME], all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein;

NOW, THEREFORE, if the said Contractor shall faithfully and strictly perform the Contract in all its terms, provisions, and stipulations in accordance with its true meaning and effect, and in accordance with the Contract Documents referred to therein and shall comply strictly with each and every provision of the Contract and this Bond, then this obligation shall become null and void and shall have no further force and effect; otherwise the same is to remain in full force and effect. Should the Contractor fail to faithfully and strictly perform the Contract in all its terms, including but not limited to the indemnifications thereunder, the Surety shall be liable for all damages, losses, expenses, and liabilities that the City may suffer in consequence thereof, as more fully set forth herein.

IT IS FURTHER PROVIDED herein that pursuant to this undertaking, the Principal hereof and the Surety shall both be bound until date of final completion as shall be expressed and set out in the terms and conditions of the Contract, and suit on said bond may be brought up until the first anniversary of the date of said final completion, or abandonment or termination of the public work contract as is provided for in Chapter 2253.078(a), Texas Government Code, as may be amended.

It is further understood and agreed that the Surety does hereby relieve the City or its representatives from the exercise of any diligence whatever securing compliance on the part of the Contractor with the terms of the Contract, and Surety agrees that it shall be bound to take notice of and shall be held to have knowledge of all acts or omissions of the Contractor in all matters pertaining to the Contract. The Surety understands and agrees that the provision in the Contract that the City shall retain certain amounts due the Contractor until the expiration of thirty (30) days from the acceptance of the Work,

00470-1

City of Friendswood

City Attorney Approved: 8/6/2010

which is intended for the City's benefit, and the City shall have the right to pay or withhold such retained amounts or any other amount owing under the Contract without changing or affecting the liability of the Surety hereon in any degree.

It is further expressly agreed by the Surety that the City or its representatives are at liberty at any time, without notice to the Surety, to make any changes in the Contract Documents and in the Work to be done there under, as provided in the Contract and in the terms and conditions thereof, or to make any extension of time, any change in, addition to, or deduction from the Work to be done thereunder, and that such changes, if made, shall not in any way vitiate the obligation in this bond and undertaking or release the Surety therefrom.

It is further expressly agreed and understood that the Contractor and Surety will full indemnify, defend, and save harmless the City from any liability, loss, cost, expense, or damage arising out of the Contractor's performance of the Contract.

If the City gives the Surety notice of the Contractor's default, Surety shall, within forty-five (45) days take one (1) of the following actions:

1. Arrange for the Contractor, with consent of the City, to perform and complete the Contract; or
2. Take over and assume the completion of the Contract itself, through its agents or through independent contractors, and become entitled to the payment of the balance of the Contract Price.

If the Surety fails to take either of the actions set out above, it shall be deemed to have waived its right to perform and complete the Contract and receive payment of the balance of the Contract Price and the City shall be entitled to enforce and remedies available at law, including but not limited to completing the Contract itself and recovering any cost in excess of the Original Contract Price from the Surety.

This Bond and all obligations created hereunder shall be performable in Galveston County, Texas. This Bond is given in compliance with the provisions of Chapter 2253, Texas Government Code, as amended, which is incorporated herein by this reference.

Notices required or permitted hereunder shall be given in writing and shall be deemed delivered when actually received or, if earlier, on the third (3rd) day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other Party at the address prescribed in the Contract Documents or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

IN WITNESS THEREOF, the Bidder and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

WITNESS:

[INSERT CONTRACTOR NAME]

Name of Contractor

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

WITNESS:

[INSERT SURETY NAME]

Full Name of Surety

[INSERT SURETY ADDRESS]

Address of Surety for Notice

[INSERT CITY, STATE, ZIP]

City, State and Zip Code of Surety for Notice

[INSERT SURETY TEL #]

Telephone Number of Surety

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

Signature

Name: [INSERT NAME]

Title: Attorney-in-Fact

Date: _____

END OF DOCUMENT

DOCUMENT 00475

PAYMENT BOND

THAT WE, [INSERT CONTRACTOR NAME], as Principal, hereinafter called Contractor, and the other subscriber hereto, [INSERT SURETY NAME], as Surety, do hereby acknowledge ourselves to be held and firmly bound to the City of Friendswood, a municipal corporation, in the sum of [INSERT WRITTEN DOLLAR AMOUNT] dollars and [INSERT WRITTEN CENTS AMOUNT] cents (\$[INSERT AMOUNT IN #'S]), for the payment of which sum well and truly to be made to the City of Friendswood and its successors, the said Contractor and Surety do bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT:

WHEREAS, the Contractor has on or about this day executed a contract in writing with the City of Friendswood for [INSERT PROJECT NAME], all of such work to be done as set out in full in said Contract documents therein referred to and adopted by the City Council, all of which are made a part of this instrument as fully and completely as if set out in full herein;

NOW, THEREFORE, if the said Contractor shall pay all claimants supplying labor and materials to him or a Subcontractor in the prosecution of the Work provided for in the Contract, then, this obligation shall be void and shall no further force and affect; otherwise the same is to remain in full force and effect;

This Bond and all obligations created hereunder shall be performable in Galveston County, Texas. This Bond is given in compliance with the provisions of Chapter 2253, Texas Government Code, as amended, which is incorporated herein by this reference.

Notices required or permitted hereunder shall be given in writing and shall be deemed delivered when actually received or, if earlier, on the third (3rd) day following deposit in a United States Postal Service post office or receptacle, with proper postage affixed (certified mail, return receipt requested), addressed to the respective other Party at the address prescribed in the Contract Documents or at such other address as the receiving party may hereafter prescribe by written notice to the sending party.

IN WITNESS THEREOF, the Bidder and Surety have signed and sealed this instrument on the respective dates written below their signatures and have attached current Power of Attorney.

WITNESS:

[INSERT CONTRACTOR NAME]

Name of Contractor

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

WITNESS:

[INSERT SURETY NAME]

Full Name of Surety

[INSERT SURETY ADDRESS]

Address of Surety for Notice

[INSERT CITY, STATE, ZIP]

City, State and Zip Code of Surety for Notice

[INSERT SURETY TEL #]

Telephone Number of Surety

Signature

Name: [INSERT NAME]

Title: [INSERT TITLE]

Date: _____

Signature

Name: [INSERT NAME]

Title: Attorney-in-Fact

Date: _____

END OF DOCUMENT

AGREEMENT

STATE OF TEXAS }

COUNTY OF HARRIS }

THIS AGREEMENT ("Agreement") is made and entered into this 30th day of January, 2019, by and between COASTAL BEND PROPERTY DEVELOPMENT, LP, 4558 FM 2351, Friendswood, Texas 77546, of Harris County, Texas, and SER Construction Partners, LLC hereinafter termed "Contractor."

All capitalized terms used herein shall be given the meanings set forth in the General Conditions. COASTAL BEND ENGINEERING shall be referred to herein as the "Engineer."

For and in consideration of the mutual covenants hereinafter set forth, and under the conditions expressed in the Bonds bearing even date herewith, the Contractor and Owner hereby agree as follows:

Contractor shall commence and complete the Work generally described as follows:

BEAMER ROAD WATER LINE IMPROVEMENTS
for COASTAL BEND PROPERTY DEVELOPMENT, LP,
Friendswood, Texas,
according to those particular Plans and Technical Specifications
prepared by Engineer
in the initial Contract Price of \$223,620.23

and all Extra Work in connection therewith, under the terms as stated in the General and Special Conditions of the Agreement, and, at Contractor's own proper cost and expense, to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said Work, in accordance with the conditions and prices stated in the Bid attached hereto and in accordance with the Contract Documents, including, but not limited to, Invitation to Bidders, Instructions to Bidders, General and Special Conditions of the Agreement, Plans, and other drawings and printed or written explanatory matter thereof, and the Technical Specifications, on file with Engineer. Contractor represents and warrants to the Owner that it has carefully examined this Agreement and all other Contract Documents, which are made a part of the Contract, and is thoroughly familiar therewith.

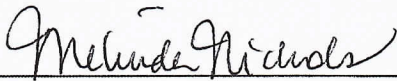
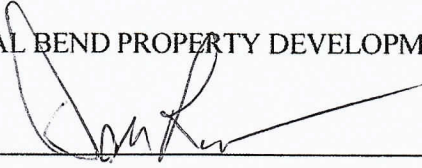
The Contractor hereby agrees to begin work within **10 calendar days** after written Notice to Proceed has been given by Engineer. Contractor hereby also agrees to achieve Substantial Completion of the Work within **30 calendar days** after the date of the written Notice to Proceed and to achieve Final Completion of the Work within **60 calendar days** after the date of the written Notice to Proceed.

Owner agrees to pay Contractor for completion of the Work in accordance with the Contract Documents the initial Contract Price of Two Hundred Twenty-Three Thousand Six Hundred Twenty Dollars and Twenty-Three Cents (\$223,620.23) and, plus or minus any increases or decreases to the initial Contract Price as provided by the

Contract. Contractor will be paid in current funds for the performance of the Contract in accordance with the Bid submitted therefor, subject to additions and deductions as approved by Change Order under the Contract Documents, and to make payments on account thereof as provided therein.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

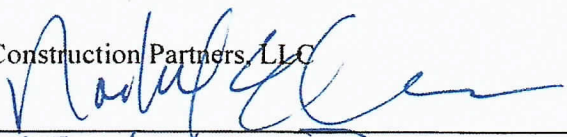
ATTEST:

COASTAL BEND PROPERTY DEVELOPMENT, L.P.
OwnerBy: Name: Daniel RuckerTitle: Member

ATTEST:



SER Construction Partners, LLC

By: Name: Rosalee E. FrancisTitle: Pres

(The following to be executed if Contractor is a Corporation)

I, _____, certify that I am the secretary of the Corporation named as Contractor herein; that _____, who signed this Contract on behalf of Contractor, was then _____ of said Corporation; that said Contract was duly signed for and on behalf of said Corporation by authority of its governing body and is within the scope of its corporate powers.

Signed: _____

Corporate Seal

SPECIAL CONDITIONS OF THE AGREEMENT

1. Name and Location of Project. Work covered by these Technical Specifications is entitled “8” Water Line Replacement, Specifications for Beamer Road Water Line Improvements for Coastal Bend Property Development, LP, City of Friendswood, Texas.” Plans for this project are entitled “Proposed Water Line Pipe & Support Bracket Attachment to Beamer Road Turkey Creek Bridge (A119-00-00)” and “Harris County, City of Friendswood, Texas, FM 2351 Infrastructure Utility Service to Beamer Road/FM 2351 Modified 1-15-20”.
2. Description of Work.
 - a. Under this Contract, Contractor shall furnish all materials, appliances, tools, equipment, transportation, services, and all labor and superintendence necessary for the construction of the Work as described in these Technical Specifications and as shown on the Plans. The completed installation shall not lack any part that can be reasonably implied as necessary to its proper functioning or any subsidiary item that is customarily furnished, and Contractor shall deliver the installation to Owner in operating condition.
 - b. The Work, in general, under this Contract includes the purchase, installation, and construction of all structures, equipment, and materials, including appurtenances, as indicated on the Plans.

Major items of construction and services required are designated as follows:

 - (1) Install and adjust waterlines, valves, valve boxes, flushing valves, fittings, supports, and appurtenances
 - (4) Furnish and install all subsidiary items as necessary to complete the project
 - (5) Perform testing as specified on installed lines
 - (6) Clean-up project area upon completion
3. Technical Specifications.
 - a. Technical Specifications are of the abbreviated, simplified, or streamlined type and include incomplete sentences. The omission of words or phrases such as “Contractor shall,” “in conformity therewith,” “shall be,” “as noted on Plans,” “according to Plans,” “a,” “an,” “the,” and “all,” are intentional. Omitted words or phrases shall be supplied by inference in same manner as they are when a “note” occurs on Plans.
 - b. The Technical Specifications are interpreted to require that Contractor shall provide all items, articles, materials, operation or methods listed, mentioned, or scheduled either on Plans or specified herein, or both, including all labor, materials, equipment, and incidentals necessary and required for their completion.
 - c. Whenever the words “designated,” “submitted,” “observed,” or similar words or phrases are used, it shall be assumed that the word “Engineer” follows the verb as the object of the clause, such as “observed by Engineer.”

- d. All references to standard Technical Specifications or manufacturer's installation directions shall mean the latest edition thereof on the date BIDS are due unless specifically noted otherwise.
- e. Reference to technical society, organization, or body is made in Technical Specifications in accordance with following abbreviations:
- | | |
|--------|--|
| AASHTO | American Association of State Highway and Transportation Officials |
| ACI | American Concrete Institute |
| ASTM | American Society for Testing and Materials |
| AWWA | American Waterworks Association |
| FS | Federal Specifications |
| PCA | Portland Cement Association |
| IEEE | Institute of Electrical and Electronic Engineers |
| NEC | National Electric Code |
| UL | Underwriters' Laboratories |
| AISI | American Iron and Steel Institute |
| API | American Petroleum Institute |
| IPCEA | Insulated Power Cable Engineers Association |
| NEMA | National Electrical Manufacturers Association |
| AWS | American Welding Society |
| PCI | Prestressed Concrete Institute |
| AISC | American Institute of Steel Construction |
| ANSI | American National Standards Institute (Formerly ASA) |
- f. Some Technical Specification items cover construction requirements and materials in comprehensive manner, and only pertinent portions of these items apply.
4. Manufacturer's Representative. When required by Technical Specifications provide the services of trained, qualified technicians to check final equipment installation, to assist as required in placing same in operation, and to instruct operating personnel in the proper manner of performing routine operation and maintenance of the equipment.
5. Plans.

SHEET INDEX	
1 OF 10	COVER
2 OF 10	HARRIS COUNTY EXPRESS REVIEW SHEET (1 OF 4)
3 OF 10	SITE PLAN & DETAILS (2 OF 4)
4 OF 10	STORM WATER POLLUTION PREVENTION DETAILS (3 OF 4)
5 OF 10	TRAFFIC CONTROL PLAN (4 OF 4)
6 OF 10	COVER, PROJECT LAYOUT & CONTROL DETAILS
7 OF 10	PLAN & PROFILE BEAMER RD STA BL "B" 0+00 TO 10+00 (10 OF 35)
8 OF 10	PLAN & PROFILE BEAMER RD STA BL "C" 0+00 TO 8+00 (12 OF 35)
9 OF 10	PLAN & PROFILE BEAMER RD STA BL "C" 8+00 TO END (13 OF 35)
10 OF 10	COF WATER DISTRIBUTION STANDARD DETAILS

BOND NO. _____

MAINTENANCE BOND

MAINTENANCE BOND

STATE OF TEXAS Contract Date _____

COUNTY OF _____ Date Bond Executed _____

PRINCIPAL _____

SURETY _____

OWNER COASTAL BEND PROPERTY DEVELOPMENT, L.P.

CO-OBLIGEE CITY OF FRIENDSWOOD

PENAL SUM OF BOND (in words and figures) _____

being approximately 100 percent of the Contract Price.

CONTRACT for BEAMER ROAD WATER LINE IMPROVEMENTS for COASTAL BEND PROPERTY DEVELOPMENT, LP, Friendswood, Texas (the "Contract").

KNOW ALL PERSONS BY THESE PRESENTS, that we, Principal and Surety above named, are held and firmly bound unto Owner, its successors and assigns, in the penal sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves and our respective heirs, executors, administrators, officers, directors, shareholders, partners, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal entered into that certain Contract with Owner, dated the same date as this bond, which Contract is expressly incorporated herein for all purposes.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION IS SUCH, that if Principal well and truly repair any and all defects in the work occasioned by or resulting from defects in materials furnished by, or workmanship of, the Principal in performing the work covered by the Contract, including any guaranty or warranty required under the Contract, then this obligation is void; otherwise it is to remain in full force and effect. Should the Principal fail to well and truly repair any and all defects in the work occasioned by or resulting from defects in materials furnished by, or workmanship of, the Principal in performing the work as required by the Contract in all its terms, the Surety will be liable for all damages, losses, expenses and liabilities that the Owner may suffer in consequence thereof.

The parties intend this maintenance bond to be a common law bond to be constructed in accordance with Texas law.

Surety hereby agrees, for value received, that no change, extension of time, alteration or addition to the terms of the Contract or to work performed under the Contract, or to the plans, specifications or drawings accompanying the Contract, will in any way affect its obligations on this bond and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder.

The bound parties have executed this instrument pursuant to authority of their respective governing body, to be effective on the same date of the Contract.

_____	ATTEST
PRINCIPAL	
By _____	By _____
Name _____	Name _____
Title _____	Title _____
Address _____	
_____	(SEAL)

_____	ATTEST
SURETY	
By _____	By _____
Name _____	Name _____
Title _____	Title _____

(SEAL)	Physical Address:

	Mailing Address:

	Telephone: _____

Local Recording Agent Personal Identification Number:

Agency Name: _____
Agency Address _____
Agency Telephone _____

Surety must attach its original Power of Attorney to this bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the secretary of the corporation named as Principal in the Bond; that _____, who signed the bond on behalf of Principal, was then _____ of the corporation; that I know his or her signature, and his or her signature is genuine; and that the Bond was duly signed for and on behalf of the corporation by authority of its governing body.

_____ (Corporate Seal)

ATTACH POWER OF ATTORNEY

GENERAL CONDITIONS OF THE AGREEMENT

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GENERAL CONDITIONS OF THE AGREEMENT**ARTICLE I. DEFINITIONS**

- 1.01. DEFINITIONS. The following terms shall be defined as described below, unless such definition is expressly modified by the Contract Documents. Any capitalized terms used in the Contract Documents not defined in this section shall have the meaning assigned to such term under the Contract Documents.
- a. Bid. The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - b. Bond(s). Performance bonds, maintenance bonds and payment bonds, or any of them, as required by the Contract Documents.
 - c. Change Order. A document signed by Contractor, Engineer and Owner and entered into in accordance with the Contract Documents that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the time for completion.
 - d. Claim. A “Claim” is a claim, demand, or assertion by the Contractor seeking for itself or on behalf of a subcontractor or supplier: adjustment or interpretation of any Contract term, including without limitation, adjustment of the Contract Price or Contract Time; payment of money; relief from obligations; or other relief or recovery with respect to the terms of the Contract. The term “Claim” also includes other disputes and matters in question asserted by the Contractor (whether for itself or on behalf of a subcontractor or supplier) arising out of or relating to the Contract.
 - e. Contract. The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
 - f. Contract Documents. The Invitation to Bidders, Instructions to Bidders, Bid, Agreement, General Conditions, Special Conditions, Technical Specifications, Plans, Change Orders, any written amendment to the Contract signed by both Contractor and Owner, Written Work Orders, written interpretations of the Contract or addenda issued by Engineer, and all other documents designated as incorporated by reference. Documents incorporated by reference are Contract Documents, whether attached or not. Approved shop drawings and other Contractor’s submittals, inspections and reports, such as testing of subsurface and physical or environmental conditions, are not Contract Documents.
 - g. Contractor. The entity with whom Owner has entered into this Contract.
 - h. Contractor Parties. The contractor, subcontractor, supplier and their respective agents, representatives or employees, or any of them.

- i. Contract Price. The amount of money stated in the Agreement as payable by Owner to Contractor for timely completion of the Work in accordance with the Contract Documents, plus or minus any increases or decreases to the initial Contract Price agreed to by Owner as provide by the Contract.
- j. Contract Time. The number of days or the dates stated in the Agreement to achieve Final Completion, expressed as a number of calendar days or as a reference to the date of Final Completion. If the Contract Time is measured by calendar days, each and every calendar day shall be counted against the Contract Time.
- k. Engineer. The design consultant so identified in the Agreement, or such other firm that Owner may designate, is herein called Engineer and is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.
- l. Extra Unit Price Items. All extra unit price items or alternate unit price items so specified in the Bid.
- m. Extra Work. All Work that may be required by Engineer or Owner to be done by Contractor to accomplish any change, alteration, or addition to the Work shown upon the Plans, implied by the Technical Specifications, or otherwise within the Contract Documents and not covered by Contractor's Bid. Notwithstanding the foregoing, Extra Unit Price Work required by Engineer or Owner as described herein is not included in the definition of Extra Work.
- n. Final Completion. The date on which the entire Work or an agreed portion thereof is complete in strict conformance with the Contract Documents. If any governmental entity has jurisdiction to approve or accept Contractor's work on the Project, or any portion thereof, Final Completion is not achieved unless and until written approval or acceptance of the entity is received.
- o. Force Majeure. Fire, flood, or act of God, earthquakes, hurricanes, tornadoes, epidemics, war, riot, civil disturbance, sabotage, terrorism, governmental or judicial restraint but only to the extent such event (i) is beyond the control of and cannot be reasonably anticipated by, or the effects alleviated by, the Contractor and (ii) prevents the performance of the Work. Events not specifically listed herein shall not constitute events of Force Majeure.
- p. Hazardous Environmental Condition. The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, Contaminants, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- q. Indemnified Parties. Owner, Engineer, and the officers, directors, employees, agents, and representatives of each such party.
- r. Laws and Regulations. Any and all applicable federal, state and local laws, rules, regulations, codes, and orders of any and all governmental bodies, agencies,

authorities, and courts having jurisdiction and any and all rules of common law pertaining to the Contractor's services, the Site, Contractor's employees and subcontractor's employees and/or the Work, and those of any other governmental entities with jurisdiction, including, without limitations all applicable laws of the State of Texas, Chapter 411 of the Texas Labor Code, Title VII (Equal Employment Opportunity) of the Civil Rights Act of 1964, The Occupational Safety and Health Act of 1970, The National Environmental Policy Act, The Federal Water Pollution Control Act, The Clean Air Act, The Clean Water Act, The Toxic Substance Control Act, The Resource Conservation and Recovery Act, and all amendments thereof. The agencies charged with the administration and enforcement of the Laws and Regulations include, but are not limited to, the Department of the Interior, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, the Environmental Protection Agency, the U.S. Corps of Engineers, the National Fire Protection Association, the U.S. Geological Survey, the Minerals Management Service, the Texas Commission on Environmental Quality, the county in which the Owner is located, and the municipality, as applicable, in whose corporate or extraterritorial jurisdiction the Owner is located. Certain of the specific regulations that may be applicable to the Work are the Occupational Safety and Health Construction and General Industry Standards (29 CFR Part 1926 and 1910), and various environmental regulations.

- s. Notice to Proceed. A written notice given by or on behalf of Owner to Contractor fixing the date on which the Contract Time will begin to run and on which Contractor shall start to perform the Work.
- t. Owner. The entity so specified in the Agreement.
- u. Plans. That part of the Contract Documents which graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- v. Project. The total construction on the Site, which may include work performed by the Owner or other contractors.
- w. Regulatory Agencies. Any and all governmental bodies, agencies, authorities, counties, municipalities, and courts having jurisdiction over the Project.
- x. Site. The land or area furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access.
- y. Substantial Completion. The time at which the Work is sufficiently completed in accordance with the Contract Documents so that Owner can occupy the entirety of the Work and put it to the full and unrestricted use for which it was intended, and all required certificates of occupancy and other permits, approvals, licenses, and documents required to occupy the Project by all entities, agencies and governmental authorities having jurisdiction over the Project and/or the operation and occupancy of the Project, have been given so that the Project may operate for its intended purpose, although the Project may still require minor miscellaneous Work and adjustment. The Work will not be considered substantially complete if any Project systems included in the Work are not operational as designed and scheduled, if designated

instructions of Owner, Engineer, or Owner's other representative in the operation of systems has not been completed, or any final finishes within the Contract Documents are not in place. The terms "substantially completed" or "substantially complete" as applied to all or part of the Work shall have the same meanings as set forth here.

- z. Technical Specifications. That part of the Contract Documents, including any written addenda thereto, consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- aa. Work. All obligations of the Contractor under the Contract Documents and all equipment, materials, labor, construction, management, supervision, services, and activities of every kind and nature, whether commenced or not, or completed or partially completed, undertaken by the Contractor, provided or to be provided by the Contractor, required of the Contractor, or inferable from the Contract Documents to perform and fulfill all of the Contractor's obligations pursuant to the Contract Documents.
- bb. Written Work Order. A written statement to Contractor signed by Owner or Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions. A Written Work Order will not change the Contract Price or Contract Time, but is evidence that the parties expect that the Written Work Order will be incorporated in a subsequently issued Change Order following agreement by the parties as to its effect, if any, on the Contract Price or Contract Time.

ARTICLE II. CONTRACT DOCUMENTS

2.01. INTERPRETATION OF CONTRACT DOCUMENTS AND PHRASES.

- a. Whenever the words "required," "permitted," "designated," "considered necessary," "prescribed," or words of like import are used, it shall be understood that the requirement, permission, order, designation, or prescription of Engineer is intended and similarly, the words "approval," "acceptable," or "satisfactory," or words of like import shall mean approved by, or acceptable to, Engineer.
- b. Whenever in the Technical Specifications or Plans accompanying this Agreement, the terms or descriptions of various qualities relative to finish, workmanship, or other qualities of similar kind which cannot from their nature be specifically and clearly described and specified, are necessarily described in general terms, the fulfillment of which must depend on individual judgment, then, in all such cases, any question of the fulfillment of said judgment of said Technical Specifications or Plans shall be decided by Engineer, and said Work shall be done in accordance with his interpretations of the meaning of the words, terms, or clauses defining the character of the Work.
- c. The parties hereto agree that these Contract Documents shall not be construed against any party hereto on the basis that such party did or did not draft the Contract Documents.

- d. The section headings used herein are for convenience only and shall not affect the construction or terms hereof.
- e. If there is an irreconcilable conflict between Contract Documents, the document highest in precedence shall control, but except in such event and to avoid such conflict, every construction of provisions shall be that each is in aid to, or supplementary to or complementary of, each other provision, to control and secure for Owner the completion of the entire Work in an expeditious, orderly and coordinated manner. The precedence, from highest to lowest, shall be in the following order:
 - 1. Permits for the Work from governmental authorities as may be required by law;
 - 2. Agreement between Owner and Contractor;
 - 3. Special Conditions Part A;
 - 4. General Conditions;
 - 5. Special Conditions Part B Technical Specifications and Plans.

The most recently issued document takes precedence over previously issued forms of the same document. Modifications take precedence over applicable previously issued documents under items 2 through 5 above. Detailed drawings shall take precedence over general drawings.

- f. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period.
- 2.02. EXHIBITS. All Work shall be done and all materials furnished in strict conformity with the Contract Documents, all of which are hereto attached (or considered as if attached) and are hereby made a part of this Contract.
- 2.03. ACCURACY. These Contract Documents, including the Technical Specifications, Plans, and Bid, are intended to show all Work to be done and material to be furnished hereunder. Contractor understands and acknowledges that errors may exist in the Contract Documents, and that the Owner does not warrant the accuracy or sufficiency thereof. The Contractor accepts any lack of completeness of and errors in the Contract Documents, including the Plans, Technical Specifications and Bid, and acknowledges that such documents were sufficiently detailed, accurate and comprehensive to enable Contractor to have adequately estimated and established the Contract Price and to perform the Work within the time for completion.

ARTICLE III. PRELIMINARY MATTERS

- 3.01. CONSTRUCTION SCHEDULE. The Contractor shall submit a construction schedule based on critical path method ("CPM") and that is sufficiently accurate during the entire Contract

Time to allow the Engineer to schedule his inspections and to determine if the Contractor is performing on schedule.

Within 10 days following the end of each month after Notice to Proceed, or at more frequent intervals when requested by Engineer, the Contractor shall submit an updated and revised schedule; the revision must be current as of the immediate past schedule period. Each element shall be updated to reflect the actual start and stop dates, actual duration and actual number of days worked, anticipated changes to future start and stop dates, and changes due to change in amount of Work or Contract Time. When requested by Engineer, the Contractor will submit only that portion of the CPM submittal required.

Failure to meet any schedule submission dates or to comply with any requested submittal or failure to provide an acceptable submittal will be cause to withhold payment of all or portions of the next scheduled monthly payment or any portions of future monthly payment until an acceptable submittal has been made.

As a minimum, the Contractor shall have available at least one individual with authority to maintain and revise the schedule as needed to reflect the actual and planned work schedule. This individual is to cooperate with Engineer's staff and be available to discuss schedule with Engineer's staff when requested.

- 3.02. SEQUENCE OF WORK. Owner reserves the right, at no additional cost to Owner, to schedule sequence of construction; that is, which portion of the Project will be constructed first.
- 3.03. DISCREPANCIES AND OMISSIONS. It is further agreed that it is the intent of this Contract that all Work must be done and all material must be furnished in accordance with the Standard of Care set forth in Section 5.03 of these General Conditions, and to the end that the finished Work be complete in every detail. In the event of any discrepancies between the Plans and Technical Specifications, or likewise, in the event of any doubt as to the meaning and intent of any portion of the Contract, including the Technical Specifications or Plans, Engineer shall define that which is intended to apply to the Work.
- 3.04. SCHEDULE OF VALUES. If Directed by Engineer within 10 calendar days following the Notice to Proceed, the Contractor shall submit, within 10 calendar days following such direction from Engineer, a schedule of values showing the subdivision of the Contract into various items of payment of construction. This schedule of values must state quantities and prices to the smallest common measurement, e.g., cubic yard, pound, linear feet, etc., and will be used as a basis for computing value to the Owner of Work to be paid for in partial payments. Except for work associated with prices bid as supplemental items listed in the Bid, the schedule of values also will be used to determine the value of like or similar work that may be added to or deleted from the Contract. The above-mentioned schedule of values must be in a format and of such detail to be acceptable to the Engineer, and the acceptance must be obtained prior to commencement of construction. No partial payments will be made unless the schedule of values has been submitted by Contractor and accepted by the Engineer. Schedule of values must be cross-referenced to CPM with each item on schedule of values to show which CPM activity corresponds to or includes the item.

- 3.05. KEEPING PLANS AND SPECIFICATIONS ACCESSIBLE. Contractor shall be furnished with five copies of all Plans and Technical Specifications without expense to him, and shall keep one copy of each constantly accessible on the Site.
- 3.06. QUANTITIES AND MEASUREMENTS. No extra or customary measurements of any kind will be allowed, but the actual length, area, solid contents, number, and weight only shall be considered, unless otherwise specifically provided.
- 3.07. SALES TAX. Owner is exempt from Texas sales and use taxes pursuant to Texas Tax Code § 151.309 as a political subdivision of the State of Texas. Owner shall provide Contractor, if requested by Contractor in writing, with a completed Texas Sales and Use Tax Exemption Certification as evidence of the applicability of such exemption. Contractor shall not collect Texas sales and use taxes from Owner with respect to this Contract. Contractor and all subcontractors to Contractor shall issue a Texas Sales and Use Tax Exemption Certification with respect to, and shall not pay Texas sales and use taxes on, all purchases of the following items that are exempt from Texas sales and use taxes pursuant to Texas Tax Code § 151.311: (i) tangible personal property that will be incorporated into Owner's realty; (ii) tangible personal property that is necessary and essential for the performance of this Contract and is consumed entirely on the job site; and (iii) taxable services for use in the performance of this Contract that are performed at the job site and are either integral to the performance of this Contract or expressly required to be provided by this Contract. In addition, Contractor and all subcontractors to Contractor (i) shall not include any provision for Texas sales and use taxes with respect to such exempt items in any bid or contract amount, and (ii) shall pass on to Owner cost savings due to the exempt status of such exempt items. Contractor's contracts with all subcontractors to Contractor shall include the foregoing provision regarding the exemption from Texas sales and use taxes. The Certification is included as *Attachment A*.
- 3.08. SHOP DRAWINGS AND SUBMITTALS.
- a. Shop Drawing Submittal List. Within 15 days after the date of the Notice to Proceed, Contractor shall submit for the Engineer's review a complete shop drawing submittal list. The list is to include shop drawings for all equipment and manufactured materials to be furnished under this Contract. The list should include, but not be limited to, the following, with each submittal to be numbered with a consecutive numbering system.
- i) Name (description) of submittal.
 - ii) Applicable specification number or drawing number.
 - iii) Scheduled submission date.
 - iv) Latest date acceptable submittal required to prevent delay in purchase.

The Engineer may waive all or portions of the submittal requirements for any shop drawing on the submittal list. The Contractor may not begin construction on the Project until the submittal list is accepted by the Engineer.

- b. Contractor's Duties. The Contractor shall review shop drawings prior to submittal to verify field measurements, field construction criteria, manufacturer model number and other pertinent data, to ensure conformance to Contract Documents, coordination with other submittals, and schedule for submittal and review.

The Contractor shall stamp and sign submittals with stamp which states "This submittal is certified to be in conformance with Contract Documents unless noted herein." All submittals without this certification will not be reviewed but will be returned to the Contractor for proper submission. The Engineer will rely on this statement when performing the review of the submittal.

The Contractor shall schedule submittals to allow sufficient time for review process and to coordinate submittals with the schedule to prevent delay to Work.

No Work may be performed in connection with fabrication, manufacturer, or purchase of materials or equipment until submittals have been reviewed and marked "No Exception Taken" or "Make Corrections Noted." Work performed on submittals marked "Make Corrections Noted" must be in accordance with all corrections noted thereon.

The Contractor shall correct submittals and resubmit or shall prepare new submittals for review by Engineer for all submitted items marked "Submit Specified Item," "Rejected," or "Revise and Resubmit." No claims for extra time or delays will be considered due to time required for review of submittals or resubmittals.

- c. Engineer's Duties. The Engineer shall review submittals as quickly as possible consistent with a thorough review and consistent with type of information submitted, but in any event not later than 14 calendar days from the date of submittal. Failure to comply with such review period shall not constitute the basis of a Claim.

Such review by the Engineer shall be for the sole purpose of determining the general conformity of said shop drawings or schedules to the Contract Documents and shall not relieve the Contractor of his duty as an independent contractor as set forth herein, it being expressly understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby, in relation to the safety of either person or property during Contractor's performance hereunder. The Engineer's review of drawings will not constitute an acceptance of all dimensions, quantities, and details of the material, equipment, device, or item shown and does not relieve the Contractor from any responsibility for errors or deviations from the Contract requirements.

The Engineer shall clearly mark four copies of submittals with required corrections and shall stamp drawings noting the appropriate action, signature, and date.

- d. Form of Submittal. The Contractor must submit four copies of all submittals. One copy of the appropriately marked submittal will be retained at the Engineer's office, one copy will be retained at the Engineer's field office, and two copies will be returned to the Contractor for Contractor's use. The Engineer will not mark additional copies for the Contractor. If the Contractor desires additional copies, they must be marked by the Contractor.

The Contractor shall submit a complete copy of relevant Contract Document items which has been marked by the manufacturer to certify each point of the Contract Document item noting compliance and each point of deviation.

The Contractor must submit relevant literature, catalog cuts, or written descriptive matter backing up all points of the Contract Documents item compliance.

Contractor must submit comparative life cycle, cost, performance, or other data supporting consideration of all points of the Contract Documents item deviation.

All information supplied must be carefully and completely cross-referenced to the relevant Contract Document item requirement.

When required by an individual Contract Document item, the Contractor shall submit written step-by-step test plan for functional checkout and demonstration test of respective equipment. Submissions that do not conform to the form of submittal as outlined herein will not be considered and will be returned to the Contractor for proper submission.

The Contractor must have acceptable shop drawings at the Site. Failure of the Contractor to supply acceptable drawings will be deemed sufficient cause for Owner to delay the Work at Contractor's risk and expense until such drawings are available. This procedure shall not entitle Contractor to an extension of time.

- e. Installation Drawings. When required by individual items of the Technical Specifications, the Contractor shall provide, for the Engineer's use, two copies of installation drawings and instructions consisting of all necessary details required for field assembly, erection, and installation of a particular component of Work, including, but not limited to, unloading and storage instructions, layout/placement drawings, erection sequences, assembly drawings, connection details, and wiring diagrams.
- 3.09. VARIATIONS AND ALTERNATE DESIGNS. Foundations, structural supports, electrical work, and piping when shown on Plans for items of equipment may be changed if necessary to accommodate equipment furnished. Every effort has been made to design foundations, structural supports, electrical work, and piping so that no changes will be necessary; however, exact dimensions and size of subject foundations and structural supports and exact electrical and piping installations cannot be finally determined until various items of equipment are purchased and manufacturer's certified shop drawings are secured. Structural or electrical changes must be signed and sealed by a professional engineer licensed in the State of Texas. Contractor shall make required changes, after prior consultation with the Engineer, at no cost to Owner.

If substitute items of equipment are authorized which vary materially from those shown on Plans, Contractor shall prepare equipment data and detailed drawings covering necessary modifications and submit to the Engineer for approval. Contractor shall make drawings same size as Plans and of comparable quality. Contractor shall make payment of charges resulting from modifications including engineering charges for checking modifications.

If alternate design features are proposed for the convenience of the Contractor, the Contractor shall submit design calculations and detailed drawings covering proposed changes and related modifications of the Plans to the Engineer for review. Design calculations and detailed drawings submitted by the contractor must be signed and sealed by a professional engineer licensed in the State of Texas. The Contractor shall make drawings the same size as the Plans and of comparable quality. Contractor shall make payment of charges resulting from modifications, including engineering charges for checking such designs.

ARTICLE IV. SITE ACCESS/ CONDITIONS/ REFERENCE POINTS

- 4.01. ACCESS AND AVAILABILITY OF LANDS. Except as provided herein, the Owner shall provide, as indicated on the Plans, land upon which the Work is to be done, rights-of-way for access to same, and such other lands which are designated for use of the Contractor. If required, Contractor shall provide, at its own cost, for additional lands and access for temporary construction facilities or storage of materials and equipment.

Contractor shall propose, for Engineer's review and approval, access roads for moving construction personnel and equipment. The access routes are subject to change by the Engineer, occasioned by the progress of the Work or unforeseen conditions. If routes are changed, Contractor may propose alternate routes. Changes required in haul routes shall not be the basis for extra payment.

Contractor shall, whenever possible, keep all construction traffic out of existing neighborhoods. Contractor shall keep haul routes clean at all times to the satisfaction of the Engineer and the local governing body having jurisdiction over the haul routes.

- 4.02. SURVEYING; LINES AND GRADES. The Owner will establish reference points for construction only; the Contractor is responsible for staking from bench marks and horizontal control references established by Engineer. The Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Engineer. The Contractor shall report to the Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.
- 4.03. SOILS REPORT. If provided, any soils report and log of borings is available for Contractor's information only. The report is not a warranty of subsurface conditions, nor is it a part of the Contract Documents. Contractor is expected to examine the Site and such reports and then decide for itself the character of the materials to be encountered.

Owner and Engineer disclaim any responsibility for the accuracy, true location and extent of the surface and subsurface investigations that have been prepared by others. Owner and

Engineer further disclaim responsibility for interpretation of that data by Contractor, *i.e.* projecting soil-bearing values, rock profiles, soil stability and the presence, level and extent of underground water or underground facilities.

- 4.04. SUBSURFACE EXPLORATION. It is not represented that the Plans show all existing storm sewer, sanitary sewer, water, gas, telephone and electrical facilities, and other underground structures. Contractor is to determine the location of these installations in the way of construction by referring to available records, consulting appropriate municipal departments and utility owners, and by making necessary exploration and excavations.
- 4.05. DEVIATIONS OCCASIONED BY UTILITY STRUCTURES. Whenever existing utilities, not indicated on the Plans, present obstructions to grade and alignment of pipe, Contractor shall immediately notify the Engineer who, without delay, will determine whenever existing improvements are to be relocated or grade and alignment of pipe changed. Where necessary to move services, poles, guy wires, pipelines, or other obstructions, the Contractor will make arrangements with owners of utilities. The Owner will not be responsible for or liable for damages for any delays due to changes made by owners of utilities which hinder progress of work. The Owner may, at its discretion, determine whether to grant any extension of time.
- 4.06. DIFFERING SUBSURFACE OF PHYSICAL CONDITIONS. Contractor shall give prompt written notice to Engineer if any subsurface or physical condition is uncovered or revealed and either i) differs materially from that shown or indicated in the Contract Documents or the technical data or related documents or ii) is of a highly unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work performed at the location. After receipt of Contractor's written notice, Engineer will promptly review the condition, determine the necessity of Owner's obtaining additional exploration or tests and advise Owner in writing of Engineer's findings and conclusions. Contractor shall not further disturb such condition or perform any Work in connection therewith until receipt of written order from Engineer to do so. Absent an emergency, any Work performed by Contractor before receiving Engineer's response will be at the sole expense of the Contractor.

The Contract Price and/or the Contract Times may be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work. Provided, however, Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if i) Contractor knew, or should have known, of the existence of such conditions at the time Contractor entered into the Contract; ii) the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site required by the Contract Documents to be conducted prior to Contractor's entering into the Contract; or iii) Contractor failed to give the written notice as required. If Owner and Contractor cannot agree on entitlement to, or the amount or extent of, any adjustment in the Contract Price or Contract Times, or both, a Claim may be made.

- 4.07. ARCHAEOLOGICAL OR HISTORICAL MATERIALS. On discovery of materials with potential archaeological or historical significance, the Contractor shall stop work and notify the Engineer. The Contractor shall protect the site from disturbance until it is cleared by the Engineer to resume work. The Contractor may receive damages for delay, limited to the

actual costs of de-mobilization and re-mobilization, without mark-up, and may make a Claim for an extension to the Contract Time.

- 4.08. HAZARDOUS ENVIRONMENTAL CONDITIONS. Reports identifying Hazardous Environmental Condition are not Contract Documents. Owner and Engineer do not warrant the accuracy or completeness of such documents and disclaim all responsibility and liability for accuracy of investigations and reports prepared by third parties. Owner and Engineer also disclaim any responsibility for Contractor's interpretation of such reports and tests. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby; and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Contractor shall not be required to resume Work in connection with such condition or in any affected area until the affected area is or has been rendered safe for the resumption of Work.
- 4.09 LOSSES FROM UNFORESEEN CIRCUMSTANCES AND CONDITIONS OR NATURAL CAUSES. Except as specifically provided in the Contract Documents, all loss or damage arising out of the nature of the Work to be done, or from the action of the elements, or from any unforeseen circumstances or natural causes in the prosecution of the same, or from the soil, subsurface, and other conditions, whether naturally occurring or manmade, or from concealed conditions or unusual obstructions or difficulties which may be encountered in the prosecution of the Work, shall be sustained and borne by Contractor at his own cost and expense. Contractor accepts such risk even for circumstances and conditions that differ materially from those indicated in the Contract Documents, geotechnical report or other information furnished by or on behalf of Owner or are otherwise undiscoverable by the Contractor from the Contract Documents or a review of the Site and surrounding area. ACCORDINGLY, CONTRACTOR SHALL NOT BE ENTITLED TO ANY ADDITIONAL COMPENSATION OR TIME ASSOCIATED WITH UNFORESEEN CIRCUMSTANCES OR CONDITIONS OR NATURAL CAUSES.

ARTICLE V. CONTRACTOR'S RESPONSIBILITIES/ INDEMNITIES

- 5.01. INDEPENDENT CONTRACTOR. It is understood and agreed that all Work done by Contractor shall meet with the approval of Owner's representative but that the detailed manner and method of doing the Work shall be under the control of Contractor as set forth more fully in these General Conditions, Owner being interested only in the result obtained, and that Contractor is an independent contractor as to all Work performed hereunder.
- 5.02. TIME AND ORDER OF COMPLETION. It is the meaning and intent of this Contract, unless otherwise herein specifically provided, that Contractor shall be allowed to prosecute his Work at such times, in such order of precedence, and in such manner as shall be most conducive to economy of construction; provided, however, that (i) in all instances Contractor shall comply with the Contract Documents and the order, time, techniques, sequences, procedures, manner, means and methods of prosecution of the Work shall be such that the Work shall comply with and shall be substantially completed as a whole and in part, in accordance with the Contract Documents, including the Plans and Technical Specifications,

and within the required time of completion, and Contractor shall have no right to perform any portion of the Work or utilize means, methods, techniques, sequences, procedures or individuals in violation of the Contract Documents or that may damage the Work or decrease the life expectancy of the Project, (ii) the exercise of any of the rights and authority granted the Owner in the Contract Documents (including, without limitation, ordering changes in the Work, rejecting proposed means, methods, techniques, sequences or procedures, and directing suspension, rescheduling, re-execution or correction of the Work) shall not be construed as or deemed to be control of, charge of, or responsibility for or violation of Contractor's responsibility for and rights with respect to such construction means, methods, techniques, sequences, procedures, safety precautions and programs, and (iii) when Owner is having other work done, either by contract or by his own force, Engineer may prescribe the time and sequence of constructing the Work done under this Contract so that conflict will be avoided and the various construction being done for Owner shall be harmonized. Any schedules or charts furnished in connection therewith, or acquisition of any necessary additional equipment, working hours in excess of those encompassed within Contractor's normal workday, or the performance of certain tasks whether similar or dissimilar to the foregoing shall be furnished without additional cost to Owner.

- 5.03. CONTRACTOR'S DUTY AND STANDARD OF CARE. Contractor is an independent contractor and shall give personal attention to the faithful prosecution and completion of the Work and shall be present either in person or by duly authorized representatives on the Site continuously during its progress. Contractor shall exercise a high degree of skill, care, and diligence in the performance of the Work. Contractor warrants that Contractor will (i) perform, supervise and direct the Work, using the Contractor's best skill and attention, in a good and workmanlike manner and in the best and most expeditious and economical manner consistent with the interests of the Owner, (ii) utilize his best skill, efforts and judgment in furthering the interests of the Owner, (iii) perform the Work in strict compliance with applicable Laws and Regulations, such that the Work, no later than the time for completion, will comply with applicable Laws and Regulations, and (iv) furnish efficient business administration and supervision (all of the foregoing collectively, the "Standard of Care"), and (v) perform the Work in strict accordance with the Contract Documents. Unless otherwise specified in the Contract Documents, he shall maintain an office on or adjacent to the Site. Regardless of what authority and rights may be assigned by the Owner to the Engineer, Contractor remains fully and solely responsible and liable for its obligations to perform the Work in strict accordance with the requirements of the Contract Documents; to insure against failures in safety precautions; to carry out the Work pursuant to safe methods of construction; to select and fulfill the proper manner, means, and methods in performing the Work in order to fully comply with the Plans, Specifications and other Contract Documents; and to otherwise complete the Work in accordance with the Contract Documents.
- 5.04. CONTRACTOR'S AGENT. Contractor, during his absence from the Site, shall keep a competent superintendent or foreman upon the Site, fully authorized to act for him in his absence. Contractor shall provide Engineer and Owner with written notification of such individual's position, name, and contact information. Any notice given by Engineer, when given to any superintendent, foreman, or agent of Contractor in charge of any operation of the Work in the absence of Contractor, shall be considered as notice to Contractor, provided any notice given under this paragraph shall be in writing.

- 5.05. CHARACTER OF WORKERS. Contractor agrees to employ only orderly, competent, and skillful people to do the Work; and agrees that whenever Owner shall inform him in writing that any person(s) or subcontractors on the Work are, in his opinion, incompetent, unfaithful, or disorderly, such person(s) or subcontractor shall be discharged from the Work and shall not again be employed on the Work without Owner's written consent.
- 5.06. CONSTRUCTION MATERIALS. Contractor shall provide all labor, tools, equipment, machinery, and material necessary in the prosecution and completion of this Contract, unless otherwise specifically provided, and it is also understood that Owner shall not be held responsible for the care, preservation, conservation, or protection of any material, tools, or machinery or any part of the Work until it is finally completed and accepted.
- 5.07. OTHER CONTRACTS. Other construction may be underway concurrently in this area. The Contractor shall afford utility companies and other contractors reasonable opportunity for introduction and storage of their materials and execution of their work. All work under this Contract must be properly connected and coordinated with that constructed by others.
- 5.08. DAMAGES. In the event Owner is damaged in the course of the Work by the act, negligence, omission, mistake, or default of Contractor, or should Contractor delay the progress of the Work being done by others on the job so as to cause loss or liability to Owner, then Contractor shall reimburse Owner for such loss.

NOTWITHSTANDING ANY OTHER PROVISION OF THE CONTRACT DOCUMENTS, IN NO EVENT (INCLUDING, WITHOUT LIMITATION, DEFAULT BY OWNER), SHALL OWNER'S LIABILITIES, IF ANY, TO CONTRACTOR EVER EXCEED THE TOTAL CONTRACT PRICE, LESS ALL SUMS FOR WORK, MATERIALS AND/OR LABOR PREVIOUSLY PAID TO CONTRACTOR BY OWNER.

- 5.09. TITLE AND RISK OF LOSS. Although Contractor has custody and possession of the Work, as between Owner and Contractor, ownership and title to (as opposed to risk of loss of) all of the Work completed and in the course of construction at the Site and of all materials furnished irrespective of the location thereof, shall be in the name of the Owner. The vesting of such title in the Owner shall not impose any obligations on the Owner or relieve Contractor of any of its obligations hereunder. The Contractor warrants that it shall acquire no Work or equipment and materials, whether directly or through a subcontractor, subject to an agreement under which a security interest is retained by the seller or otherwise imposed by the Contractor, any subcontractor, or any other person or entity. Notwithstanding the passage of title, risk of loss or damage shall remain with Contractor until the Owner finally accepts the Work.
- 5.10. PROTECTION OF PERSONS AND PROPERTY. Contractor shall at all times take reasonable precautions for the safety of its employees and of all other persons at the Site, and for the protection of adjacent property of others. Contractor shall comply with all applicable federal, state, and municipal safety laws and regulations and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the Manual of Accident Prevention in Construction of the Associated General Contractors of America unless such instructions are incompatible with Laws and Regulations. Where damage occurs on adjacent property, or where necessary to take down fences, signs, or other obstructions, Contractor shall repair, renew or replace in their original condition and restore

damaged property or make satisfactory restitution to a condition equal to or better than that which existed before Contractor caused the damage or removal, at no cost to Owner. Contractor shall promptly report to Engineer all accidents involving Contractor's employees or any other parties or property. Where livestock are present, Contractor shall take all necessary precautions to assure that no construction or construction related activity will allow livestock to leave their confine. Where existing fences are being crossed, Contractor shall maintain the integrity of the fence during construction through placement of guards, temporary fences, or other adequate measures as approved by the Engineer. All construction activities, including ingress and egress, shall occur within the boundaries and Contractor constraints of the temporary and permanent construction limits. Additionally, no staging, parking, loading and/or unloading shall occur outside of the designated construction limits.

5.11. INSURANCE AND BONDS. Contractor shall procure and maintain in force and effect during the Work the insurance described in the Special Conditions. It is further agreed by the parties to this Contract that Contractor will execute a Performance Bond, Maintenance Bond and/or Payment Bond, each as further specified in the Special Conditions.

5.12. INDEMNIFICATION OF OWNER. **TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS THE INDEMNIFIED PARTIES FROM AND AGAINST EVERY LOSS, ITEM OF DAMAGE, INJURY, EXPENSE, DEMAND, CLAIM, CAUSE OF ACTION, JUDGMENT OR LIABILITY, OF WHATSOEVER KIND OR CHARACTER, WHETHER ARISING IN CONTRACT OR TORT OR UNDER ANY STATUTE, FOR EVERY ELEMENT OF RECOVERY, WHETHER DIRECT OR INDIRECT, INCLUDING SPECIAL AND CONSEQUENTIAL DAMAGES, AND INCLUDING ALL RELATED FINES, FEES AND COSTS, TO INCLUDE ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS, FOR:**

(I) **BODILY INJURY OR DEATH OF AN EMPLOYEE OF ANY CONTRACTOR PARTIES, EVEN IF SUCH BODILY INJURY OR DEATH IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE, BREACH OF CONTRACT, BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR OTHER FAULT OF AN INDEMNIFIED PARTY;AND**

(II) **BODILY INJURY TO OR DEATH OF ANY PERSON NOT ENCOMPASSED IN (I), ABOVE, PROPERTY DAMAGE OR ECONOMIC LOSS (INCLUDING LOSS OF USE) CAUSED BY OR ARISING OUT OF ANY BREACH OF THIS CONTRACT, OR THE BREACH OF ANY COMMON LAW DUTY, OR THE VIOLATION OF ANY STATUTE OR REGULATION BY THE CONTRACTOR PARTIES IN CONNECTION WITH THE PERFORMANCE (OR NON-PERFORMANCE) OF THE WORK, IN EACH INSTANCE, EVEN IF DUE IN PART TO THE NEGLIGENCE, BREACH OF CONTRACT, BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR OTHER FAULT OF AN INDEMNIFIED PARTY, PROVIDED, HOWEVER, THAT CONTRACTOR'S OBLIGATION OF INDEMNIFICATION SHALL NOT**

EXTEND TO THE PERCENTAGE OF DAMAGES, INJURIES, EXPENSES, DEMANDS, CLAIMS, CAUSES OF ACTION, JUDGMENTS, LIABILITIES, COSTS AND FEES CAUSED BY THE INDEMNIFIED PARTIES.

THIS INDEMNITY AGREEMENT IS INTENDED TO MEET THE TEXAS “EXPRESS NEGLIGENCE RULE” BECAUSE CONTRACTOR AGREES THAT IT APPLIES AND IS ENFORCEABLE EVEN AS TO LOSSES, DAMAGES, INJURIES, EXPENSES, CLAIMS, CAUSES OF ACTION, JUDGMENTS OR LIABILITIES JOINTLY OR CONCURRENTLY CAUSED BY THE NEGLIGENCE OR OTHER FAULT OF THE INDEMNIFIED PARTIES. THE TERM “FAULT” IN THE PREVIOUS SENTENCE INCLUDES THE VIOLATION OR BREACH BY THE INDEMNIFIED PARTIES OF ANY COMMON LAW DUTY, ANY TERM OF THIS CONTRACT, OR ANY STATUTE OR REGULATION.

THIS INDEMNIFICATION OBLIGATION SHALL NOT BE LIMITED IN ANY WAY BY ANY OTHER PROVISION OF THIS CONTRACT OR BY ANY LIMITATIONS ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR THE CONTRACTOR PARTIES UNDER WORKERS’ COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFITS ACTS.

THIS INDEMNIFICATION OBLIGATION IS IN ADDITION TO ALL OTHER LEGAL, EQUITABLE, OR INDEMNIFICATION REMEDIES AVAILABLE TO THE INDEMNIFIED PARTIES. THIS INDEMNIFICATION OBLIGATION SURVIVES THE TERMINATION OR EXPIRATION OF THIS CONTRACT.

CONTRACTOR DOES HEREBY WAIVE, RELEASE AND FOREVER RELINQUISH AND DISCHARGE OWNER FROM ALL OF CONTRACTOR’S CAUSES OF ACTION ARISING FROM BODILY INJURY OR DEATH OR DAMAGE TO ANY PROPERTY ARISING OUT OF THE WORK, REGARDLESS OF WHETHER THE INJURY OR DAMAGE IS CAUSED IN FULL OR IN PART BY THE NEGLIGENCE OR OTHER FAULT OF THE INDEMNIFIED PARTIES.

In the event that any statute, rule of law or equitable principle should be held applicable to any indemnity clause contained in this Contract in favor of one or more of the Indemnified Parties which would render void, voidable, or unenforceable any such indemnity clause as to any party by reason of any provisions contained therein, then and in only such event, such indemnity clause shall be deemed modified and read, construed and enforced as to such party with respect to the provisions held to violate the statute, rule of law or equitable principle to require indemnity by Contractor of the Indemnified Parties to the fullest extent required by such indemnity provision modified and limited only to the degree or extent necessary to bring such indemnity into compliance with such statute, rule of law or equitable principle, but otherwise, the indemnity shall remain in full force and effect and binding upon the parties hereto.

Each party hereto agrees and covenants that it will not contest the validity or enforceability of any indemnity or exculpatory provision of this Contract on the basis that the party has no notice or knowledge of such provision or that the provision is not “conspicuous.”

If other provisions contain any indemnities or limitations, such indemnities shall be deemed to be cumulative of and to operate independently of the indemnities provided herein to the end that all indemnities provided in the Contract Documents shall be construed to grant indemnity to the Indemnified Parties to the fullest extent of each such indemnity.

Contractor shall include in each of its subcontracts with its subcontractors of every tier provisions the same as in all material respects those contained herein. Such provisions shall be for the benefit of and in favor of the Indemnified Parties and such other parties on whom Contractor and such subcontractors may agree.

5.13. INTELLECTUAL PROPERTY RIGHTS, COPYRIGHT AND INDEMNIFICATION.

- a. Contractor shall not furnish or provide to Owner any materials or Work that infringes a third party’s intellectual property rights (whether it be claims of improper use of confidential information, patent infringement, copyright infringement, or the like). Contractor shall not disclose or provide to Owner any information, ideas, concepts, improvements, discoveries, inventions, or forms of expression of ideas which Contractor does not own or otherwise have the right to disclose or provide to Owner.
- b. Contractor represents and warrants that the materials and the Work shall be free from third party claims of ownership and that Owner’s right to own, use, or otherwise disclose such materials and Work shall be free from third party claims of infringement of intellectual property rights (whether it be claims of improper use of confidential information, patent infringement, copyright infringement, trademark infringement or the like).
- c. Contractor represents and warrants to Owner that all information, ideas, concepts, improvements, discoveries, inventions, or forms of expression of ideas disclosed or provided to Owner shall be free from third party claims of ownership and that Owner’s right to own, use, or otherwise disclose such information, ideas, concepts, improvements, discoveries, inventions, or forms of expression of ideas shall be free from third party claims of infringement of intellectual property rights (whether it be claims of improper use of confidential information, patent infringement, copyright infringement, trademark infringement or the like).
- d. Contractor represents and warrants that all processes or methods utilized by Contractor to provide it services to Owner are free from infringement of third party intellectual property rights (whether it be claims of improper use of confidential information, patent infringement, copyright infringement, or the like) and that all products provided by Contractor to Owner are free from third party claims of infringement of intellectual property rights, including allegations that the product infringes the claims of the United States process patent in violation of the Process Patents Amendment Act of 1988. Contractor shall cooperate fully and promptly with Owner with respect to any notice of infringement or request for disclosure or response to a request for disclosure generated or received by Owner in connection

with Contractor's Work pursuant to the Process Patents Amendment Act of 1988. To the extent that Contractor obtains products from third parties which it intends to provide to Owner, Contractor shall obtain agreements from Contractor's vendors to cooperate in connection with requests for disclosure generated or received by Owner pursuant to the Process Patents Amendment Act of 1988.

- e. THE INDEMNITY AGREEMENT PROVIDED IN CONTRACTOR'S INDEMNITY OBLIGATION PROVIDED IN SECTION 5.12, ABOVE, INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: (I) CONTRACTOR'S BREACH OF ANY COVENANT, REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, REGARDING INTELLECTUAL PROPERTY RIGHTS; (II) ALLEGATIONS THAT OWNER, BY USE OF THE MATERIALS OR THE WORK, INFRINGES ANY THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS (WHETHER IT BE CLAIMS OF IMPROPER USE OF CONFIDENTIAL INFORMATION, PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADEMARK INFRINGEMENT OR THE LIKE); (III) ALLEGATIONS THAT A THIRD PARTY OWNS INFORMATION, IDEAS, CONCEPTS, IMPROVEMENTS, DISCOVERIES, INVENTIONS, OR FORMS OF EXPRESSION OF IDEAS, DESCRIBED OR PROVIDED BY CONTRACTOR TO OWNER; (IV) ALLEGATIONS THAT OWNER'S OWNERSHIP OR USE OF INFORMATION, IDEAS, CONCEPTS, IMPROVEMENTS, DISCOVERIES, INVENTIONS, OR FORMS OF EXPRESSION OF IDEAS DISCLOSED OR PROVIDED BY CONTRACTOR TO OWNER INFRINGE A THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS; (V) ALLEGATIONS THAT THE PROCESSES UTILIZED BY CONTRACTOR IN PROVIDING ITS SERVICES TO OWNER INFRINGE THIRD PARTY INTELLECTUAL PROPERTY RIGHTS (INCLUDING A VIOLATION OF THE PROCESS PATENTS AMENDMENT ACT OF 1988); OR (VI) THE COSTS, AND EXPENSES, INCLUDING ATTORNEY'S FEES INCURRED BY OWNER, IN ENFORCING THE INTELLECTUAL PROPERTY INDEMNITY INCLUDED IN THIS PARAGRAPH.

IN ADDITION TO CONTRACTOR'S INDEMNITY OBLIGATION PROVIDED IN SECTION 5.12, ABOVE, TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS THE INDEMNIFIED PARTIES FROM AND AGAINST EVERY LOSS, ITEM OF DAMAGE, INJURY, EXPENSE, DEMAND, CLAIM, CAUSE OF ACTION, JUDGMENT OR LIABILITY, OF WHATSOEVER KIND OR CHARACTER, WHETHER ARISING IN CONTRACT OR TORT OR UNDER ANY STATUTE, FOR EVERY ELEMENT OF RECOVERY, WHETHER DIRECT OR INDIRECT, INCLUDING SPECIAL AND CONSEQUENTIAL DAMAGES, AND INCLUDING ALL RELATED FEES AND COSTS, TO INCLUDE ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS, BASED UPON, ARISING OUT OF, OR RELATING TO ANY ALLEGATION OF VIOLATION OF COPYRIGHT LAWS AS A RESULT OF CONTRACTOR'S PERFORMANCE (OR NON-PERFORMANCE) OF THE WORK AND EVEN IF DUE TO THE

**NEGLIGENCE, BREACH OF CONTRACT, VIOLATION OF STATUTE,
OTHER FAULT OR LIABILITY WITHOUT REGARD TO FAULT OF ANY
INDEMNIFIED PARTY.**

- f. Contractor confirms and agrees that the Owner has and shall retain all rights, title, and interest in and to the drawings, documents, designs and information, including, without limitation, any copyright or other intellectual property rights, provided to Contractor or on behalf of Owner, and that by use of such drawings, documents, designs and information, the Contractor shall not acquire any right, title, or interest in such drawings, documents, designs and information, including, without limitation, any copyright or other intellectual property rights. The Owner makes no representation or warranty, and hereby disclaims any such warranty, that any information provided to the Contractor by or on behalf of the Owner in connection with the Work is accurate, correct, sufficient, complete, fit for its intended purpose or can be used without infringing any intellectual property rights of third parties under any intellectual property rights of the world.
- 5.14. SUBCONTRACTOR'S ASSIGNMENT AND SUBLETTING. Contractor shall be fully responsible to Owner for all acts and omissions of any subcontractor, supplier, or other person or organization performing or furnishing any of the Work under a direct or indirect contract with Contractor. All Work performed for Contractor by such subcontractor, supplier, persons or organization shall be pursuant to an appropriate agreement between Contractor and each such party that specifically binds such party to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- Contractor shall timely pay its subcontractors and material suppliers, as required by law and any agreements between or among Contractor and its subcontractors/material suppliers, and such payments are a condition precedent to final payment.
- 5.15. CONTRACTOR'S SETTLEMENT OF CLAIMS. Contractor shall promptly settle or cause the settlement of all claims for which it is responsible, in whole or in part, pursuant to the Contract Documents. Upon receipt of any claim, Contractor shall immediately notify the Owner of the full particulars thereof, and the Owner may elect, by notice to Contractor, to have its representative accompany Contractor's representative in making settlement of the same.
- 5.16. SETTLING SMALL CLAIMS. Owner shall provide Contractor written notice of any claims made arising out of or relating to the Contract or the Contractor's performance of the Work. Contractor shall, within 10 calendar days following such notice, appoint in writing and thereafter, until Final Completion, unless earlier allowed by Owner, maintain on the Site a special agent who shall have full duty and authority on behalf of Contractor to settle and pay any claims payable by Contractor described herein, to request or confirm payment by Owner of such claims for the account of Contractor, and to do all other things necessary or convenient in connection with the foregoing authority. In addition, Contractor shall cause said special agent to accompany the representative of Owner to solicit the settlement of such claims as Owner's representative may request. Contractor, through his special agent, shall settle and pay claims payable by Contractor hereunder, but only in the presence and with the cooperation of the representative of the Owner, and in such settlement Contractor shall take receipts and releases in favor of and releasing the Indemnified Parties as well as Contractor.

Understanding that Owner has a special interest in preserving the good will of persons whose property may be injured in the course of the Work, should Contractor fail to settle and pay claims, including providing written receipts and releases in favor of and releasing the Indemnified Parties, within 30 calendar days of Owner's initial written notice, Owner shall thereafter have the rights and authority to itself settle and pay, on Contractor's behalf, such claims as described in this paragraph. Contractor expressly acknowledges, acquiesces and confirms that a representative of Owner may, in good faith, determine whether claims are payable in whole or in part by Contractor under the provisions herein (the hazard and expense of litigation and the special interest of Owner in liquidating all Claims being considered), and if found so payable in part, the portion thereof properly payable by Contractor. To minimize the expense of employing agents in settling claims, Contractor hereby further authorizes Owner to settle and pay, without advice to or participation by Contractor but for Contractor's account, any claims payable by Contractor hereunder which may be settled for up to \$10,000 per claim (or such greater amount per claim as Contractor may fix by written notice to Owner). The amount of any such claims may be withheld from Contractor's final payment. Owner will use diligence in undertaking the settlement and payment of any such claims.

Contractor shall reimburse Owner for all costs and expenses incurred by Owner in the settlement of any claims payable by Contractor.

- 5.17. CONTRACTOR'S USE OF OWNER'S PROPERTY. In the event that any arrangement is made whereby Contractor or any of its subcontractors of any tier use any employees of Owner, any tools, equipment, apparatus, improvements or other personal property of Owner or any utilities (such as electricity, gas, water, compressed air and toilet facilities) furnished by or through Owner, irrespective of who pays the employees and regardless of whether any consideration is paid for the use of the tools or the utilities, then the employees while engaged in the use of the tools or the utilities shall be conclusively considered the agents, servants, and employees of Contractor, and the acceptance and/or use of the tools or the utilities by Contractor or its subcontractors of every tier shall mean the Contractor has inspected and determined the tools and utilities satisfactory for Contractor's intended purposes and uses, and accepted full responsibility for the tools and utilities. Owner makes no representation or warranty regarding the condition or suitability of any such tools, equipment, apparatus, improvements, other property or utilities. Contractor shall return the tools at the conclusion of Contractor's use thereof in the same condition as when received, ordinary wear and tear excepted.

5.18. LAWS AND REGULATIONS.

- a. Prior to beginning the Work, Contractor shall become familiar with all of the Laws and Regulations relating to the Work or which in any manner might affect the Work, and shall thereafter comply with all such Laws and Regulations. Contractor shall, at its expense, obtain all permits, licenses, certificates and other authorizations required by or reasonably necessary in connection with the Work and shall at all times observe and comply with the Laws and Regulations.
- b. Contractor agrees that all financial settlements, billings, and reports rendered to Owner as provided for in the Contract Documents will, to the best of its knowledge and belief, reflect properly the facts about all activities and transactions handled for

the account of Owner, which data may be relied upon as being complete and accurate in any further recording and reporting made by Owner for whatever purpose.

- c. Contractor agrees to notify Owner promptly upon discovery of any instance where the Contractor fails to comply with provision (a) above or where Contractor has reason to believe data covered by (b) above is no longer accurate and complete.

- 5.19. BUSINESS STANDARDS. Contractor, in performing its obligations under Contract, shall establish and maintain appropriate business standards, procedures, and controls, including those necessary to avoid any real or apparent impropriety or adverse impact on the interests of the Owner. Contractor shall review with the Owner at reasonable frequency during the performance of the Work hereunder, such business standards and procedures including, without limitation, those related to the activities of Contractor's employees and agents in their relations with the Owner's employees, agents, and representatives, vendors, subcontractors and other third parties, and those relating to the placement and administration of purchase orders and subcontracts.

In connection with this Contract and the Work, neither Contractor, its subcontractors of every tier, nor the employees, representatives, and agents of Contractor or any such subcontractor shall at any time solicit, accept, offer or bestow gratuities of more than nominal value from or to one or more of the Indemnified Parties, any of Owner's other contractors associated with the Work, the employees, agents, or representatives of such other contractors, or anyone else associated with the Work. Violation of this policy by Contractor or any subcontractor shall constitute a material breach of Contractor's obligations under the Contract Documents that may result at the Owner's election in a declaration of default.

- 5.20. SAFETY.

- a. Contractor shall develop a safety program applicable to each job site and to the Work to be done and enforce such program at all times. Further, Contractor shall comply with all applicable Laws and Regulations including, but not limited to, the standards and regulations promulgated by the Secretary of Labor under the Occupational Safety and Health Act of 1970 (OSHA) and any other legislation enacted for the safety and health of Contractor employees. Contractor shall have complete responsibility for protecting the safety and health of its employees, subcontractors, and all other persons.
- b. Contractor shall notify Owner immediately by telephone with prompt confirmation in writing, of injuries and fatalities that occur on the Site in connection with any Work being performed under this Contract and shall provide Owner with such reports of injuries and fatalities as Owner shall deem necessary, including but not limited to, copies of all reports or other documents filed or provided to Contractor's insurers or the State of Texas in connection with such injury or fatality.
- c. Nothing contained herein shall be interpreted as enlarging Owner's legal duty to Contractor or to Contractor's agents, employees, subcontractors, or third parties, or altering the status of Contractor as an independent Contractor.

- 5.21. ALCOHOL, DRUGS, WEAPONS, ETC. The use of alcohol or controlled substances by any person on Owner's property or the Site or any person remaining on Owner's property or the Site under the influence of such substances is strictly prohibited. In addition, possession of alcohol, controlled substances, firearms, explosives, weapons, and hazardous substances or articles without proper authorization is not permitted on Owner's property or the Site. Entry onto Owner's property is deemed to be consent to and recognition of the right of Owner or a representative of the Owner who has been specifically authorized to search the person, motor vehicles, and other property of each individual while entering, on, or departing the Site.
- 5.22. UTILITY SERVICES FOR CONSTRUCTION. The Contractor shall provide all utilities necessary for construction at no additional cost to Owner unless otherwise specified in the Contract Documents.
- 5.23. OPERATION AND MAINTENANCE MANUALS. Operation and maintenance manuals are to be provided where required by an item in the Technical Specifications. The Contractor is responsible for obtaining installation, operation, and maintenance manuals from manufacturers and suppliers for equipment furnished under the Contract and shall submit three copies of each complete manual to the Engineer within 90 days after approval of shop drawings, product data, and samples, and not later than the date of shipment of each item of equipment to the Site or storage location. Operations and maintenance manuals specified hereinafter are in addition to any operation, maintenance, or installation instructions required by the Contractor to install, test, and start up equipment.

Each manual must be bound in a folder and labeled to identify the contents and project to which it applies. The Engineer may additionally requested electronic copies of each manual, stored on electronic media suitable to the Engineer. The manual should contain the following:

- a. An 8-1/2-inch x 11-inch typewritten sheet listing the manufacturer's identification, including order number, model, and serial number and location of parts and service centers.
 - b. A separate 8-1/2-inch x 11-inch typewritten list of recommended stock of parts, including part number and quantity.
 - c. Complete replacement parts list.
 - d. Performance data and rating tables.
 - e. Specific instructions for installation, operation, adjustment, and maintenance.
- 5.24. MATERIALS AND EQUIPMENT. The Contractor shall incorporate into the Work only new materials and equipment and shall store these materials and equipment in manner to protect them from damage. The manner of protection is subject to specific approval of the Engineer. Pipe, fittings, equipment, and other serviceable materials found on the Site or dismantled by reason of construction shall remain property of the Owner unless otherwise designated. The Contractor shall remove and deliver materials to Owner at designated points and shall pay, at prevailing market price, for usable materials that are damaged through negligence.

- 5.25. INTERRUPTION OF UTILITY SERVICES. The Contractor shall not operate any valve or other control on existing systems. The Contractor shall exercise care in performing work so as not to interrupt service, including, but not limited to, locating and uncovering existing utilities ahead of heavy excavation equipment and at house connections, either lifting trenching machine over lines or cutting and reconnecting with minimum interruption of service, as approved.
- 5.26. TRAFFIC SAFETY MEASURES. If the Work occurs on or adjacent to any street, alley, or public place or where construction creates hazard to traffic or public safety, the Contractor shall furnish and maintain suitable barricades, warning signs, and lights and remove same when no longer necessary. The Contractor shall be responsible for all phases of traffic control according to the guidelines as set forth in Manual on Uniform Traffic Control Devices.
- 5.27. USE OF STREETS. Except where approved otherwise, the Contractor may not hinder or inconvenience travel on streets or intersecting alleys for more than two blocks at any one time. Whenever streets are closed the Contractor shall place properly worded signs announcing such fact to the public, with proper barricades at the nearest street corners, on both sides of obstruction. The Contractor shall leave no street or driveway blocked at night. When streets are closed, Contractor shall also notify the Fire Department and the Police Department. The Contractor shall not block ditches, inlets, fire hydrants, etc., and, where necessary, shall provide temporary drainage.

The Contractor shall remove as soon as practicable, accumulated rubbish and open each block for public use. Use of any portion of a street shall not constitute acceptance of any portion of Work. The Contractor shall backfill and shape trenches across street intersections or driveways for safe traffic at night or, where permitted, span open trenches with steel plates or bridges to permit traffic flow. When driveways are cut, the immediate placement of mats for ingress or egress of vehicles may be directed if undue hardship to property owner would otherwise result.

- 5.28. CONSTRUCTION STORMWATER DISCHARGES. The Contractor shall, without any additional expense to the Owner, be responsible for obtaining any necessary licenses and permits and for complying with all applicable Laws and Regulations, including, but not limited to, any Laws or Regulations concerning storm water permitting and management. Specifically, without limitation, the Contractor will comply with all aspects of the Texas Pollutant Discharge elimination System ("TPDES") General Permit for Storm Water Discharges from Construction Activities in Texas and with the Storm Water Pollution Prevention Plan (SWPPP) that has been developed for the Project. At Owner's expense, the baseline SWPPP for the Project will be provided by the Engineer to Contractor. The Contractor will implement the baseline SWPPP and advise the Engineer in writing prior to implementing any changes required to the SWPPP due to changes in construction activities. The Engineer may update SWPPP due to changes in construction activities. The Contractor will file the Notice of Intent ("NOI") for permit coverage with the Texas Commission on Environmental Quality and will maintain a copy thereof, file stamped by such governmental authority, at the Site. Weekly inspection to ensure compliance with the SWPPP and other permit requirements will be performed by the Contractor. Upon Final Completion, the Contractor shall file the Notice of Termination ("NOT") with the Texas Commission on Environmental Quality.

- 5.29. SITE MAINTENANCE AND CLEAN-UP. Contractor shall maintain the Site during construction to keep it reasonably neat and free of trash, rubbish, and other debris. In clean-up operations, Contractor shall remove from the Site and from public and private property temporary structures, rubbish, and waste materials and dispose of excavated materials beyond that needed to bring the Site to elevations shown. During final clean-up, any road constructed by Contractor for access to the Site must be leveled and ruts filled so that surface drainage is not hindered.
- 5.30. AS-BUILT DIMENSIONS/ RECORD DRAWINGS. The Contractor shall make daily measurements of facilities constructed and keep accurate records of location (horizontal and vertical) of all facilities. Upon completion of Work, the Contractor shall furnish Owner with one set of direct prints, marked with red pencil, to show as-built dimensions and location of all Work constructed.
- 5.31. SANITATION. Necessary sanitary conveniences for the use of laborers on the Work, properly secluded from public observation, shall be constructed and maintained by Contractor, in such manner and at such point as shall be approved by Owner, and their use shall be strictly enforced.
- 5.32. CONTRACTOR'S BUILDINGS. The building of structures for housing men, or the erection of tents or other forms of protection will be permitted only at such places as Owner shall prescribe, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in a manner satisfactory to Owner.

ARTICLE VI. ENGINEER'S STATUS DURING CONSTRUCTION

- 6.01. ENGINEER'S AUTHORITY AND DUTY. It is mutually agreed between the parties to this Contract that: Engineer will act as Owner's representative during the construction of the Project, and that no act or omission on the part of Engineer, his subordinates or representatives, will excuse Contractor from full and proper performance of this Contract according to its terms, or give rise to any liability or obligation from Engineer to Contractor. All authority and rights assigned by the Owner to the Engineer with respect to the Work are solely and exclusively for the benefit of the Owner and not for the Contractor. The Engineer shall have no liability to Contractor under these Contract Documents in the absence of actual fraud.

To prevent delays and disputes and to discourage litigation, it is further agreed by and between the parties to the Contract that, if it cannot be otherwise agreed, Engineer shall in all cases determine the amounts and quantities of the several kinds of Work which are to be paid for under this Contract, and he shall determine all questions in relation to said Work and the construction thereof, and he shall in all cases decide every question which may arise relative to the performance of this Contract on the part of Contractor; provided, however, that should Engineer render any decision or make any requirement which, in the opinion of either party hereto, is not in accordance with the meaning and intent of this Contract, either party may file with Engineer within 30 calendar days his written objection to the decision or requirement so rendered. Contractor's failure to object to Engineer's decision or requirement within such 30 calendar days shall be deemed Contractor's agreement with such decision or requirement and constitute a waiver of any right of Contractor to additional time, compensation or damages as a result of such decision or requirement. It is the intent of this Contract that there shall be no

delay in the performance of the Work. To this end, the decision or requirement of Engineer shall be promptly carried out. Engineer shall, within a reasonable time or as otherwise required in the Contract Documents, render and deliver to both Owner and Contractor a written decision on all claims of the parties hereto and on all questions that may arise relative to the execution of the Work or the interpretation of the Contract, Technical Specifications, or Plans.

- 6.02. EXAMINATION, OBSERVATION, AND TESTING. It is agreed by Contractor that Engineer shall be and is hereby authorized to appoint from time to time such subordinate engineers or project representatives as Owner may deem proper to examine the material furnished and observe the Work done and to ascertain whether the said material is furnished and said Work is done in accordance with the Contract Documents there for. Contractor shall furnish all reasonable aid and assistance required by the subordinate engineers or project representatives for the proper examination and testing of the Work and materials. The authority of subordinate engineers and project representatives shall be limited to examination, observation, and testing of Work and materials, and reporting same to Engineer.

- 6.03. PRELIMINARY APPROVAL. Neither Engineer nor his subordinates shall have any power to waive the obligations of this Contract for the furnishing by Contractor of good material, or for his performance of good Work as herein described and in full accordance with the Plans, Technical Specifications, and other Contract Documents. No action taken or thing done, written or oral, including, but not limited to, inspections made, payments made, or Final Completion of the Work, and no failure or omission of Engineer or his subordinates to discover, object to, or condemn any defective Work or material, shall release Contractor from the obligation to fully and properly perform the Contract, including, without limitation, the obligation to at once tear out, remove, and properly replace the same.

Any questioned Work may be ordered by Engineer to be taken up or removed for re-examination prior to final acceptance, and if found not in accordance with the Contract Documents for said Work, all expense of removing, reexamination, and replacement shall be borne by Contractor; cost of uncovering any Work will be borne by Owner only when the Work is found acceptable and the Work was originally performed with the knowledge of the Engineer.

- 6.04. RIGHT OF ENGINEER TO MODIFY METHODS AND EQUIPMENT. The Contractor shall provide and use accepted equipment and materials in sufficient qualities and quantities to facilitate diligent prosecution of the Work to the end that the Work will be completed within the time for completion and otherwise in accordance with the Contract Documents. If at any time Engineer shall find that the methods, materials or equipment used by Contractor are faulty or inadequate to secure the quality of Work or the rate of progress necessary for Contractor to complete the Work (or any portion thereof) within the time period required by this Contract or otherwise will prevent the Work from being completed in accordance with the Contract Documents, Engineer may, in writing, require Contractor to improve their character and efficiency, replace and/or supplement them, and Contractor shall comply with such requirements.

If at any time the working force of Contractor is inadequate for securing the progress herein specified, Contractor shall, if so notified in writing, increase his force or equipment, or both,

to such an extent as to ensure compliance with the schedule of progress (and timely completion of the Work) all in accordance with the Contract Documents.

ARTICLE VII. EXTRA WORK/ CHANGE ORDERS/ CLAIMS

- 7.01. CHANGES AND ALTERATIONS. Contractor further agrees that Owner may make such changes and alterations as Owner may see fit in the line, grade, form, dimensions, Plans, Technical Specifications, or materials for or scope of the Work herein contemplated, or any part thereof, either before or after the beginning of the construction, without affecting the validity of this Contract and the accompanying Bonds.

If such changes or alterations diminish the quantity of the Work to be done, such changes may reduce the Contract Price according to the quantity of Work actually done and the unit price established for such Work under this Contract and shall not constitute the basis for a Claim. If such changes or alterations increase the amount of Work and the increased Work can fairly be classified under the Plans, Technical Specifications, or other Contract Documents, such increase shall be paid for according to the quantity of Work actually done and at the unit price established for such Work under this Contract; otherwise such Extra Work shall be paid for as provided in this Article. If Owner makes such changes or alterations as makes useless any Work already done or materials already furnished or used in accordance with the Contract Documents in connection with said Work, then Owner shall recompense Contractor for such Work, labor and materials, in accordance with the prices therefore in the Contract Documents, made useless by such change.

- 7.02. EXTRA WORK. It is agreed that Contractor shall perform all Extra Work when presented with a Written Work Order or Change Order. **The Contract Price for Extra Work may be changed only by a Change Order signed by Owner, Engineer and Contractor.** It is agreed that pricing in any Change Order for performing Extra Work shall be determined by one or more of the following methods:

Method (A) - By agreed unit prices; or

Method (B) - By agreed lump sum; or

Method (C) - If neither Method (A) nor Method (B) be agreed upon before the Extra Work is commenced, then Contractor shall be paid the "actual field cost" of the Extra Work, less any savings attributable to the change, alteration or addition, plus 15 percent of the net amount.

In the event said Extra Work be performed and paid for under Method (C), then the provisions of this paragraph shall apply and the "actual field cost" is hereby defined to include the cost of all workmen, such as foremen, timekeepers, mechanics, and laborers, and all materials, supplies, teams, trucks, and rentals on machinery and equipment for the time actually employed or used on such Extra Work, plus actual transportation charges necessarily incurred if such equipment or machinery be not already on the job together with all power, fuel, lubricants, water, and similar operating expenses; also all necessary incidental expenses, incurred directly on account of such Extra Work, including Social Security, Old Age Benefits, and other payroll taxes, and a ratable proportion of premiums on all Bonds and all insurance as may be required by any law or ordinance, or required by Engineer or Owner, or

by them agreed to. Engineer may prescribe the form in which accounts of the “actual field cost” shall be kept and may also specify, in writing, before the Work commences, the method of doing the Work and the type and kind of machinery and equipment to be used, otherwise these matters shall be determined by Contractor. Where practicable, the terms and prices for the use of machinery and equipment shall be incorporated in the Written Work Order or Change Order. The 15 percent of the “actual field cost” to be paid Contractor shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the “actual field cost” as herein defined, save that where Contractor’s camp or field office must be maintained primarily on account of such Extra Work, then the cost to maintain and operate this office shall be included in the “actual field cost.” When Extra Work is performed by a subcontractor, the 15 percent will apply to the subcontractor only. The Contractor will be allowed 5 percent for overhead and profit.

No Claim for Extra Work of any kind will be allowed unless ordered in writing by Engineer. In case any requirements, response to request for information, response to a submittal or other communication made by Engineer or any other event appear to Contractor to involve Extra Work for which he should receive compensation, Contractor shall immediately, and **in any event within 30 calendar days after being notified of any such requirement, response or communication or after such event**, make written request to Engineer for written authorization there for. Such written request for written authorization shall set forth Contractor’s belief of, basis for and amount of expected compensation. IN NO EVENT SHALL CONTRACTOR BEGIN PERFORMING THAT PORTION OF THE WORK AFFECTED BY SUCH REQUIREMENT, RESPONSE, OR COMMUNICATION PRIOR TO GIVING SUCH WRITTEN REQUEST FOR WRITTEN AUTHORIZATION TO THE ENGINEER. Any written request for written authorization not timely made by the Contractor shall be deemed a waiver by the Contractor of its right to assert and recover any additional compensation or otherwise on a Claim in respect of such request, response or communication. Should a difference of opinion arise as to what does or does not constitute Extra Work, or as to the payment therefore, and Engineer insists upon its performance, Contractor shall proceed with the Work after making its written request for written authorization to Engineer and shall keep an accurate account of the “actual field cost” thereof, as provided under Method (C). Engineer shall, within a reasonable time, render and deliver to both Owner and Contractor a written decision on all Claims as provided under Section 6.01 in these General Conditions.

- 7.03. ESTIMATED QUANTITIES. The estimated quantities of the various classes of Work to be done and material to be furnished under this Contract are approximate and are to be used only as a basis for estimating the probable cost of the Work and for comparing the Bids offered for the Work. It is understood and agreed that the actual amount of Work to be done and material to be furnished under this Contract may differ somewhat from these estimates, and that the basis for determining quantities for payment under this Contract shall be the actual amount of such Work done and the material incorporated.

Contractor agrees that he will make no Claim for damages, anticipated profits, or otherwise on account of any differences which may be found between the quantities of Work actually done or the material actually incorporated under this Contract and the estimated quantities contemplated and contained in the Bid.

Where the final quantity of Work performed by Contractor on “Major Unit Price Work” item differs by more than 25 percent from quantity of the item stated in the Contract, a party may request (subject to Owner’s approval) an adjustment in the unit price, for the portion that differs by more than 25 percent, by a Change Order. Major Unit Price Work is defined as an individual unit price line item whose original total value i) is greater than five percent of original Contract Price, ii) becomes greater than five percent of original Contract Price as the result of an increase in quantity, or iii) is greater than or equal to \$100,000, whichever is least.

- 7.04. EXTENSION OF TIME. Subject to the remainder of this paragraph, should Contractor be delayed in the completion of the Work by any act or negligence of Owner or Engineer, or by any employee of either, or by other contractors employed by Owner, or by changes ordered in the Work, then, if the other requirements for an extension of time are met, an extension of time shall be allowed for completing the Work sufficient to compensate for the delay, the amount of the extension to be the amount approved by Owner, based on the recommendation by Engineer; provided, however, that Contractor shall give Engineer notice in writing of the cause of such delay and the impact to the critical path of the schedule prior to the tenth day of the month following the month in which the delay occurred. Failure to file requests for extension of time within the time set forth in and otherwise as required by this paragraph shall constitute a waiver of any rights the Contractor may have had to such extensions of time. Contractor shall support its request for time extension with such information as required by Engineer. Approved extensions of time must be made in writing, signed by the Owner, Engineer, and Contractor.

Contractor will not be allowed time extensions that are due to (i) inclement weather (not including Force Majeure); (ii) non-availability of equipment or material, when the principal units of Work and tasks on the critical path are not in progress or are not delayed by the event of delay, interference, disruption, or hindrance; (iii) when at least seven (7) hours of available working time remain out of the working day; (iv) while materials are drying and it is possible for the Contractor to enclose the area and use drying devices; (v) when an event of delay, interference, disruption, or hindrance occurs on a day other than a working day or other day when the Contractor had not originally planned to work; (vi) when an event of delay, interference, disruption, or hindrance occurs after the expiration of the time for completion; (vii) to the extent the Contractor could have anticipated or alleviated the impact of the event of delay, interference, disruption, or hindrance through reasonable efforts; (viii) when events of concurrent delay overlap the claimed delay; and/or (ix) when an extension of time is precluded by any other provision of the Contract Documents.

- 7.05. HINDRANCES, INTERFERENCES, DISRUPTIONS, AND DELAYS. The Contractor shall receive no financial compensation for delay, interference, disruption, or hindrance at any time in the commencement or progress of the Work for any reason and for any period of time, by an act, omission or neglect, intentional or otherwise, of the Owner, Engineer or any other consultant or Contractor of the Owner, or of an employee of any of them; or by changes ordered in the Work; or by fire, unavoidable casualties or other causes beyond the Contractor’s control; or by delay authorized by the Owner pending mediation; or by other causes that may justify delay. To the fullest extent allowed by applicable Laws and Regulations, in no event shall the Owner be liable to the Contractor or any subcontractor or supplier, any other person or any surety for or any employee or agent of any of them, for any

damages arising out of or associated with any delay, interference, disruption, or hindrance to the Work, regardless of the source of the delay, interference, disruption, or hindrance, AND EVEN IF SUCH DELAY, HINDRANCE, DISRUPTION OR INTERFERENCE RESULTS FROM, ARISES OUT OF OR IS DUE, IN WHOLE OR IN PART, TO THE NEGLIGENCE OR OTHER TORTIOUS CONDUCT, BAD FAITH, ARBITRARY OR CAPRICIOUS CONDUCT, INEQUITABLE CONDUCT, BREACH OF CONTRACT OR OTHER FAULT, HOWEVER CHARACTERIZED, OF THE OWNER OR THE ENGINEER OR THE EMPLOYEES, REPRESENTATIVES OR AGENTS OF THE OWNER OR ENGINEER. The Contractor's sole remedy in any such case shall be an extension of time in such amount as allowed by the Section 7.04 of these General Conditions.

- 7.06. **FILING CLAIMS.** It is agreed that, unless specifically waived in the Contract Documents, all Claims shall be referred to Engineer for a decision. All Claims shall be in writing and filed with Engineer within 30 calendar days of the event giving rise to such Claim, unless a specific provision of the Contract Documents provide a shorter period of time for such filing, in which case it shall occur within such shorter time. Written notice stating the general nature of each Claim and the amount or extent of the Claim, with supporting data, must be provided as a condition precedent to Contractor's exercise of any rights or remedies he may otherwise have under the Contract Documents. The Claim shall also be accompanied by Contractor's written statement that the adjustment claimed is the entire adjustment to which the Contractor believes he is entitled as a result of said event. Engineer shall reply to such written Claims by Contractor and render his final decision in writing within 30 days of receipt of the Contractor's last submittal. In the event Engineer shall take no action, the Claim shall be deemed denied.

Contractor hereby confirms its willingness and ability to comply with the requirements of the Contract Documents for seeking an adjustment in price or time, damages or other relief and hereby agrees that the time periods, notice requirements and procedures set forth in the Contract Documents are reasonable time periods, notice requirements and procedures and that Owner will be prejudiced if Contractor fails to comply with such time periods, notice requirements and procedures. ACCORDINGLY, CONTRACTOR'S FAILURE TO COMPLY WITH THE TIME PERIODS, NOTICE REQUIREMENTS AND PROCEDURES OF THE CONTRACT DOCUMENTS WITH RESPECT TO A CLAIM FOR ADJUSTMENT IN PRICE OR TIME, DAMAGES OR OTHER RELIEF SHALL CONSTITUTE A WAIVER OF THE CLAIM, INCLUDING CLAIMS ARISING OUT OF OWNER'S NEGLIGENCE, BREACH OF CONTRACT OR OTHER FAULT OR STRICT LIABILITY WITHOUT REGARD TO FAULT.

IT IS FURTHER AGREED THAT ACCEPTANCE BY CONTRACTOR OF THE FINAL PAYMENT SHALL BE A BAR TO ANY CLAIMS OR SUITS BY CONTRACTOR AGAINST OWNER FOR ANY MATTERS RELATED TO THIS CONTRACT, INCLUDING MATTERS ARISING OUT OF OWNER'S NEGLIGENCE, BREACH OF CONTRACT OR OTHER FAULT OR STRICT LIABILITY WITHOUT REGARD TO FAULT.

ARTICLE VIII. TESTS AND INSPECTIONS/ DEFECTIVE WORK/ WARRANTY

- 8.01. **TESTING AND INSPECTION.** The Owner shall arrange and obtain all inspections and tests required by the Contract Documents; provided, however, that if initial testing fails, all retests

will be at Contractor's sole expense. Such testing and inspection is for the sole benefit of Owner, and Owner makes no representation or warranty as to the accuracy of the results of any test or inspection. Contractor at its own expense shall provide such laboratory with all test specimens required by the Contract Documents. The Contractor shall notify the Engineer prior to manufacture or fabrication of items so that observation may be accomplished and furnish field samples of materials to Engineer for testing.

- 8.02. DEFECTS AND THEIR REMEDIES; WARRANTY. It is agreed that if the Work or any part thereof, or any material delivered to the Site for use in the Work or selected for the Work, shall be deemed by Engineer as unsuitable or not in conformity with the Contract Documents, Contractor shall, after receipt of written notice thereof from Engineer, forthwith remove such material and rebuild or otherwise remedy such Work so that it shall be in full accordance with this Contract.

It further is agreed that all Work or any part thereof, including equipment installed, shall be free from defects due to faulty workmanship or materials for period of one year from date of Final Completion. Contractor shall notify Engineer in writing 30 days in advance of the expiration of such one-year warranty period, and Engineer shall thereafter schedule a final inspection of the Work prior to the expiration of the warranty period. Contractor's failure to notify the Owner of the expiration of the warranty period, as provided herein, shall extend the warranty period for successive 30 day periods until such written notice is received. Upon notice from Owner, Contractor shall repair defects in all construction that develop during the warranty period, or as noted on the final inspection report, at no cost to Owner. Neither final acceptance nor final payment nor any provision in the Contract Documents relieves Contractor of the above guarantee.

If observed by Owner, notice of the defects will be given by Owner to Contractor with reasonable promptness. Failure to repair or replace defect upon notice entitles Owner to repair or replace same and recover reasonable cost thereof from Contractor and/or his surety.

- 8.03. RIGHT OF ENTRY. Owner reserves the right to enter the property or location on which the Work herein contracted for is to be constructed or installed, by Engineer and such agent or agents as Owner may elect, for the purpose of examining, observing, or testing the Work, or for the purpose of constructing or installing such collateral Work as Owner may desire.

ARTICLE IX. PRICE FOR WORK/ PAYMENTS TO CONTRACTOR

- 9.01. PRICE FOR WORK. In consideration of the furnishing of all the necessary labor, equipment, and material and the completion of all Work by Contractor, and on the Final Completion of all Work and the delivery of all materials embraced in this Contract in full conformity with the Contract Documents, Owner agrees to pay Contractor the final Contract Price. Contractor hereby agrees to pay such prices as are necessary for furnishing all materials and all labor required for the aforesaid Work, including all expenses incurred by him, and for well and truly performing the same and the whole thereof in the manner prescribed by and in accordance with this Contract, including the attached Technical Specifications, and requirements of Engineer.

- 9.02. PROGRESS PAYMENTS. On or before 25th day of each month, the Contractor shall submit an application for progress payment to the Engineer showing the total value of the Work

completed. Progress payments for unit price work will be based on the number of units completed. No payment shall be requested nor made for materials purchased or stored on-site that are not yet incorporated into the Work unless specifically authorized by the Owner. If requested, Contractor shall meet with the Engineer at the Site to verify quantity of Work completed.

Beginning with the second application for progress payment, each application shall include an affidavit and lien release of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations with respect to the prior application for payment.

Engineer shall promptly review each application for payment, including required submittals. Engineer shall provide to Owner a statement showing, as complete as practicable and based upon Engineer's inspections, the total value of the Work completed by the Contractor together with Engineer's recommendation as to payment. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, such payments are not due and payable under the Contract Documents. Payments based on such interim statements are subject to adjustment and correction as set forth in the Contract Documents.

Unless otherwise provided herein, Owner shall pay Contractor the total amount of Engineer's statement, less 10 percent of the amount thereof, and further less all previous payments, and further less all sums that may be retained by Owner under the terms of this Contract. The stated 10 percent retainage may be retained until 30 calendar days after final payment is made. Payment shall be made by Owner on or before the 46th day from receipt of the monthly statement.

Owner may, at Owner's option, withhold part or all of any payment due the Contractor if i) any submittals, reports, shop drawings, samples, test reports, or Work progress not be timely or be behind schedule or any requirement of the Contractor as provided in the Contract not be performed or timely or up to date or as scheduled; ii) any Work be defective or not in complete compliance with this Contract or should Contractor otherwise fail to perform Work in accordance with the provisions of this Contract; iii) Owner has incurred damages, including, without limitation, any additional costs associated with design professionals, attorneys or other consultants, as a result of any action or inaction by Contractor not in accordance with the Contract; iv) claims have been made against Owner on account of Contractor's performance or furnishing of the Work; v) Contractor is in breach of the Contract Documents; vi) there is evidence that the Work cannot be completed for the unpaid balance of the Contract Price; vii) Contractor has failed to submit proper statements for payment with all required attachments and supporting documentation; viii) Contractor has failed to make payment to any tier of subcontractor or supplier; and ix) any other items entitling Owner to an offset against the amount recommended for payment. It is understood, however, that in case the whole Work be near completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the Contractor, the Owner may, at Owner's option and upon written recommendation of the Engineer, pay a reasonable and equitable portion of the retained percentage to the Contractor; or the Contractor, at the Owner's option, may be relieved of the obligation to fully complete the Work and, thereupon, the Contractor shall receive payment of the balance due him under the Contract, subject to the conditions stated in Section 10.01.

Partial payment shall not be construed as an acceptance of defective or non-conforming Work.

- 9.03. PAYMENT OF SUBCONTRACTOR/MATERIAL CLAIMS. Should Owner receive notice of any claim(s) of unpaid labor or materials (or damages) from subcontractors, material suppliers, or any other person or entity, Owner may, at its option, withhold part or all of any payment due the Contractor until Owner, in its discretion, is satisfied that such claim(s) have been fully resolved and paid by Contractor, or Owner may, at its option, pay such claim(s) using the withheld funds.
- 9.04. RIGHT OF SET-OFF. If the Owner is entitled to reimbursement or payment from the Contractor under or pursuant to the Contract Documents, such payment shall be made promptly upon demand by the Owner. Notwithstanding anything contained in the Contract Documents to the contrary, if the Contractor fails to promptly make any payment due the Owner, or if the Owner incurs any costs and expenses to cure any default of the Contractor or to correct defective Work, or if the Contractor owes the Owner money for any other reason, then, for all purposes and at all times, without waiver or limitation of any of its other rights or remedies under this Contract and applicable Laws and Regulations, Owner shall have the right, but not the obligation, to deduct and withhold the amount of money, if any, that may ever be due from Contractor (or its surety) to Owner from any monies that Owner owes Contractor (or its surety), or to issue a written notice to the Contractor reducing the Contract Price by an amount equal to that which the Owner is entitled.

ARTICLE X. FINAL COMPLETION AND ACCEPTANCE

- 10.01. FINAL COMPLETION, ACCEPTANCE, AND PAYMENT. Upon completion of the Work, Contractor shall give the Engineer written notice that the Work has been fully and finally completed and must certify that the Work is complete and was built in conformance with the Plans, Technical Specifications, and other Contract Documents. Such written notice must be accompanied by all documentation called for in the Contract Documents, including but not limited to (i) the consent of surety to final payment; (ii) Contractor Affidavit for Final Payment and Bills Paid; and (iii) as-built drawings, as described in Section 5.30 of these General Conditions. Drawings will be reviewed by Engineer and returned to Contractor so that any adjustment required may be made.

Contractor shall also furnish like certifications from all subcontractors who performed Work on the Project. Subcontractor certifications shall be limited to that Work actually performed by the subcontractor. Such certifications shall be executed on the forms provided. These certifications must accompany the executed Contractor Affidavit for Final Payment and Bills Paid and are a condition precedent to final payment.

Within 10 calendar days after Engineer receives Contractor's written notice, certification(s), and required documentation, Engineer will schedule inspection by Engineer, Owner, and Regulatory Agencies; provided, however, that additional time shall be allowed for scheduling such inspections if required due to the Regulatory Agencies' availability or responsiveness. If the Work is found to be completed in accordance with the Contract Documents, including the Plans and Technical Specifications, and acceptable to the Engineer, Owner, and Regulatory Agencies, Engineer shall proceed to make final measurements and prepare a final statement of the value of all Work performed and materials furnished under the terms of the

Contract Documents and shall submit the final statement to Contractor for approval. Upon receipt from the Contractor of the executed approved final statement and all other documents required by the Contract Documents for final payment, the Engineer shall issue to the Owner a certificate of completion and Contractor-approved final statement of the value of the Work performed. The Owner shall thereafter accept the Work and shall pay to the Contractor on or before the 46th day after the date of the certificate of completion the balance due Contractor under the terms of this Contract, provided he has fully performed his contractual obligations under the terms of this Contract.

The Owner shall be entitled to withhold from such final payment for any circumstance for which Owner is entitled to withhold pursuant to General Conditions. For example, but not by limitation, should Owner receive notice of any claim(s) of unpaid labor or materials (or damages) from subcontractors, material suppliers, or any other person or entity, Owner may, at its option, withhold part or all of any of the final payments due the Contractor until Owner, in its discretion, is satisfied that such claim(s) have been fully resolved and paid by Contractor, or Owner may, at its option pay for such claims(s) using the withheld funds.

The 10 percent retainage may be held by Owner for 30 calendar days after the date of said payment, after which said retainage will be paid to Contractor in full, provided he has fully performed his contractual obligations under the terms of the Contract and Owner is not otherwise entitled to withhold payment.

It is understood that in the event that all Work has been completed, final payment less 10 percent retainage has been paid, and 30 calendar days have passed but, due to no fault or neglect on the part of Contractor, notification of Regulatory Agency acceptance has not been obtained, then Owner may, at Owner's option, pay Contractor a reasonable and equitable portion of the retainage; or Contractor, at Owner's option, may be relieved of its obligation to further perform hereunder, and thereupon, Contractor shall receive payment of the balance due it under the Contract subject to the conditions stated in this Section.

Neither final acceptance by Owner, nor the final payment, nor any provision in the Contract Documents, shall relieve Contractor of: (i) the obligation for fulfillment of any warranty that may be required in the Contract Documents, including the Technical Specifications; (ii) the obligation to repair defective Work or materials; (iii) Contractor's indemnification obligations under this Contract; or (iv) any of Contractor's continuing obligations.

- 10.02. OPERATION OF FACILITIES. The Owner reserves the right to operate new facilities during the construction period. Use of new facilities by the Owner during construction will not constitute final acceptance of the Work and will not constitute the date for start of any required warranties or guarantees. The Contractor will provide all necessary maintenance, including normal lubrication and adjustment, to new facilities operated by the Owner until final acceptance of the construction.

ARTICLE XI. SUSPENSION OF WORK/ TERMINATION/ DEFAULT

- 11.01. SUSPENSION OF WORK. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than sixty (60) consecutive calendar days by written notice to Contractor.
- 11.02. TERMINATION FOR CONVENIENCE OF OWNER. Owner may terminate Contractor's performance under the Contract for Owner's convenience at any time upon written notice to Contractor, whether or not Contractor is in default and, in such event, Owner's only liability will be to pay Contractor the following amounts:
- a. The unpaid balance due Contractor for the Work actually performed and accepted, based on the schedules and tables, unit prices and lump sums enumerated in the Contract Documents; and
 - b. Reasonable expenditures made and costs incurred by Contractor for the materials ordered by Contractor for the Work prior to the date of termination and not incorporated in the Work, less reasonable salvage or resale value, provided such materials conform to the Specifications, and for labor performed on any such materials prior to the date of termination and associated labor insurance and labor payroll taxes.

From the total of the items enumerated in items a and b above inclusive, there shall be deducted the total dollar amount of all claims of Owner against Contractor, including the total dollar amount of claims on account of delay or defects in materials and/or workmanship.

The amount payable under the provisions of this section, plus the sum of all amounts previously paid under the Contract, shall in no event exceed the Contract Price.

Contractor shall transfer and assign to Owner in accordance with Owner's instructions, all materials, supplies, Work in process, and other things for which Contractor is entitled to receive reimbursement hereunder, and all plans, drawings, working drawings, sketches, specifications, and information in connection with the Work, and shall take such action as may be necessary to secure to Owner, at Owner's election, the rights of Contractor under any or all orders and subcontracts made in connection with the Work.

If and as Owner so directs or authorizes, Contractor shall sell at a price approved by Owner, or retain at a price mutually agreeable, any such materials, supplies, Work in progress or other things as referred to above. The proceeds of any such sale or the agreed price shall be paid or credited to Owner in such manner as Owner may direct to reduce the amount payable by Owner.

If requested by Owner, Contractor shall endeavor to cancel any or all of its outstanding orders or subcontracts upon such terms as may be approved by Owner.

Upon the performance of the obligations described in this section by the respective parties, all obligations of the respective parties under the Contract shall be discharged, except such obligations as by their terms, express or implied, contemplate continued obligations after acceptance of the Work.

Nothing herein shall affect the right of Owner to terminate Contractor's performance as provided elsewhere in the Contract Documents.

11.03. EVENTS OF DEFAULT. An event of default includes, without limitation, any one or more of the following:

- a. A petition in bankruptcy is filed by or against Contractor, or Contractor makes a general assignment for the benefit of creditors, or a receiver is appointed on account of the insolvency of Contractor or to take charge of the Work or any part thereof.
- b. Contractor fails or refuses to supply enough properly skilled workers or proper equipment, or fails to make prompt payment when due to subcontractors for materials, equipment or labor.
- c. Contractor disregards the Laws and Regulations or the instructions of Owner or of Engineer.
- d. Contractor breaches any of the provisions of the Contract Documents, or breaches any of its representations or warranties in the Contract Documents, or otherwise fails or refuses to perform or fulfill all or any part of its obligations under the Contract Documents.

If one or more of the identified events occur, Owner or Engineer will provide written notice to Contractor and Contractor's surety of its intent to terminate for cause. Owner will allow a minimum of 5 calendar days to cure deficiencies in performance, then in any such case, Owner may, by written notice to Contractor and its surety, declare Contractor in default under the Contract Documents and terminate Contractor's performance under the Contract and may at its option employ any remedies provided for in the Contract Documents or otherwise available at law or in equity.

Nothing contained herein shall be interpreted as enlarging Owner's legal duty to Contractor or to Contractor's agents, employees, subcontractors, or third parties, or altering the status of Contractor as an independent contractor.

11.04. REMEDIES FOR DEFAULT OF CONTRACTOR. If the Contractor has been declared in default as described above, then Owner may, without prejudice to any other right or remedy available to it, elect to provide for completion of the Work in any manner deemed appropriate by Owner, including but not limited to the following:

- a. Owner shall have the right to demand that Contractor's surety honor its performance bond without delay.
- b. Owner shall have the right to, at its sole election and discretion, without further notice to Contractor, take possession of the Work and the Site, and, also at its sole election and discretion, use all or any part of Contractor's equipment and materials and may finish the Work by whatever method Owner may deem expedient (including, without limitation, at Owner's option, by negotiating contract(s) and prices(s) or by competitively bidding).

- c. Owner shall have the right to, and Contractor and its surety hereby consent to, the appointment of a receiver by any court with jurisdiction, without bond (or, if local rules require, a bond of nominal amount), to take charge of the Work, the Site, and all of Contractor's equipment, material, tools and other appliances on or near the Site and associated with the Work, at any time when Contractor is in default and such default has not been remedied or cured to the satisfaction of Owner. Owner may employ such receiver to continue the Work, receive any payments due to Contractor hereunder, pay all bills and invoices to subcontractors and material suppliers due from Contractor and otherwise perform Contractor's obligations hereunder, without discharging or limiting the liability of Contractor to Owner or of any surety on any bond.

In event either Owner, itself, causes the completion of the Work or Owner, via use of a receiver, causes completion of the Work, neither Contractor nor its surety shall be entitled to receive any further payment under the Contract until the Work achieves Final Completion. If the unpaid balance of the Contract Price shall exceed the expense of finishing the Work, (including, without limitation, attorney's, engineering, surveying and other professionals' fees and costs and compensation to the receiver, if any), such excess shall be paid to Contractor. If such expenses shall exceed such unpaid balance, Contractor or its surety shall pay the difference to Owner. Owner shall not be required to obtain the lowest price for the Work performed.

Should Owner elect to terminate the performance of Contractor hereunder, then such termination shall not waive, extinguish or diminish the obligations and liabilities of the Contractor or its surety existing as of termination. Contractor shall submit and does hereby submit to the personal jurisdiction of the state or federal courts having subject matter jurisdiction and sitting in the county in which the Site is located, for the adjudication of any suit brought to enforce Owner's rights and remedies under the Contract.

Any sum of money or indebtedness owed by Contractor to Owner as a refund or offset on account of audit, under any indemnity, or otherwise arising in connection with the Contract, shall be paid to Owner at such address or addresses which Owner may specify in writing.

ARTICLE XII. MISCELLANEOUS

- 12.01. NO THIRD PARTY BENEFICIARIES. The Contract Documents shall not create any rights in third parties and no provision of the Contract Documents shall be construed as creating any obligations for the benefit of, or rights in favor of, any person or entity other than the Owner, the Indemnified Parties, and the Contractor. Without limiting the foregoing, the Owner shall have no obligation to pay or to see to the payment of any monies due to any of Contractor's subcontractors or material suppliers of every tier or to any other person or entity.
- 12.02. SEVERABILITY. Except as provided under Section 5.12 of these General Conditions, if any term, condition or provision of the Contract Documents, or the application thereof to any person or circumstance, shall ever be held to be void, voidable or unenforceable, then in each such event the remainder of the Contract Documents or the application of such term, condition or provision to any other person or any other circumstance (other than those as to which it shall have been held void, voidable or unenforceable) shall not be affected thereby,

and each term, condition or provision of the Contract Documents shall remain valid and enforceable to the fullest extent permitted by Laws and Regulations.

- 12.03. NON-WAIVER OF RIGHTS. Any failure by the Owner at any time, or from time to time, to enforce or require the strict keeping and performance of any of the terms or conditions of the Contract Documents shall not constitute a waiver of the right to enforce or require the strict keeping of such terms or conditions and shall not affect or impair such terms or conditions in any way or the right of Owner at any time to avail itself of such remedies as it may have for any subsequent breach or breaches of any such term or condition or of any other term or condition of the Contract Documents, including, without limitation, the right to terminate. Notwithstanding any provision hereof, neither Owner's receipt of non-compliant bonds or non-compliant insurance certificates nor Owner's allowance of Contractor to proceed with the Work, shall be construed to relieve Contractor of its obligation to provide bonds and insurance in favor of Owner according to the requirements of these Contract Documents.

Contractor agrees that Owner shall not be precluded or estopped by any action taken or thing done, written or oral, including, but not limited to, inspections made, payments made, or final completion of the Work, from showing that the true and correct amount and character of the Work done and equipment and materials furnished by Contractor do not in fact conform to the Plans, Technical Specifications or other Contract Documents. Contractor also agrees that Owner shall not be precluded or estopped because of any action taken or not taken, from demanding and recovering from Contractor any damages resulting therefrom or from the Contractor's other failure to comply with the Contract Documents.

In the event of termination by Owner of Contractor's performance under the Contract for convenience, on account of Force Majeure, or by reason of Contractor's default, no rights or remedies of Owner shall thereby be waived, nor shall any breach by Contractor of the provisions in the Contract Documents which has occurred or is continuing at the time of such termination be waived, regardless of whether or not default has been declared.

- 12.04. OWNER'S AUDIT RIGHTS. Owner's duly authorized representatives shall have access at all reasonable times to all Contractor's and subcontractor's personnel, job description, employment and qualification records, books, records, correspondence, instructions, plans, drawings, receipts, vouchers, data stored in computers, and memoranda of every description pertaining to Work for the purpose of auditing and verifying costs of Work or for any other reasonable purpose. Owner's representatives shall have the right to reproduce any of the aforesaid documents.

Contractor shall preserve and shall cause its subcontractors to preserve all the aforesaid documents for a period of five years after completion and acceptance of termination of Work.

If audit by Owner reveals charges or costs charged to or paid by Owner as costs or fees which are not proper or exceed the rates or amounts permitted under the Contract Documents for any such matters, the Owner shall be entitled upon demand for a refund from Contractor of all such amounts, plus interest thereon from the date of payment by Owner until the date of refund by Contractor at the rate of the lesser of (i) 18 percent per annum or (ii) the maximum rate allowed by law.

- 12.05. NO ASSIGNMENT. Contractor shall not be allowed to assign or otherwise convey all or any portion of this Contract without the express written consent of Owner.
- 12.06. CUMULATIVE RIGHTS AND REMEDIES. The rights and remedies of Owner provided in the Contract Documents shall be cumulative of and not in lieu of all other rights and remedies available to Owner at law or in equity. It is expressly agreed that exercise of a right or pursuit by Owner of any one or more of the remedies provided in the Contract Documents or otherwise available at law or in equity shall not constitute an election of remedies by Owner or forfeiture of any other right of Owner.

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FINAL WALKTHROUGH CHECKLIST

PART I: GENERAL HOUSEKEEPING

- 1.1 All trash, concrete wash out, concrete spillage, and debris has been removed from the site.
- 1.2 Streets have been cleaned and are still clean.
- 1.3 Used or unused construction materials have been removed from the site.

PART II: SANITARY SEWER SYSTEM

- 2.1 All lid covers read City of Friendswood Sanitary Sewer as shown in the City of Friendswood Standard Details.
- 2.2 All lid covers must be clean and free of concrete.
- 2.3 All manhole elevation adjustment rings are grouted appropriately.
- 2.4 Manhole service entrance diameter is thirty-two (32) inches.
- 2.5 All manholes are clean - No debris or mud inside.
- 2.6 Any piping entering a manhole should be grouted watertight so there are no spaces between the pipe and the manhole.
- 2.7 Pipe connections to existing manholes must be cored – NOT chipped or broken.
- 2.8 Finish elevation of manhole cover shall be as stated in Section 02310 – Adjusting Manholes, Inlets and Valves Boxes to Grade.
- 2.9 Manhole cover inflow protector is in place.
- 2.10 Service leads are installed and extend a minimum of one (1) foot above finished grade.
- 2.11 Curbs should be painted green at each manhole or service lead aligned with the centerline of that manhole or service lead as specified in Section 01800 – Temporary Utility Identification Markings.
- 2.12 Service lead end cap to be completely painted green.

- 2.13 Temporary plug is removed at the point of connection to the existing system.
- 2.14 All manholes shall be opened during the final walkthrough.

PART III: STORM WATER SYSTEM

- 3.1 All lid covers must read City of Friendswood Storm Sewer as shown in the City of Friendswood Standard Details.
- 3.2 All lid covers must be clean and free of concrete.
- 3.3 All manholes or inlets must be grouted smooth on the interior.
- 3.4 All manholes are clean - No debris or mud inside - No standing water.
- 3.5 All inlets are clean - No debris or mud inside - No standing water.
- 3.6 All piping is clean - No debris or mud inside - No standing water.
- 3.7 All inlets must have silt fence protecting front of inlet from debris.
- 3.8 All formwork must be removed from manholes or inlets.
- 3.9 All lifting hook places shall be grouted so no metal is showing.
- 3.10 Pipe protrusions into manholes or inlets must be cut flush with the inner wall of the manhole or inlet and grouted smooth and watertight.
- 3.11 Drainage inverts must be installed within manholes and inlets.
- 3.12 All joint cracks must be grouted appropriately.
- 3.13 All inlet grates must be installed and should be unmarked.
- 3.14 All Inlets and manholes shall be opened during final walkthrough.

PART IV: POTABLE WATER SYSTEMS

- 4.1 All main valves at point of connection to existing system are open and operable.
- 4.2 All main valves within the newly installed system are open and operable.
- 4.3 All fire hydrant valves are open and operable.

- 4.4 All valve covers are free of concrete.
- 4.5 All valve covers are painted blue.
- 4.6 All valve cover boxes are encased in concrete per City of Friendswood Standard Details.
- 4.7 All valve cover boxes are Tyler type "A" valve boxes.
- 4.8 All valve cover boxes are a minimum of three (3) inches above finished grade unless they are contained within a poured sidewalk at the time of the walk through, then they should be painted blue and flush with the sidewalk surface – No trip hazard.
- 4.9 Curbs should be painted blue at each valve, fire hydrant, blow-off, or meter service lead aligned with the centerline of that valve, fire hydrant, blow-off, or meter service lead as specified in Section 01800 – Temporary Utility Identification Markings.
- 4.10 All valves shall be turned during final walkthrough.

PART V: FIRE HYDRANTS

- 5.1 All fire hydrants must be either Mueller Centurion or American Darling per the City of Friendswood Technical Specifications.
- 5.2 All fire hydrants must be sandblasted, painted with the approved City of Friendswood colors, and audited as specified in Section 02435 – Fire Hydrant Assemblies. The City of Friendswood will accept a letter from the audit firm acknowledging they are under contract to perform the work.
- 5.3 All fire hydrants are set at the proper elevation based upon the finished grade and meeting the twenty-two (22) inch clearance to open the steamer nozzle.
- 5.4 All fire hydrant valves are open.
- 5.5 All fire hydrant valve covers are Type "A" covers and are painted blue.
- 5.6 All pumper nozzles shall face the street.
- 5.7 Blue reflectorized raised pavement marker shall be offset eight (8) inches from the centerline on the side where fire hydrant is located. Reflectorized side shall face direction of traffic.
- 5.8 Fire hydrants to be flowed during the final walkthrough.

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PART VI: WATER METER SERVICE CONNECTIONS

- 6.1 Proper number of meter service connections have been installed.
- 6.2 Meter service boxes are located within the right of way or easement.
- 6.3 Meter service boxes are located off the property line a minimum of nine (9) inches laterally for a minimum spread between services of eighteen (18) inches.
- 6.4 Meter service boxes are set a minimum of three (3) inches above grade and undamaged.
- 6.5 Corporation stop set with the shutoff in the vertical position for easy "T" handle access.
- 6.6 Services are to be flowed during the final walkthrough.
- 6.7 Service lead and stop set to a maximum depth of twelve (12) inches below finished grade.

PART VII: POLLUTION PREVENTIVE PROTECTION

- 7.1 Erosion control must be provided around perimeter of property.
- 7.2 Erosion control must be provided at the back of curb for all lots, islands, and reserves.
- 7.3 Erosion control measures must be in place at all swales, curb inlets, and area inlets.
- 7.4 All erosion control measures must be in good condition for the walk through.
- 7.5 Hydro-mulch or sod must be provided at the back of curb, reserves, detention pond, and any drainage areas.

PART VIII: PROPERTY

- 8.1 Lots must be staked with lot numbers at the right of way and back of the lot.
- 8.2 Back lot stakes must have elevation control marks to match the design elevations.

- 8.3 Reserves must be identified on lot staking where adjacent to lots.
- 8.4 Property pins must be in place at the right of way and back lots.
- 8.5 Lots must exhibit positive drainage to match the plan design.
- 8.6 Lots must be graded to finish grades per the plan design.

PART IX: DETENTION POND

- 9.1 Drainage slopes for detention areas shall not exceed 4:1 (Horizontal versus Vertical) per both HCFCD and GCCDD.
- 9.2 Open channel drainage swales shall not exceed 4:1 (Horizontal versus Vertical) per the HCFCD criteria.
- 9.3 Open channel drainage swales shall not exceed 3:1 (Horizontal versus Vertical) per the GCCDD criteria.
- 9.4 GCCDD approval of drainage and detention facilities is required prior to the City of Friendswood walk through in Galveston County.
- 9.5 HCFCD acknowledges the City of Friendswood as their approval authority at the time of the walk through unless the site outfalls directly into an HCFCD Facility.
- 9.6 Outfall structures are complete.
- 9.7 Pipe projections at the outfall structures must be cut flush with the face of the outfall structure and grouted smooth.

PART X: PAVING AND SIDEWALKS

- 10.1 Street paving must be free of cracks and defects as defined in the City of Friendswood Technical Specification Section 02805 – Concrete Paving.
- 10.2 Concrete spillage must be removed from the street travel surface.
- 10.3 No surface defects such as name imprints, bike tracks, tire tracks, animal tracks, etc. will be accepted.
- 10.4 Curbs must be free of defects.
- 10.5 Joint sealants have been installed at all construction joints, saw joints, and inlet joints.

- 10.5 Sidewalks have been installed at all islands, detention areas, utility easements, and reserves where indicated on the approved sidewalk accessibility plan.
- 10.6 Sidewalks have been installed along major thoroughfares adjoining the new subdivision.
- 10.7 Wheel Chair Ramp access has been provided at all locations as shown on the sidewalk accessibility plan, the five (5) foot by (five (5) foot turn area at the back of the Wheel Chair Ramp is part of the Wheel Chair Ramp.
- 10.8 Wheel Chair Ramps shall have the integral charcoal color per City of Friendswood Section 02825 Colored Concrete for Wheelchair Ramps.
- 10.9 Traffic control signage has been installed per City of Friendswood Standard Details.
- 10.10 The City of Friendswood and a lab representative must be present to witness each and every concrete placement.
- 10.11 Pavement markings are installed per the plans for traffic control islands, medians, turn lanes, and crosswalks.
- 10.12 Raised reflective blue and white pavement markers have been installed near the street centerline at each fire hydrant.

PART XI: TESTING

- 11.1 The City of Friendswood must be copied directly on all lab results and should have all reports in hand prior to the scheduling of the walk through.
- 11.2 A City of Friendswood representative should have been present to witness all concrete placements.
- 11.3 A testing lab representative should have been present to witness all concrete placements.
- 11.4 All testing has been completed successfully
- 11.5 Bacteria Test – City of Friendswood representative on site to witness test.
- 11.6 Sanitary Sewer low-pressure air test, deflection test and manhole vacuum test – City of Friendswood representative on site to witness test.
- 11.7 Waterline Test waterline pressure test – City of Friendswood representative on site to witness test.

- 11.8 Lime Depth Check Test – City of Friendswood representative on site to witness test.
- 11.9 Density and gradation tests – City of Friendswood representative on site to witness all tests.
- 11.10 Twenty-eight (28) day concrete compressive strength test results have been received by the City of Friendswood and all results are satisfactory.
- 11.11 Twenty-eight (28) day concrete pavement cores or pre-placement form checks have been taken for thickness and all results are satisfactory.

PART XII: LIFT STATIONS

- 12.1 All lift stations shall be tested as specified in the City of Friendswood Technical Specification Section 02535 – Sanitary Sewer Lift Stations prior to scheduling the final walkthrough.

PART XIII: AS-BUILT DRAWINGS

- 13.1 Electronic drawing files formatted in AutoCAD and contained on two (2) individual CD's.
- 13.2 One (1) black line copy in full size and one (1) black line copy in half size.
- 13.3 Reflect any and all deviations in the field versus the original design documents on the As-Built sets.
- 13.4 Incorporate any and all design revisions from the original design.
- 13.5 Stamped conspicuously as "As-Built Drawings".
- 13.6 Must be a reproducible Mylar.
- 13.7 Must include one (1) set of blue line drawings for the acceptance final walkthrough.

PART XIV: MAINTENANCE BOND

- 14.1 Maintenance bond must name the City of Friendswood as the bondholder, dated to commence on the date the Work is scheduled for City Council approval.
- 14.2 In Galveston County the GCCDD requires a maintenance bond independent of the City of Friendswood.

14.3 Must be for the full value of the infrastructure improvements including work performed through Change Order to the Original Contract.

14.4 A copy of the Original Contract and any Change Orders that would establish the value of the infrastructure improvements shall be submitted with the Maintenance Bond.

Note: This document is intended to assist in preparing for the acceptance walk through and is not intended to be a site specific Punch list.

END OF DOCUMENT

SECTION 00800**SUPPLEMENTARY CONDITIONS****PART 1 - GENERAL**

The following supplements modify, change, delete from or add to Section 00700 – Standard General Conditions of the Construction Contract. Where any article of the General Conditions is modified or any paragraph, subparagraph, or clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that article, paragraph, subparagraph, or clause shall remain in effect.

1. SCOPE OF WORK

The Scope of Work shall include the following:

- A. Construction of water distribution system.
- B. Storm Water Pollution Prevention Plan (SWPPP)
 - 1) The Contractor is responsible for maintaining a SWPPP and filing an NOI/NOT with Texas Commission on Environmental Quality.
 - 2) The Contractor shall install the SWPPP controls listed and shown on the construction plans. The manual titled SWPPP for BEAMER ROAD WATER LINE IMPROVEMENTS shall be used for all SWPPP Controls, Maintenance, Inspections and Non-Storm Water Discharges.

2. CONSTRUCTION DRAWINGS AND SPECIFICATIONS

The Contractor will be provided four sets of construction drawings and two sets of specifications.

The contractor may purchase additional sets of contract documents.

3. LINES AND GRADES

The Owner shall establish the boundary line control staking including all PT's, PC's and angle points. The Contractor shall provide his own construction staking from control staking provided by Owner.

- A. The Contractor shall check the horizontal and vertical control provided by the Engineer and satisfy himself as to their accuracy. The Contractor shall report any discrepancies or errors to the Engineer. Once the Contractor begins construction staking, he has indicated acceptance of the control.

- B. If errors or discrepancies are found in the control, the Engineer shall re-establish or correct the control data, and provide the corrected information to the Contractor.
- C. The Contractor shall provide all construction surveying and construction staking necessary to establish the line and grade of the proposed work from the control points.
- D. The Contractor shall be responsible for the correctness and accuracy of his own control for the construction of the project.
- E. The Contractor shall be responsible for re-establishing property corners and right-of-way monuments damaged or destroyed by the Contractor. Such monuments shall be replaced by the Contractor. Such monuments shall be replaced by a registered public land surveyor. The survey work shall be "Category 1A - Land Title Survey" in accordance with the "Manual of Practice for Land Surveying in Texas, Categories 1-9", as published by the Texas Society of Professional Surveyors.
- F. Requests for control staking shall be made in writing on forms provided by Owner, and shall be submitted to Owner 72 hours in advance of required layout. A written request shall constitute Contractor's acceptance of responsibility for preservation of layout performed.
- G. Contractor shall take every reasonable precaution to preserve layout from which control staking is to be or has been performed. Control Staking will be provided one time only. Any re-staking of control will be at Contractors expense.
- H. Contractor shall not disturb any survey monument until monument rivet disc, or reference mark therein has been referenced by field survey party of Owner. In the event that the Contractor disturbs any survey monument during construction operations or if reference stakes are lost for any reason, Owner will reset such monuments or stakes at expense of Contractor.

4. RIGHT OF ENTRY

The Owner and his duly authorized representatives, including the A-E acting as his representative, shall have access to any part of the work at all times.

5. COLLATERAL CONTRACTS

The Owner reserves the right to let other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work. Where required, the Contractor shall properly connect and coordinate his work and operations with that of other Contractors.

Wherever work being done by the Owner's forces or by other Contractors is contiguous to work covered by the Contract, the respective rights of the various interests involved shall be established by the A-E to secure the completion of the various portions of the work in general harmony.

Owner to accurately estimate the damages and the amount per day to be stated in the following clause.

Consideration shall be given to inclusion of separate rates for each part of the work for which a separate time of completion is stated in the Proposal form.

6. TIME OF COMPLETION

The work shall be completed within the number of consecutive calendar days as stated in the Contract Documents. Time for completion shall start on the date on which written notice to commence work is received by the Contractor. Contractor shall commence work no later than ten days after receipt of notice to commence work.

7. ESTIMATED QUANTITIES FOR UNIT PRICE CONTRACT

This Agreement, including the specifications, drawings and estimate, is intended to show clearly all work to be done and materials to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under the Contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this Contract may differ from these estimates, and that where the basis for payment under this Contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the Contractor agrees that he will make no claim for damages, anticipated or lost profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this Contract and the estimated quantities contemplated and contained in the Proposal; provided, however, in case the actual quantity of any major item should become as much as 20 percent more than, or 20

percent less than the estimated or contemplated quantities for such items, then either party to the Agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work more than or less than 20 percent of the estimated quantity, but such revised consideration shall not include lost or anticipated profits on work deleted.

A "major item" shall be construed to be any individual bid item incurred in the proposal that has a total cost equal to or greater than five percent of the total Contract cost, computed on the basis of the Proposal quantities and the Contract unit prices.

Any revised consideration is to be determined by agreement between the parties, or by the terms or article entitled "Added Work".

8. PARTIAL PAYMENTS

In compliance with State of Texas SB733, the Owner shall not be obligated to pay any interest on the 10 percent retainage held on the first 50 percent of work completed. If the District holds any retainages on the remaining 50 percent of the work completed, the District shall pay interest on such retainages from the date each retainage amount is withheld to the date of payment to the Contractor. The interest rate to be paid on each retainage amount shall be the rate of interest paid by the District's depository bank on interest bearing accounts of similar amounts during the withholding period of each retainage amount.

The Contractor shall meet with the A-E on the _____ day of each month to agree upon all pay quantities for work completed to the _____ day of that month. The Contractor shall submit to the A-E an application for partial payment, as agreed upon, on or before the ____ day of the following month. The A-E will review, approve, and submit the application for partial payment to the Owner.

If requested by the Owner or A-E, the Contractor shall submit with his application for partial payment receipts or other vouchers showing his payments for materials and labor, including payments to subcontractors.

In reviewing and approving the Contractor's application for partial payment, the A-E shall review the application for correctness concerning the quantity of work complete to the ____ day of the preceding month, including the value of all sound materials in place or fabricated into the work, and including the value, substantiated by receipts or vouchers, of all sound materials delivered to the site, but not in place.

9. MAINTENANCE RESPONSIBILITY

Contractor's maintenance responsibilities shall be as follows:

- A. Maintain work under Contract free from defects in workmanship and materials for one year after acceptance.

10. APPROVAL OF SUBCONTRACTORS

- A. Submit for review of A-E list of major subcontractors and percentage of work each subcontractor will be awarded.
- B. Submit list within ten days after receipt of notice to proceed.

11. EQUAL OPPORTUNITY

Owner is an Equal Opportunity Employer and complies with Section 200.420 of HUD regulations.

12. PRICE OF MATERIALS AND SALES TAX

The Contractor shall obtain the necessary documentation so that any taxes exempted by law due to the nature of the work shall be obtained, and these cost savings due to the project tax exempt status shall be passed on to Owner. Contractor and all subcontractors must obtain a Texas sales tax permit.

END OF SECTION

SECTION 01005

GENERAL REQUIREMENTS

PART 1 - GENERAL

RELATED SECTIONS

- A. Section 01026: Unit Prices.

1.2 SUMMARY OF WORK

- A. Work Covered by Contract Documents:

It is the declared and acknowledged intention and meaning of these Contract Documents to provide and secure the general construction of the proposed **BEAMER ROAD WATER LINE IMPROVEMENTS for Coastal Bend Property Development, LP, Friendswood, Texas**, complete and ready for use.

- B. Reference Standards: Refer to Reference Articles at the beginning of Standards each specification.
- C. Unit Prices, Methods of Measurement and Payment: Refer to Section 01026, Unit Prices.
- D. Notices to Utilities, Pipeline Companies, and Various Engineering Offices:
 - 1. Contractor shall give advance notice of construction to owners of utilities and pipelines and to various engineering offices as required, prudent or necessary.
- E. Permits:
 - 1. Permits and licenses of temporary nature necessary for prosecution of work shall be secured and paid for by Contractor.
 - 2. Rights-of-way, easements, and instruments of permanent nature will be secured and paid for by Owner.
- F. Traffic Control: Temporary and permanent traffic control devices and traffic control procedures during construction shall conform to provisions of Texas Department of Transportation (TXDOT) "Texas Manual on Uniform Control Devices for Streets and Highways" and any additional requirements set forth by Harris County Public Infrastructure Department.
- G. Drawings: Accompanying these specifications and forming an integral part thereof are drawings listed on index sheet of drawings.

1.3 PROTECTION

A. Protection of Work, Utilities, Structures and Items to Remain:

1. Provide temporary fences, barricades, barriers, guards, or coverings as necessary to protect work, utilities, structures, and items to remain from damage that may result from construction operations.
2. Maintain adequate clearance from paths of traffic, material storage, moving and mechanical equipment and construction operations to prevent impact or vibration damages.
3. Maintain adequate clearance, cut banks at stable slopes, or properly and substantially sheet, brace, and shore tunneling, trenches, and earthwork cuts and fills to prevent damages because of overloading, undermining, disturbing, or removing support of work, utilities, structures, or items to remain.
4. Design and install necessary sheeting, bracing, and shoring to withstand loads caused by earthwork, tunneling, and construction operations.
 - a. Maintain shape and position of sheeting, bracing and shoring for duration necessary.
 - b. Remove when not necessary unless by permission Owner allows sheeting to be abandoned in place.
5. Provide and maintain drainage sewers, swales, and ditches as necessary to prevent flooding and damage to work, project site, and adjacent properties and to prevent storm water from entering excavations.
6. During construction, maintain drainage pattern within project area to prevent damage from flooding and ponding and to avoid violating pre-existing drainage pattern off and onto adjacent properties.
7. At completion of project, restore or refill swales and ditches as appropriate in implementing final project site grading and landscaping plan.
8. Maintain public roadways used during construction as haul roads and sweep and clean such roadways free of spills of materials and restore to pre-existing conditions.
9. Maintain public roadways used during construction as haul roads and sweep and clean such roadways free of spills of materials and restore to pre-existing conditions.

1.4 CUTTING AND PATCHING

- A. Contractor shall perform cutting, patching, or of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of others shown on, or reasonably implied by Drawings and Specifications for completed facility, and responsibility to accomplish fitting without endangering or damaging work shall be his, and any damaged work shall be restored and repaired by the Contractor.
- B. Contractor shall on his own responsibility cut and patchwork as required to uncover work to provide for installation of ill-timed work, to remove or replace work he recognizes as defective, and to remove samples of installed work as specified for tests.
- C. On written instructions of Owner, cutting and patching may be required to remove and replace work not conforming to Contract Documents, to uncover work to provide for observation of covered work, and to remove samples of installed materials for testing.

- D. Provide supports and protection as necessary to prevent weakening or damaging adjacent work.
- E. Final condition of cut, fitted, and patched work shall conform to full strength design concept of Contract Documents.

1.5 CONTRACTOR'S AND OWNER'S USE OF WORK SITE

- A. Owner's operations at work site shall meet with minimum of interference resulting from work required by Contract Documents.
- B. Owner may designate areas for Contractor's use of work site to allow for work by other contractors, Owner's occupancy, future work and public use.
- C. Contractor shall confine his operations, storage and construction vehicle and employee parking to areas designated by Owner.
- D. Owner may restrict Contractor's entry and egress to work site to assigned entrances and routes.
- E. Contractor's blocking or non-essential hindering of traffic will not be permitted.
- F. Areas and routes of entry designated by the Owner for the Contractor's entry, operations, storage, and employee and construction vehicle parking shall be adequate to the Contractor's needs.
- G. Temporary buildings and utilities erected and installed by the Contractor in assigned operations and storage areas remain his property and shall be removed by the Contractor at completion of work, unless by written permission, the Owner allows these to be abandoned in place.
- H. Contractor shall repair roads, curbs, sidewalks, structures, drainage and other facilities to remain, which become damaged during his use of entry, operations, parking, and storage areas.
- I. Contractor shall keep assigned operations, storage, and parking areas free of an accumulation of water, waste materials, trash, and rubbish during the construction period.

1.6 FIELD ENGINEERING

- A. Examination of Site:

1. Before commencing operations, Contractor shall make examination of site of work to familiarize himself with conditions to be encountered:
2. Actual site shall be compared to the Drawings and Specifications and discrepancies affecting the work or the cost thereof shall be brought to the attention of the Owner and A-E.
3. Exact locations of sewers, manholes and junction boxes, water mains and valves, gas mains, above or below ground electrical wires and conduits and structures which affect work or may interfere with work shall be determined and verified by Contractor without claim for extra compensation.
4. No extra compensation will be allowed for any extra work made necessary because of conditions or obstacles encountered during progress of work, which could have been determined by examination of site before commencing operations.

B. Borings and Subsurface Soil Investigation:

1. Logs of borings were made to determine character of materials for design purposes. The soils report is available to the contractor upon request to the Owner. The information included therein may be used by the contractor for his general information only. The Owner and A/E will not be responsible for the accuracy or applicability of such data therein.

C. Underground and Aboveground Utilities and Pipelines:

1. Underground utilities and pipelines directly obstructing and conflicting with construction will be disrupted, abandoned, removed or temporarily or permanently relocated by arrangements between the Owner and the utility companies.
2. Underground utilities and pipelines not directly obstructing and conflicting with construction shall be crossed or construction shall be placed in strict compliance with instructions from the utility company or entity having ownership or jurisdiction over the underground utility or pipeline.
3. Pipe lines and other existing underground utilities, service lines, installations, and structures in vicinity of work are shown on Drawings according to best information available to Owner.
4. Owner does not guarantee accuracy of such information.
5. Contractor shall be responsible for the protection of utilities and service lines designated to remain that are crossed or exposed by his construction operations.
6. Contractor shall accurately locate all underground pipe lines, conduits, cables, utilities, service lines, and structures by contacting owners of underground installations and by prospecting in advance of construction.

7. Repair of existing installations cut, broken or damaged by Contractor shall be made at expense of Contractor, and shall be scheduled so as to cause least possible inconvenience to public and to owners of installations.
8. Delay or extra cost to Contractor caused by pipe lines, utilities, service lines, conduits, cables, or other underground structures or obstacles shall not constitute a claim for extra work, additional payment, or damages.
9. Aboveground utilities directly obstructing construction will be disrupted, abandoned, removed, or temporarily or permanently relocated by arrangements between the Owner and the utility companies, including telephone and power poles, except that aboveground utility poles and lines disrupted, abandoned, removed, or temporarily or permanently relocated for the convenience of the Contractor shall be the responsibility and expense of the Contractor.

D. Restoration:

1. Items to remain which are disturbed, damaged, or removed as the result of performing the required work or for the convenience of the Contractor or to expedite his operations including sewers, culverts, lawns, landscaping, paving, roads, walks, trees, shrubs, fencing, mail boxes, posts and poles, public or private streets, driveways, drainage ditches or channels, and traffic or other signs shall be restored, repaired, reinstalled or replaced with new work and refinished, as appropriate, so as to be left in as good condition as existing before work commenced and such restoration shall be considered incidental to the work.
2. Existing items to be altered, extended, salvaged, or relocated and reused that are found to be defective in any way shall be reported to A-E before they are disturbed.
3. Materials and workmanship used in restoring work shall conform in type and quality to the original existing construction.

1.7 REGULATORY REQUIREMENTS

- A. Special attention is to be given to the requirements of the City of Friendswood.
- B. Contractor is required to know these standards and practices.
- C. Work shall comply with these requirements.
- D. When work under Contract includes providing and installing permanent traffic control stop signs and street name signs, Contractor shall be responsible for providing and installing such signs in compliance with regulations and practices of municipality, county, or other public agency having jurisdiction, and, further, Contractor shall be responsible for street name signs coordinating correctly with street names as platted.
- E. Provide traffic control stop signs located as shown on Drawings in compliance with "1980 Texas Manual on Uniform Control Devices for Streets and Highways", Texas Department of Transportation (TXDOT), Appendix A-1, Listing R1-1.

1.8 CONSTRUCTION ON STATE HIGHWAY RIGHT-OF-WAY

- A. No right, claim, title, or easement is granted with permission for construction on right-of-way.

- B. Pavement structure shall conform to State directions.
- C. Contractor shall indemnify and save harmless the State from any and all damage or loss that may develop from Contractor's operations.
- D. Work shall conform to State instructions.
- E. Installation shall not damage any part of highway.
- F. Provisions shall be made to cause minimum inconvenience to traffic and adjacent property owners.
- G. Barricades, warning signs, and flagmen shall be provided by Contractor to comply with applicable portions of the "Texas Manual on Uniform Control Devices" as necessary and prudent or as directed by the State.
- H. Construction or repair work by the State shall not be interfered with by the Contractor's operations, and, in the event interference occurs, Contractor shall cease operations and accommodate the State's operations until such time as the State's operations are complete within the area involved.
- I. Appropriate District Engineer having jurisdiction within the right-of-way area involved in construction under the Contract shall be notified 48 hours before the Contractor begins such construction.

1.9 DEFINITIONS

- A. Specification Sentence Structure:
 - 1. Simple imperative mood of sentence structure is used in specification sections, which places verb as first word in sentence.
 - 2. Verb defines action to be performed by Contractor and replaces phrases "shall" or "shall be".
- B. Provide:
 - 1. Furnishing of labor, material, equipment, transportation and services required for completed installation.
 - 2. "Provide" is used to obtain emphasis and brevity and replaces such phrases as "Contractor shall", "by Contractor", "furnish labor and materials", etc.
- C. Incidental, Incidentals, Incidental To:
 - 1. Minor work related and necessary to a main item of work or to the job as a whole in order that the item or job as a whole shall be complete and ready for use.
 - 2. No additional, extra, separate payment, or other compensation will be made for incidental work.
 - 3. According to manufacturer's recommendations; in compliance with manufacturer's instructions; and similar phrases of equivalent meaning:

4. Wherever phrases as mentioned above are used in the specifications, Contractor shall obtain manufacturers written or printed instructions pertaining to use and installation of particular materials, equipment, components, and systems referred to.
 5. Such instructions shall be kept on file at project site.
 6. Contractor shall review such instructions prior to installation of pertinent materials, equipment, components and systems and follow these instructions in making installations.
- D. Approved, Approval: If language in the Specifications indicates Contractor's actions, operations, or construction shall be subject to "approval", "to be approved", or implies approval is to be obtained, such approval shall mean approval by the Owner and A-E or their designated authorized representatives.

1.10 CONSTRUCTION SCHEDULE

- A. Contractor shall submit schedule of his planned operations for work within ten days after receipt of notice to proceed.
- B. This schedule, when reviewed by Owner and A-E, shall become the project construction schedule and shall be updated prior to each application for payment.
- C. End of construction period for utility work is when the project is ready to be turned over to the paving contractor for paving.
- D. Utility contractor will be required to come back to complete final second stage of curb inlet construction within 15 days of notification that paving has been completed.

1.11 FACILITIES AND UTILITIES DURING CONSTRUCTION

- A. Utilities during Construction:
 1. Contractor shall make arrangements with the local municipalities and utility companies for obtaining electric power and water services during construction, and shall bear all expenses involved.
 2. Contractor shall make necessary utility connections and extensions, and provide valves, hoses, wrenches, and whatever is necessary for use of water and electricity during construction and shall remove same upon completion of work.
 3. Cost of utilities provided by contractor during construction shall be incidental to work.
- B. Temporary Sanitary Facilities:

1. Contractor shall provide and maintain sanitary facilities at locations satisfactory to Owner, for use by employees of Contractor, and A-E.
2. They shall be well ventilated, but provide proper concealment, and shall be kept scrupulously clean at all times by Contractor.
3. Facilities shall be removed and site restored to its original condition upon completion of work.
4. Such facilities shall conform to requirements of state and local health authorities, ordinances, and laws.

C. Public Safety and Convenience of Traffic:

1. Safety of public and convenience of traffic shall be regarded as of prime importance.
2. If the Contractor shall be authorized to close a street to traffic, Contractor will not be responsible for the maintenance of the detour or the directing of traffic thereon, but in all other respects, public safety and convenience of traffic and provisions therefore, made necessary by the work or for the convenience of the Contractor in prosecuting the work, shall be the direct responsibility of the Contractor.
3. Not less than 48 hours before closing any street to traffic the Contractor shall notify the entity having jurisdiction over the traffic of such necessary closing.
4. Materials shall not be stored in a street without permission from the entity having jurisdiction, and, when permission is granted, material shall be stored so as to obstruct traffic as little as possible and in no case shall there be less than 12 ft. of unobstructed roadway.
5. Excavations, obstructions, stored materials and parked equipment near the path of traffic shall be provided by the Contractor with safety barricades, flags, warning and detour signs, and nighttime warning lights.
6. Where construction operations or excavations block driveways and walkways, the Contractor shall provide bridges or suitable alternate ingress and egress and crossways.
7. Operations shall be planned and executed in manner that will cause minimum interference with traffic.
8. Approval of proposed plan of operation, sequence of work, and methods of providing for public safety and safe passage of traffic shall be secured from entity having jurisdiction before it shall be placed into operation.
9. If reviewed plan does not accomplish intended purpose during construction due to weather or other conditions affecting safe passage of traffic, necessary changes to correct unsatisfactory conditions shall immediately be made.
10. Work such as backfilling of excavation, repair to roads and drives, and cleanup or other such operations shall follow as closely as practical to laying or installing operations, in such manner that public is not unnecessarily inconvenienced or hazard to public safety created.
11. Entity having jurisdiction may require changes in work forces and equipment necessary to prevent or remedy unnecessary inconveniences to public or hazard to public safety.
12. Notice of such required changes will be made in writing.
13. At night or otherwise, equipment not in use shall be parked off the street whenever it is not impractical to do so.
14. Flagmen shall be provided and maintained at such points and for such periods of time as may be required to provide for safety and convenience of the public traffic, and Contractor's personnel, and as directed by entity having jurisdiction.

D. Adjoining Properties Services and Ingress and Egress:

1. Contractor shall minimize interference with use, services and ingress and egress of adjoining properties.
2. Contractor shall provide and maintain approved temporary driveways, bridges, and other suitable ingress and egress as temporary means of access to adjoining properties where construction blocks off existing means of access, or provide and maintain approved alternate driveways, bridges, and other suitable ingress and egress.
3. Contractor shall restore existing driveways, bridges, and other ingress and egress temporarily removed or disturbed to original condition as soon as sequence of construction operations permits.

1.12 PRODUCT AND MATERIAL REQUIREMENTS AND OPTIONS

A. General:

1. Contractor shall be responsible to immediately notify A-E of any material or equipment delivery dates which affect construction schedule by causing delays in completion dates.
2. No extension in contract period will be considered unless A-E shall have been notified immediately that there could be delay in receiving some item.
3. Contractor shall use only new materials in permanent finished work.
4. Finished work shall not include materials used for temporary purposes.
5. Where materials or equipment are specified by trade or brand name, it is not intention of Owner to discriminate against an acceptable product of another manufacturer, but rather to set definite standards of quality, performance, and design function.
6. Items identified by manufacturer's name and model designation shall be furnished complete in every respect as specified unless an acceptable substitution or alternate is provided.
7. To utilize an acceptable alternate item, Contractor shall submit evidence that item shall be as acceptable in quality, workmanship, finish, general aesthetic appearance, general configuration, performance, function, and strength characteristics as item specified by model or named manufacturer.
8. Where called for in these specifications, Contractor shall submit test data of independent testing laboratory to show compliance with characteristics specified.
9. Where materials are specified in the various sections to comply with ANSI, ASTM, AWWA, or UL, proof of compliance shall be submitted when requested by A-E or Owner.
10. Label or listing of specified agency will be acceptable evidence.
11. Written certificate from nationally recognized testing organizations may be submitted in lieu of label or listing.
12. When Contractor furnishes and installs substitute or alternate materials, equipment, components or systems, Contractor shall have full responsibility for acceptable design function, for acceptable performance and for acceptable strength and quality characteristics of alternate or substituted items.
13. Review by Owner or A-E or their failure to take exceptions on shop drawings or other review documents, shall not relieve Contractor of his responsibility for substituted item meeting acceptable characteristics required by the Contract Documents.

14. Review by Owner or A-E will determine whether general function, concept, finish and appearance requirements appear to be met by the substituted item and no substituted item shall be installed which changes the general function, concept, or appearance of the work without prior review by the A-E or Owner.
15. Review of shop drawings, product data, and similar material by A-E shall be considered for the benefit of Contractor, and shop drawings and product data shall not be considered Contract Documents, and no review of shop drawings or similar material shall be construed as acceptance of work, as acceptance of quality of substituted items, or as expanding A-E's design responsibility beyond Contract Document provisions, or as waiver of Contract Document requirements.

B. Storage of Materials:

1. Water-tight storage facilities of suitable size, with floors raised above ground, shall be provided for types of materials liable to damage from exposure to weather including cement stored in bins or bags.
2. Other materials shall be stored on blocks off ground.
3. Materials shall be so placed as to permit easy access for proper inspection and identification.
4. Material, which has deteriorated, become damaged or otherwise unfit for use, shall not be used in work.
5. Upon completion of work, or when directed, Contractor shall remove storage facility construction from site.

C. Construction Equipment:

1. Construction equipment provided at the work site shall be in prime working condition.
2. Inoperative and poorly operating construction equipment shall be promptly repaired or replaced.
3. Construction equipment that constantly breaks down or turns out work that does not meet requirements of the Specifications shall be replaced.
4. No extension of contract time will be allowed for delays resulting from equipment breakdowns or shortages.

1.13 PROJECT CLOSEOUT

A. Cleaning:

1. Contractor shall keep site and structures or facilities thereon free from accumulations of waste materials, debris, or rubbish caused by his employees or work.
2. At completion of work, he shall remove from site his tools, surplus materials, debris, and shall leave site and his work reasonably clean.
3. Areas disturbed during construction operations shall be restored generally to match conditions existing prior to start of work.

B. Project Record Documents:

1. Contractor shall provide and maintain in proper order and in good clean condition in field office at project site, one complete set of blue line prints of working drawings.

2. On this set of drawings, Contractor shall neatly inscribe and print by red pencil final location, sizes and types of various items of work provided under the Contract such as pipe, valves, manholes, equipment, control devices, access openings, structures and other facilities.
3. At completion of work, and before final acceptance, this set of prints shall be delivered to Owner.

END OF SECTION

SECTION 01026**UNIT PRICES****PART 1 - GENERAL****1.1 MEASUREMENT AND PAYMENT**

- A. It is intent of the Contract that the aggregate amount of unit prices times units of work actually installed shall cover all work required by the Contract Documents, in place, complete, and ready for use.
- B. Prices in the Contract Documents include all compensation for full completion of all work items in place, and include providing all labor, materials, tools, equipment, services, supplies, incidentals, and all necessary operations.
- C. Work to protect items to remain by installation of temporary construction; including posting of warning signs, placement of protective fencing, barriers, barricades and covers, and restoration of damaged items to remain; will be considered incidental to the various pay items and no separate payment for this work will be made.
- D. Work necessary to haul materials from original positions to points of disposition, including excavation of earth materials and utilization in construction or other disposition, will be considered incidental to the various pay items and no separate payment for this work will be made.
- E. Work necessary to provide proper drainage during construction; including maintaining sections, existing ditches, channels, culverts, and sewers and including temporary construction and maintenance of ditches and drainage ways, will be considered incidental to the various pay items and no separate payment for this work will be made.
- F. No costs in connection with work required by the Contract Documents for proper and successful completion of the Contract will be paid outside of or in addition to prices named in the Contract Documents.
- G. Work not specifically set forth in the Contract Documents as pay items shall be considered subsidiary obligations of Contractor and costs shall be included in prices named in the Contract Documents.
- H. Method of measurement and basis of payment for unit price work items shall be as stipulated in following paragraphs.

1.2 WATER DISTRIBUTION SYSTEM

A. Site Preparation, Mobilization, Maintenance Bond, and Insurance

1. Site preparation shall be considered incidental to the various items of work and no separate payment will be made.
2. Site preparation includes providing labor, materials, tools, equipment and operations necessary to complete work specified in Site Preparation section.
3. Includes removal and disposal of above and below ground obstructions to construction as specified within construction area.
4. Includes:
 - a. Clearing and grubbing not included under another item (there will be a separate bid item any substantial clearing and grubbing)
 - b. Removal and disposal of grasses, vegetation, trees, logs, roots, stumps, brush, rocks, rubbish, debris and other objectionable materials, and improvements indicated to be removed.
 - c. Leveling.
 - d. Earthwork not included under another item.
5. This item will be measured by the one unit for the complete job and paid for by the lump sum price.
6. This item includes the required bonds, insurance, and mobilization.
7. This item includes a revised/updated maintenance bond at the completion of the project reflecting the final construction cost.
8. Contractors must register with the City of Friendswood. City of Friendswood Permit Fee has been waived for his project.

B. HDPE Water Line:

1. This item will be by the one unit for the complete job and paid for by the lump sum price.
2. This shall be full compensation for fusion and installation of pipe, end seal and fittings, not paid for as part of another item, including labor and equipment necessary to perform the work.
3. This item includes use of cutting and fusion equipment as may be required.

C. Brackets:

1. This item will be measured by the one unit for each assembly installed for all types and configurations and paid for by the unit price.
2. This shall be full compensation for installation of brackets, bolts, nuts, spacers, sleeves, corrosion protection devices, and adjustment of pipes and appurtenances, including labor and equipment necessary to perform the work.
3. This item includes cleaning of existing materials including bridge bolts and nuts as may be required to complete a secure installation.

D. Restrained 45 Bend MJ:

1. This item will be measured by the one unit for each assembly installed for all types and configurations and paid for by the unit price.

2. This shall be full compensation for installation of fittings including 45 bend with restrained mechanical joints, gaskets, lubricants and adjustment of pipes, adapters and appurtenances, including labor and equipment necessary to perform the work.
3. This item includes cleaning of existing materials as may be required to complete a secure installation.

E. PVC from Suspended 45 MJ to Below ground 45 MJ:

1. This item will be measured by the one unit for each assembly installed for all types and configurations and paid for by the unit price.
2. This shall be full compensation for installation of fittings including 45 bend with restrained mechanical joints, gaskets, lubricants and adjustment of pipes, adapters and appurtenances, including labor and equipment necessary to perform the work.
3. This shall be full compensation for trenching, pipe embedment, trench backfill, compaction, concrete blocking, and other operations necessary.
4. This item includes sand backfill and crushed rock and/or pea gravel as may be required to achieve SC1 Stiffness Category per ASTM D2487 where pipe transitions underground.
5. This item includes applying coating to above ground PVC for extra protection using manufacturer recommended water or latex based coating as provided.

F. Cut Existing Steel Pipe & Replace with 8" Cross:

1. This item will be by the one unit for the complete job and paid for by the lump sum price.
2. This shall be full compensation for cutting of existing 8" steel pipe, removal of existing steel pipe as needed to replace existing tap with 8" cross, installation of adapters to steel line, gate valves, valve boxes and covers, blind flange, restrained joints, fittings, trenching, backfill, pipe embedment & material, compaction, concrete blocking, labor and equipment necessary to perform the work.
3. This shall be full payment for installing required valves to finished grade per City of Friendswood detail, including furnishing concrete blocks around valve box.
4. This item includes use of cutting equipment as may be required.
5. This item includes sand backfill and special bedding as may be required.
6. This item includes coordination with the Owner and City of Friendswood to have water supply turned off for the replacement.
7. The item includes locator wire as described in specification and as required by City of Friendswood.

G. Water Line:

1. This item will be measured by the one unit for each linear foot measured horizontally in place for all depths for each size for all types, unless type shall be designated in work Item Description; installed in place and paid for by the unit price.
2. This shall be full compensation for trenching, installation of pipe, fittings, bends, restrained joints and tapping sleeves not paid for as part of another item, pipe embedment, trench backfill, compaction, concrete blocking, and other operations necessary, including labor and equipment necessary to perform the work.
3. This item includes concrete blocking, sand backfill, and special bedding as may be required.

4. Installation of Iron Water Line Fittings shall be considered incidental to water line construction and no separate payment will be made.
5. The item includes locator wire as described in specification and as required by City of Friendswood.

H. Waterline PVC Casing:

1. This item will be measured by the one unit for each linear foot measured horizontally in place for all depths for each size for all types, unless type shall be designated in work Item Description; installed in place and paid for by the unit price.
2. This shall be full compensation for trenching, installation of pipe, spacers not paid for as part of another item, pipe embedment, trench backfill, compaction, concrete blocking, and other operations necessary, including labor and equipment necessary to perform the work.
3. This item includes sand backfill and special bedding as may be required.

I. Air Release Valve

1. This item will be measured by the one unit for each tapping sleeve and valve of each size and type installed and paid for by the unit price.
2. This shall be full payment for installing required sleeve and combo air relief valve, fittings, adapters, and operations required for operational installation, including labor and equipment necessary to perform the work.

J. Fire Hydrant Assembly:

1. This item will be measured by the one unit for each assembly installed for all depths and paid for by the unit price.
2. This shall be full compensation for installing fire hydrants at all depths, fittings, gravel, fill, concrete blocking, excavation, backfill, and incidentals necessary, including labor and equipment necessary to perform the work.
3. Included in this item are tee in water main, 6-in. lead pipe from main to fire hydrant, buried 6-in. gate valve and box and fire plug, all appurtenances, coatings, and attachments per City of Friendswood Specification and detail.
4. This shall be full compensation for furnishing concrete blocking including labor and equipment necessary to perform the work.

K. Connect to Existing Water Line:

1. This item will be measured by the one unit for each connection made for all depths & sizes and paid for by the unit price.
2. This shall be full compensation for excavation, backfilling, sand, labor, and equipment necessary to make the connection.
3. This shall be full compensation for removing and reusing 2- 45 bends removed at the connection point at another part of the job, removal of existing concrete blocking, installation of tee, concrete blocking, fittings, restrained joints, including labor and equipment necessary to perform the work.
4. This item includes concrete blocking, sand backfill, and special bedding as may be required.

5. This item includes coordination with the Owner and City of Friendswood to have water supply turned off for the replacement.
6. The item includes locator wire as described in specification and as required by City of Friendswood.

L. Gate Valve:

1. This item will be measured by the one unit for each tapping sleeve and valve of each size and type installed and paid for by the unit price.
2. This shall be full payment for installing required valve, fittings, adapters, and operations required for operational installation, including labor and equipment necessary to perform the work.
3. This item includes concrete blocking, sand backfill, and special bedding as may be required.
4. The item includes locator wire as described in specification and as required by City of Friendswood.

M. Hydromulch Seeding:

1. This item will be measured by the one unit for each acre seeded and paid for by unit price.
2. This shall be full compensation for furnishing materials, preparation of ground for planting, application of homogeneous aqueous mixture of seed, water, fertilizer, dye, wood fiber mulch, tackifier/soil binder to seedbed, and operations necessary to establish turf.
3. Contractor is responsible to establish turf.
4. Payment will be made only on the basis that seeding and fertilizing actually results in turf establishment.

N. Clearing and Grubbing:

1. This item will be measured by the one unit for each acre of area cleared and grubbed.
2. Site Clearing and Grubbing includes providing labor, materials, tools, equipment and operations necessary to complete work specified.
3. Includes removal and disposal of above and below ground obstructions to construction as specified within construction area.
4. Includes:
 - a. The Contractor is to remove and dispose of all grasses, vegetation, trees, logs, roots, stumps, brush, rocks, rubbish, debris and other objectionable materials, and improvements indicated to be removed within the designated area. When clearing is completed, the Contractor can properly dispose of remaining vegetation, including all tree roots and branches by leaving onsite
 - b. Includes removal and disposal of above and below ground obstructions to construction as specified within construction area.
 - c. The clearing and grubbing operation shall include removal of all roots a minimum of 2' below natural ground, including all taproots.

O. Filter Fabric Fence/Reinforced Filter Fabric Fence:

1. This item will be measured by the one unit for each linear foot of filter fabric

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2. fence or reinforced filter fabric fence installed in place.
This shall be full compensation for incidental earthwork, incidental site clearance, site preparation, compaction and appurtenances necessary.

P. Traffic Control:

1. This item will be measured by the lump sum for the complete job and paid for by the lump sum price.
2. This shall be full compensation for providing labor, materials, tools, equipment, and incidentals necessary.

END OF SECTION

SECTION 01470

TESTING LABORATORY SERVICES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Testing laboratory services and the Contractor responsibilities related to those services.

1.2 REFERENCES

- A. A2LA – The American Association for Laboratory Accreditation.
- B. ASTM – American Society for Testing and Materials.
 - 1. ASTM C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
 - 2. ASTM D3666 - Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.
 - 3. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
 - 4. ASTM E329 - Standard Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.
- C. CFTS – City of Friendswood Technical Specifications
 - 1. Section 00020 – List of Pre-qualified Testing Laboratories.
 - 2. Section 00500 – General Conditions.
 - 3. Section 01475 – Quality Control Testing Procedures.
- D. ISO/TES – International Organization for Standards.
 - 1. ISO/TEC Guide 25 - General Requirements for the

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Competence of Calibration and Testing Laboratories.

- E. TxDOT – Texas Department of Transportation.

1.3 SELECTION AND PAYMENT

- A. The City shall select, employ, and pay for services of an Independent Testing Laboratory to perform inspection and testing identified in Part III of individual Technical Specification sections.
- B. The Contractor may employ and pay for services of an independent testing laboratory or laboratories to perform inspection and testing identified in Part II of individual Technical Specification sections.
- C. Employment of a testing laboratory by the City shall not relieve the Contractor of its obligation to perform the Work in accordance with requirements of the Contract Documents.
- D. The City shall deduct a minimum two hour (2 Hr) charge for testing laboratory time from periodic progress payment when operations requiring testing or inspection are canceled without prior notification.
- E. The City shall deduct cost of any necessary retesting, whenever failed work is removed and replaced, from periodic progress payment.

1.4 QUALIFICATION OF LABORATORY

- A. Meet laboratory requirements of ASTM E329 and applicable requirements of ASTM C1077, ASTM D3666, and ASTM D3740.
- B. Meet ISO/TEC Guide 17025 conditions for accreditation by the American Association for Laboratory Accreditation (A2LA) in specific fields of testing required in individual Technical Specification sections.
- C. If laboratory subcontracts are part of the testing services, such work shall be placed with a laboratory complying with the requirements of this Section.
- D. Testing on all projects with public utilities shall be from one (1) or more testing laboratories listed in Section 00020 – List of Pre-Qualified Testing Laboratories.

1.5 LABORATORY REPORTS

- A. Testing laboratory shall provide and distribute copies of laboratory reports to the distribution list the City's Project Manager provides at the

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pre-construction conference.

- B. Keep one (1) copy of each laboratory report distributed or faxed at the site field office for duration of the Work. Laboratory shall fax material supplier, the Contractor and the City's Project Manager reports that indicate failing test results by no later than close of business on the working day following test completion and review.

1.6 LIMITS ON TESTING LABORATORY AUTHORITY

- A. Laboratory may not release, revoke, alter, or enlarge requirements of the Contract.
- B. Laboratory may not approve or accept any portion of the Work.
- C. Laboratory may not assume the Contractor duties
- D. Laboratory has no authority to stop the Work.

1.7 CONTRACTOR RESPONSIBILITIES

- A. Provide safe access to the Work and to manufacturer's facilities for the City's Project Manager and for testing laboratory personnel.
- B. Provide testing laboratory with a copy of the Construction Schedule and a copy of each update to Construction Schedule.
- C. Notify the City's Project Manager and testing laboratory a minimum of twenty-four hours (24 Hrs) previous to expected time for operations requiring inspection and testing services. When the Contractor fails to make timely prior notification, do not proceed with the operations requiring inspection and testing services.
- D. Notify Design Consultant twenty-four hours (24 Hrs) in advance when Technical Specification requires presence of Design Consultant for sampling or testing.
- E. Request and monitor testing as required to provide timely results and to avoid delays to the Work. Provide samples to laboratory in sufficient time to allow required test to be performed in accordance with specified test methods before intended use of the Product.
- F. Cooperate with laboratory personnel in collecting samples on site. Provide incidental labor and facilities for safe access to the Work to be tested, to obtain and handle samples at site or at source of Products to be tested, and to facilitate tests and inspections including storage and

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curing of test samples.

- G. Make arrangements with laboratory through the City's Project Manager. Payment for additional testing shall be made in accordance with Section 00500 – General Conditions:
 - 1. Re-testing required for failed tests.
 - 2. Re-testing for nonconforming work.
 - 3. Additional sampling and tests requested beyond specified requirements.
 - 4. Insufficient notification of cancellation of scheduled tests of which are not performed.

PART II: PRODUCTS – NOT USED.

PART III: EXECUTION

3.1 CONDUCTING TESTING

- A. Conform to laboratory sampling and testing methods specified in individual Technical Specification sections to the latest issues of ASTM standards, TxDOT methods, or other recognized test standards as approved by the City's Project Manager.
- B. Requirements of this Section shall also apply to those tests for approval of materials, for mix designs, and for quality control of materials as performed by employed testing laboratories.
- C. All testing requirements and quantities shall conform to Section 01475 – Quality Control Testing Procedures unless otherwise approved by the Project Manager.

END OF SECTION

SECTION 01475

QUALITY CONTROL TESTING PROCEDURES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Provide procedures and quantities for testing of materials, backfill, concrete and other items used.
- B. Provide procedures and quantities for testing of water lines, sanitary sewer lines and manholes.
- C. Only Independent Testing Laboratories conforming to Section 00020 – List of Pre-Qualified Testing Laboratories shall be used. NO EXCEPTIONS.
- D. Testing requiring an Approved Independent Testing Laboratory shall be executed by a laboratory technician that is certified in the test being taken. At no time shall an uncertified technician be allowed to sample or test any material except under direct supervision of a qualified and certified technician. NO EXCEPTIONS.
- E. NICET and ACI are recognized certification companies for Laboratory Technicians.
- F. Requirements in this Section are made for quick reference purposes only on the most common testing incorporated in the Work. Refer to individual work Sections for full details on testing materials, procedures, quantities and frequencies.

1.2 MEASUREMENT AND PAYMENT

- A. There shall be no separate payment of items under this Section. All testing, material, labor and equipment supplied by either the Approved Independent Testing Laboratory or the Contractor is incidental to the Work.
- B. Contracting with an Independent Testing Laboratory.
 - 1. The City shall contract with an Independent Testing Laboratory for projects funded by public funds. Any retest of failed tests or materials shall be at the Contractor's expense and deducted

from the next progress payment unless Contractor has made financial arrangements with the Independent Testing Laboratory.

2. Owners of private development projects, even in the event they are installing public infrastructure, shall contract with an Independent Testing Laboratory. The Independent Testing Laboratory shall not have any affiliation with the Owners, Contractors, Engineers or Architects on the project and shall be qualified as per Section 01470 – Testing Laboratory Services.

1.3 OBSERVATION

- A. The City's Project Manager shall be onsite for all testing procedures for the duration of the test and observe all procedures and document the adherence to the testing procedures as stated in this Section.
- B. The City's Project Manager shall be copied on all testing reports issued by the Independent Testing Laboratory.

1.4 REFERENCES

ASTM – American Society for Testing and Materials.

CFSD – City of Friendswood Standard Details.

CFTS – City of Friendswood Technical Specifications.

TCEQ – Texas Commission on Environmental Quality.

TDSHS – Texas Department of State Health Services.

TxDOT – Texas Department of Transportation

A. BACKFILL TESTING

1. ASTM C33 – Standard Specification for Concrete Aggregates (Fine Aggregate).
2. ASTM D558 – Standard Test Methods for Moisture-Density Relations of Soil Cement Mixtures.
3. ASTM D698 – Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft).

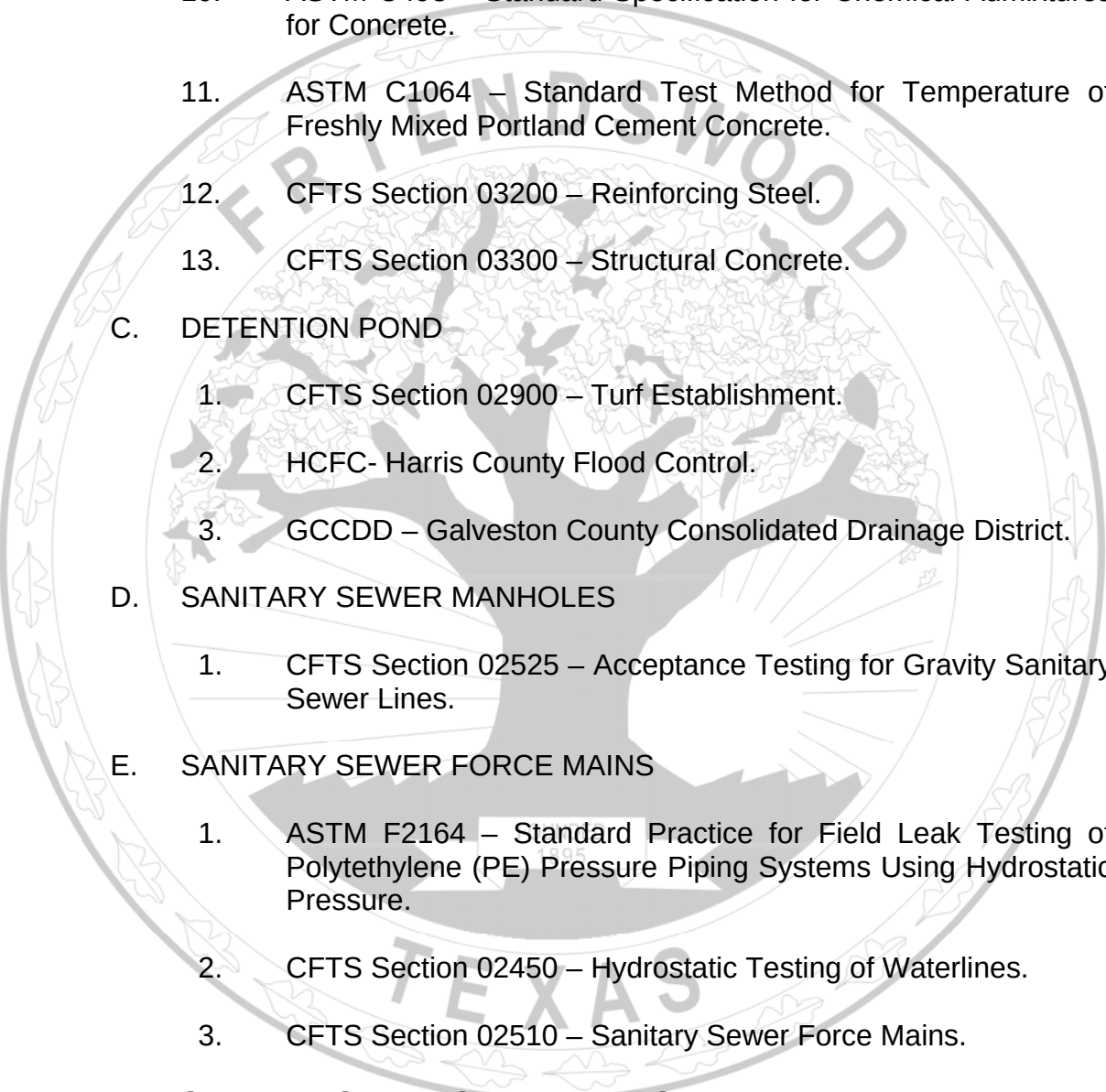
4. ASTM D1140 – Standard Test Method for Amount of Material in Sols Finer than No. 200 Sieve.

ASTM D1163 – Standard Test Method for Compressive Strength of Molded Soil-Cement Cylinders.

5. ASTM D2216 – Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil Aggregate Mixtures.
6. ASTM D2487 – Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
7. ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
8. CFTS Section 02110 – Borrow.
9. CFTS Section 02120 – Excavation and Backfill for Structures.
10. CFTS Section 02125 – Excavation and Backfill for Utilities.
11. CFTS Section 02140 – Utility Backfill Materials.

B. CONCRETE TESTING

1. ASTM C31 – Standard Practice for Making and Curing Concrete Test Specimens in the Field.
2. ASTM C33 – Standard Specification for Concrete Aggregates.
3. ASTM C39 – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
4. ASTM C94 – Standard Specification for Ready-Mixed Concrete.
5. ASTM C143 – Standard Test Method for Slump of Hydraulic Cement Concrete.
6. ASTM C172 – Standard Practice for Sampling Freshly Mixed Concrete.
7. ASTM C173 – Standard Test Method for Air Content of Freshly Mixed Concrete by Volumetric Method.

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8. ASTM C231 – Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
9. ASTM C260 – Standard Specification for Air-Entraining Admixtures for Concrete.
10. ASTM C498 – Standard Specification for Chemical Admixtures for Concrete.
11. ASTM C1064 – Standard Test Method for Temperature of Freshly Mixed Portland Cement Concrete.
12. CFTS Section 03200 – Reinforcing Steel.
13. CFTS Section 03300 – Structural Concrete.
- C. DETENTION POND
1. CFTS Section 02900 – Turf Establishment.
2. HCFC- Harris County Flood Control.
3. GCCDD – Galveston County Consolidated Drainage District.
- D. SANITARY SEWER MANHOLES
1. CFTS Section 02525 – Acceptance Testing for Gravity Sanitary Sewer Lines.
- E. SANITARY SEWER FORCE MAINS
1. ASTM F2164 – Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure.
2. CFTS Section 02450 – Hydrostatic Testing of Waterlines.
3. CFTS Section 02510 – Sanitary Sewer Force Mains.
- F. SANITARY SEWER GRAVITY LINES
1. ASTM C924 – Standard Practice for Testing Concrete Pipe Sewer Lines by Low-Pressure Air Test Method.
2. ASTM D3034 – Standard Specification for Type PSM (Polyethylene (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

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3. ASTM F1417 – Standard Test Method for Installation Acceptance of Plastic Gravity Sanitary Sewer Lines Using Low Pressure Air.
4. CFTS Section 02525 – Acceptance Testing for Gravity Sanitary Sewer Lines.

G. SUBGRADE

1. ASTM D698 – Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort.
2. ASTM D4318 – Standard Test Procedures of Liquid Limit, Plastic Limit and Plasticity Index of Soils.
3. CFTS Section 02700 – Cement-Stabilized Base Course.
4. CFTS Section 02720 – Lime-Stabilized Base Subgrade.
5. TxDOT Tex-101-E – Preparing Soils and Flexible Base Materials for Testing.
6. TxDOT Tex-140-E – Measuring Thickness of Pavement Layer.
7. TxDOT Tex-600-J – Sampling and Testing Lime.

H. WATER LINES

1. ASTM F2164 – Standard Practice for Field Leak Testing of Polyethylene (PE) Pressure Piping Systems Using Hydrostatic Pressure.
2. CFTS Section 02450 – Hydrostatic Testing of Waterlines.
3. CFTS Section 02455 – Disinfection of Waterlines.

PART II: PRODUCTS

- 2.1 The Contractor is to supply all equipment and labor needed to complete any test listed in this Section. The City's Project Manager is there to observe test and verify compliance of specifications only. The City's Project Manager shall not help or assist in any way.

PART III: EXECUTION

- 3.1 The Contractor shall notify the City's Project Manager a minimum of forty-eight hours (48 Hrs) in advance of any work which shall require testing. Only the City's Project Manager shall call the Independent Testing Laboratory and schedule their services, no exceptions.
- 3.2 All testing requirements stated in this Section are minimal testing requirements. At the discretion of the City's Project Manager, more testing can be authorized. Additional testing may be requested by the Contractor at no additional cost to the City and with the approval of the City's Project Manager.
- 3.3 BACKFILL
- A. Class I, II, and III backfill and Select fill lift placement shall not exceed six inches (6 In) to eight inches (8 In) of loose material. Clumps of material larger than six inches (6 In) in any direction shall not be allowed. Dry Density and Moisture content shall be determined by ASTM D698.
1. Frequency – One (1) test per lift per five hundred linear feet (500 Lf), or fraction thereof if less than five hundred linear feet (500 Lf), of trench or between manholes, whichever is shorter. A minimum of three (3) density tests per lift per day shall be required.
 2. Compaction in the ROW – Compaction shall be a minimum of ninety-five percent (95%) of dry density and moisture shall be at optimum plus or minus three percent ($\pm 3\%$).
 3. Compaction outside of the ROW – Compaction shall be a minimum of ninety percent (90%) of dry density and moisture shall be at optimum plus or minus three percent ($\pm 3\%$).
- B. Bank run sand shall be classified using ASTM D2487. Bank run sand lift placement shall not exceed twelve inches (12 In) of loose material.
1. Bank run sand shall have no more than two percent (2%) clay lumps or balls.
 2. Bank run sand shall have less than fifteen percent (15%) material passing through a No. 200 sieve as determined by ASTM D1140.

3. Material passing No. 40 and have a Plasticity Index less than seven (7) as determined by ASTM D4318.
- C. Cement-Stabilized Sand shall be a minimum of one and one tenth (1.1) sacks of cement per one ton (1 Tn) of sand. Sand shall meet grading requirements for Fine Aggregates of ASTM C33. Cement-stabilized sand lift placement shall not exceed twelve inches (12 In) of loose material.
 1. Sampling of cement-stabilized sand shall be either:
 - a. Three (3) samples taken from the truck, one (1) from each one-third (1/3) of the truck, beginning third (3rd), middle third (3rd) and last third (3rd), or;
 - b. One (1) sample shall be taken per one hundred fifty tons (150 Tn) or one (1 pD) production day, whichever is less.
 2. Mold four (4) specimens, per sample taken, in accordance with ASTM D558, Method A.
 3. Compaction shall be a minimum of ninety-five percent (95%) and moisture shall be at optimum plus or minus three percent ($\pm 3\%$), as determined by ASTM D558.
 4. Compressive strength of cement-stabilized sand shall be tested in accordance with ASTM D1163.
 - a. Two (2) specimens shall be tested at forty-eight hours (48 Hrs) plus or minus two hours (± 2 Hrs). Compressive strength shall be average of both specimens and shall be no less than one hundred pounds per square inch (100 psi), with no one (1) specimen compressive strength below seventy pounds per square inch (70 psi).
 - b. Two (2) specimens shall be tested at seven days (7 D) plus or minus four hours (± 4 Hrs). Compressive strength shall be average of both specimens and shall be equal to or greater than one hundred pounds per square inch (100 psi), with no one (1) specimen compressive strength below one hundred pounds per square inch (100 psi).

3.4 CONCRETE

A. Concrete mix design.

1. Each Type of Concrete shall have one (1) mix design and shall be submitted so that the City's Project Manager can send to the Independent Testing Laboratory for review a minimum of seven days (7 D) before start of concrete placement. Concrete mix designs shall conform with requirements of ASTM C94.
2. Concrete Classification shall conform to TABLE 4.1 CONCRETE CLASSIFICATION MINIMUM SPECIFICATIONS in this Section. Coarse aggregate shall conform with ASTM C33 and as specified in TABLE 4.2 COARSE AGGREGATE GRADATION in this Section.
3. Fine aggregate shall conform with ASTM C33 and as specified in TABLE 4.3 FINE AGGREGATE GRADATION in this Section.
4. Mineral filler shall only be added with the approval of the Director of Community Development and shall not exceed fifteen percent (15%) of the fine aggregate weight and conforms to TABLE 4.4 MINERAL FILLERS in this Section.
5. Admixtures shall conform to the following:
 - a. Water reducers shall conform to ASTM C494, type A.
 - b. Water reducing retarders shall conform to ASTM C494, type D.
 - c. High range water reducers (superplasticizers) shall conform to ASTM C494, Types F and G.
6. Water shall be potable.
7. Air entrainment shall be in accordance with ASTM C260 and shall be four percent (4%) plus or minus one percent ($\pm 1\%$).

B. Form Inspection.

1. Concrete Form inspection – the City's Project Manager shall inspect the forms for uniformity and bracing.
2. All forms shall be cleaned free of all dried concrete, mud or any other deleterious material.

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3. Non-petroleum based form oil may be used to coat the forms that will be in contact with concrete.
4. Wood forms shall be properly seasoned, of good quality and free of imperfections that may affect its strength or impair the finished surface of the concrete.

C. Reinforcing Bar Inspection.

1. The City's Project Manager shall inspect all reinforcing bar for conformity to CFTS Section 03200 – Reinforcing Steel.
2. Reinforcing bars shall be placed according to the Drawings, the City of Friendswood Standard Details and the City of Friendswood Technical Specifications.
3. The minimum size of reinforcing bar shall be #4 [one-half inch (1/2 In)] and the minimum spacing shall be sixteen inches (16 In) on center unless otherwise approved by the City's Project Manager.
4. Reinforcing bars shall be one hundred percent (100%) tied at all ends, and fifty percent (50%) tied for the interior of the mat.
5. Splices shall have a minimum of twenty-four inches (24 In) overlapping.
6. Chairs are to be installed so that rebar is no closer from the top than one-third (1/3) of the depth of concrete being placed.
7. Chairs shall be placed at every other bar and under the lowest rebar for support and placed in a checkerboard pattern.

D. Placement of Concrete.

1. Independent Testing Laboratory shall be on site at all times. The City's Project Manager shall be on site as long as deemed necessary.
2. Placement of concrete shall not be allowed when ambient temperature is below forty degrees Fahrenheit (40° F) or above ninety-five degrees Fahrenheit (95° F) and conform to TABLE 4.5 TEMPERATURE REQUIREMENTS FOR PLACEMENT in this Section.

3. Materials shall not exceed eight percent (8%) moisture at the plant.
4. Travel time from batch time at plant to dispersal shall not exceed ninety minutes (90 Min) and conforming to TABLE 4.6 TRANSPORTING TIME REQUIREMENTS.
5. Time between trucks, end of last truck placement to beginning of next truck placement shall not exceed sixty minutes (60 Min); otherwise a construction joint shall be installed.
6. Verify the mix design for each truck is the mix design being used.
7. Verify tare weight to actual weights.
 - a. Actual weights shall be within plus or minus one percent ($\pm 1\%$) of the tare weight.
 - b. Admixtures shall be within plus or minus one gallon (± 1 Gal) of tare.
8. Water tank on truck shall be full when arriving on site and shall have a readable and accurate measuring gauge attached to the tank.
9. Minimum drum rotations shall be between fifty (50) and seventy (70) before and during transport.
10. Minimum drum rotation shall be between seventy (70) and one hundred (100) arriving at the site and before discharge of concrete.
11. Slump shall be from three inches (3 In) to five inches (5 In) unless plasticizers are introduced to concrete and otherwise approved by the City's Project Manager.
12. Concrete temperature shall not drop below fifty degrees Fahrenheit (50° F) or rise above ninety degrees Fahrenheit (90° F). If ice is added to the mixture as part of the water content, then concrete temperature shall be allowed to rise above ninety degrees Fahrenheit (90° F) but no higher than ninety-five (95) degrees F as conforming to TABLE 4.5 TEMPERATURE REQUIREMENTS FOR PLACEMENT and ASTM C1064.

13. Slump tests shall be taken in conformance with ASTM C143 at every fifty cubic yards (50 Cy) of concrete. When ambient temperature is above ninety degrees Fahrenheit (90° F), then slump tests shall be taken on every thirty cubic yards (30 Cy) of concrete.
14. Air entrainment above five percent (5%) and below seven percent (7%), as tested in conformance with ASTM C173 or ASTM C231, may be approved for placement at the discretion of the City's Project Manager, and only accepted after the concrete has passed the twenty-eight day (28 D) compressive strength requirements.
15. Concrete that has air entrainment lower than two percent (2%) or higher than seven percent (7%), as tested in conformance with ASTM C173 or ASTM C231 shall be rejected and shall be remove concrete from site.
16. One (1) set of four (4) concrete cylinders in conformance with ASTM C31 for compressive strength test shall be made for every one hundred cubic yards (100 Cy) or portion there of placed in the day. Concrete placements less than one hundred cubic yards (100 Cy) in a day shall be tested at the discretion of the City's Project Manager.
17. Two (2) cylinders shall be tested in conformance of ASTM C39 at the age of seven days (7 D). The average of the two (2) tests shall be a minimum of seventy percent (70%) of designed twenty-eight day (28 D) strength.
18. Two (2) cylinders shall be tested in conformance of ASTM C39 at the age of twenty-eight days (28 D). The average of the two (2) tests shall equal or exceed the design strength.
19. No more that two gallons of water per cubic yard (2 Gal/Cy) shall be introduced into the truck at the job site. After addition of any water at the site, the truck drum shall make twenty-five (25) revolutions before placement can commence.
20. Water added after sampling for testing shall void air entrainment, slump and compressive strength tests that may have been completed before the addition of water. New sample of concrete shall be taken and testing started over again. NO EXCEPTIONS. If after warning the Contractor the condition continues to happen, and the practice continues, the Contractor shall be charged for failed tests.

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21. The City's Project Manager and the Independent Testing Laboratory Technicians have the authority to reject any concrete load not matching the City of Friendswood Technical Specifications.
22. Load tickets shall be marked rejected, state reason, along with date and time and be signed by the City's Project Manager or Independent Testing Laboratory Technician.

3.5 DETENTION POND

- A. Inspect for erosion around inflow/outflow areas and banks.
- B. Area surrounding all drainage ditches, retention and detention ponds shall have turf established at a minimum cover of ninety percent (90%) as required by CFTS Section 02900 – Turf Establishment.
- C. The drainage areas shall have either Galveston County Consolidated Drainage District (GCCDD) or Harris County Flood Control (HCFC) approval before requesting the City's Project Manager for inspection and approval. These inspection may be done simultaneously.

3.6 SANITARY SEWER MANHOLES

- A. Verify that all debris and water is removed from the interior of the manhole being tested and any grout has dried for a minimum of twenty-four hours (24 Hrs).
- B. Insert plugs in influent and effluent pipes. Plugs are to be installed a minimum of six inches (6 In) past the exterior wall of the manhole being tested.
- C. Inflate plugs to manufacturer's recommended air pressure.
- D. Inspect testing head. Verify that a gauge exists on the head and that all openings through the head are open, not sealed, with check ball valves.
- E. Install Vacuum testing head on ring of manhole. Testing head shall have a readable gauge that measures inches of mercury by inches.
- F. Begin evacuation of air from manhole. Turn pump off when the gauge reads ten inches of mercury (10 InHg).
- G. Softly tap gauge to ensure the gauge is not stuck.

- H. Hold vacuum for minimal time as required in TABLE 4.7 VACUUM TESTING TIME TABLE in this Section.
- I. After minimal time is complete, tap gauge twice. If the loss of mercury is one inch (1 In) or less the manhole is considered to have passed.

3.7 SANITARY SEWER FORCE MAINS

- A. Testing for High Density Polyethylene (HDPE) Pipe shall be in accordance with paragraph 3.11 of this Section.

- B. Hydrostatic Testing.

1. Plug both ends of pipe to be tested.
2. Provide a gauge with a range from zero pounds per square inch (0 psi) to three hundred pounds per square inch (300 psi), graduated in five pounds per square inch (5 psi) increments and is a minimum of three inches (3 In) in diameter. Provide a water tank and a water meter.
3. Fill pipe with water and pressure to either one hundred fifty (150 psi) or one and one-half (1.5) times the design pressure, whichever is greater.
4. Hold pressure for minimum of four hours (4 Hrs).
5. If pressure has held for four hours (4 Hrs), the pipe has passed.
6. If pressure has lost pressure, calculate the maximum allowed loss of water using the following formula.

$$4L = \frac{(S)(D)(P_{0.5})}{133,200}$$

7. Pressure pipe back up to one hundred fifty (150 psi), and record number of gallons required to achieve pressure. If less than or equal to 4L, then pipe is considered to have passed.

- C. Pigging Test

1. Pigging test shall be conducted on force mains longer than two hundred feet (200 Ft).
2. Pig shall be open-cell polyurethane with no abrasives or coatings.

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3. Pigs shall be capable of passing through reductions of up to sixty-five percent (65%) of nominal cross-section of pipe being tested.
4. Pigs shall be capable of passing through all standard fittings.
5. If pig passes through line being tested, the line is clear of obstructions and is considered to have passed.

3.8 SANITARY SEWER GRAVITY LINES

A. Low Pressure Air Test.

1. Low pressure air test shall conform to ASTM C828, ASTM C924 or ASTM F1417.
2. Clean both ends of pipe free of debris and water.
3. Install and inflate testing balls to manufacturer's recommended air pressure.
4. Pressure gravity sanitary sewer line to five pounds per square inch (5 psi) and hold for the minimum time as specified in TABLE 4.9 TIME ALLOWED FOR PRESSURE LOSS FROM 5.0 PSI TO 4.0 PSI in this Section.
5. For lengths longer than the minimum time multiply additional length by factor as specified in CFTS Section 02525 – Table 4.2 TIME ALLOWED FOR PRESSURE LOSS FROM 5.0 PSI TO 4.0 PSI.
6. If test pressure drops below four pounds per square inch (4 psi) before the minimal testing time has been achieved then the test is considered to have failed. The Contractor shall make repairs as necessary and schedule a retest.

B. TV INSPECTION

1. One week (1 Wk) prior to mandrel test, sewer lines shall be cleaned and a TV inspection completed on each line, from upstream to downstream end.

C. MANDREL TEST

1. Mandrel testing shall conform to ASTM D3034.

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2. No mandrel test shall be performed until after the gravity sanitary sewer has been installed for a minimum of thirty days (30 D).
3. Install mandrel pull string from manhole to manhole. Pull string shall not exceed three-eighths inch (3/8 In) thick nylon rope for pulling the mandrel.
4. Inspect mandrel size using proving ring provided. Proving ring shall fit snug over the mandrel. Verify that the mandrel is the correct size for the pipe being tested.
5. Once the mandrel is placed in the upstream pipe, slowly pull mandrel to the next manhole. Mandrel shall be pulled in the manhole by one (1) person. Mechanical equipment shall not be allowed to pull the mandrel through the pipe.
6. When mandrel reaches next manhole, mandrel shall be lifted and shown to the City's Project Manager. Mandrel shall never be pulled straight through a manhole, no exceptions.
7. If mandrel gets stuck in the pipe being tested, remove the mandrel and correct defects to the pipe and retest.

D. SMOKE TEST

1. Smoke test shall only be used on existing sanitary sewers that have been repaired or rehabilitated.
2. Only test from one (1) manhole to one (1) manhole section at a time.
3. Residents shall be notified no fewer than two days (2 D) and no more than seven days (7 D) before smoke testing is scheduled to take place.
4. Public Works, Police Department, Fire Department and Notification Contacts shall be notified twenty-four hours (24 Hrs) prior to actual smoke testing.
5. Isolate section gravity sanitary sewer line to be tested at each manhole.
6. Introduce smoke into one (1) or both manholes. Operate smoke generator for a minimum of five minutes (5 Min).

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7. Inspect all service line connections at the gravity sanitary sewer main for leaks. Repair and retest all leaks.
8. Visually inspect each house on the line being tested. Look for smoke coming through the plumbing vent stack on each house.
9. Any house that does not have smoke coming through the plumbing vent stack shall be checked for proper connection to the gravity sanitary sewer line being tested. Method of checking for proper connection shall be to introduce dye into the service line system at a point on landowner's property, and visually watch for dye to exit into downstream manhole. If no dye is seen, repair and retest service connection.

3.9 SUBGRADE

A. Lime Determination and Atterberg Limits

1. Have Independent Testing Laboratory obtain a representative sample of material.
2. Conform to ASTM D4318 to determine Liquid Limit, Plastic Limit and Plasticity Index.
3. Conform to ASTM D698 for Lime Determination. Minimum Lime content shall be no less than six percent (6%).
4. Make Lime Determination for soil to bring soil to a PI of no more than fifteen (15).

B. Lime Solids Test

1. Lime Solids test shall conform to TxDOT Tex-600-J.
2. Take sample from back of distributor truck.
3. Weigh and calculate samples for Dry Solids as specified in TxDOT Tex-600-J.

C. Gradation Test

1. Immediately after the re-mix of the lime-stabilized subgrade and before lime-stabilized subgrade is compacted, conform to TxDOT Tex-101-E, Part III dry method requirements for testing subgrade using sieve analysis.

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2. Three (3) random samples shall be taken and tested for every six hundred linear foot (600 Lf) of roadway section or portion thereof for day's production.
3. Locations of the sample areas shall be determined by the City's Project Manager and shall vary from left, center and middle of roadway being tested.
4. Samples shall be a representative sampling of the lime-stabilized subgrade.
5. All three (3) samples must pass sieve analysis. If any one sample fails then the Contractor shall rework the roadway section tested and have it retested at no cost to the City.
6. Immediately after the roadway section has passed the sieve analysis, the Contractor shall commence to compaction of subgrade.

D. Compaction

1. Notify the City's Project Manager a minimum of forty-eight hours (48 Hrs) before testing for compaction.
2. The City's Project Manager shall identify the locations for all density testing.
3. Compaction shall be a minimum of ninety-five (95%) of dry density and moisture shall be at optimum plus or minus three percent ($\pm 3\%$).
4. There shall be only two (2) tests performed in any one (1) hole at one (1) time to achieve density readings. Moving the Nuclear Density Gauge around more than this shall fail the whole work area being tested.
5. Three (3) density tests per lane shall be performed on every two hundred linear feet (200 Lf) of roadway.
6. After one inch (1 In) or more of documented rainfall, subgrade shall be retested and shall conform to 3.9.D.3 and 3.9.D.4.
7. After one inch (1 In) or more of rain, every five hundred feet (500 Ft) per lane of roadway shall be tested.

8. Stipulations in 3.9.D.6 and 3.9.D.7 shall be reinstituted after each additional one inch (1 In) of rainfall until paving has been placed.

E. In-place Depth Test

1. Contractor shall notify the City's Project Manager a minimum of forty-eight hours (48 Hrs) prior to the start of testing.
2. In place depth test for lime-stabilization shall conform to TxDOT Tex-140-E.
3. Tests shall be taken in hand excavated holes only. NO EXCEPTIONS.
4. Three (3) samples shall be taken for each one thousand foot (1000 Ft) section of subgrade place per lane.
5. Depth shall be based on the average of all three (3) samples from the section being tested.
6. Failing sections shall be remixed and recompact with correct amount of subgrade in place.

3.10 WATER LINES

A. Bacteriological Test (BAC-T)

1. The Contractor shall notify the City's Project Manager at least forty-eight hours (48 Hrs) in advance of testing. All testing shall conform to TCEQ and TDSHS. NO EXCEPTIONS.
2. The City's testing collection times shall be at 10:00 a.m. on Tuesdays and Thursdays only. NO EXCEPTIONS.
3. Water line shall have been thoroughly flushed prior to and at least on the day of the scheduled testing.
4. The City's Public Works Department personnel shall open the valves and collect the samples.
5. There shall be one (1) BAC-T taking for every one thousand linear feet (1000 Lf) of pipe installed. Any linear footage, no matter the amount, over one thousand linear feet (1000 Lf) shall require another BAC-T for that portion.

6. The City's Project Manager shall identify and mark the locations of the BAC-T's to be taken.
 7. Maximum testing length shall be no more than four thousand linear feet (4000 Lf) at one (1) given testing day.
 8. Optimum chlorine content for testing shall be from one part per million (1.0 ppm) to no more than four and one-half parts per million (4.5 ppm). Water lines having chlorine level above five parts per million (5.0 ppm) shall not be tested and shall be flushed until the chlorine is in the acceptable range.
 9. If the water lines have not been isolated for testing purposes, then all tests taken shall come back negative. One (1) positive test on non-isolated lines is a failure of the whole line being tested and BAC-T's for the entire line shall be retaken.
 10. After two (2) failed BAC-T's the Contractor shall re-chlorinate and flush the failing water line.
 11. The Contractor may, upon the approval of the City's Project Manager, take samples and use an alternate lab provided that the following conditions are met:
 - a. Project Manger shall be present at all times during the testing process.
 - b. The alternate lab shall be qualified and recognized under TCEQ and TDSHS rules and regulations.
 - c. Laboratory shall send a representative of their company to pick up samples. The Contractor shall not transport the samples to the laboratory. Chain of custody shall be maintained by the laboratory's personnel.
 - d. Copies of all reports shall be sent immediately from the lab to the City's Project Manager.
- B. Testing for High Density Polyethylene (HDPE) Pipe shall be in accordance with paragraph 3.11 of this Section.
- C. Hydrostatic Test of Water Lines
1. The Contractor shall notify the Project Manger a minimum of forty-eight hours (48 Hrs) before testing.

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2. Hydrostatic Testing shall conform to American Water Works Associations' Manual M-23, latest revision.
3. The Contractor shall supply all pumps, gauges, meters and other equipment necessary to perform the test procedures. Testing gauge shall measure pressure in five pounds per square inch (5 psi) increments.
4. One (1) test shall be taken for every one thousand linear feet (1000 Lf) of water line.
5. Fill the auxiliary tank full of water and using the pressure pump, pressurize the water line to one hundred fifty pounds per square inch (150 psi). [Dedicated Fire Lines shall be pressurized to two hundred pounds per square inch (200 psi)].
6. After gauge achieves one hundred pounds per square inch (150 psi), close valves and stop pump.
7. Softly tap the glass of the gauge. Start time of the test.
8. Test time shall be no less than a minimum of four hours (4 Hrs). [Dedicated Fire Lines shall be tested for no less than a minimum of two hours (2 Hrs)].
9. At the end of the test period, softly tap pressure gauge, if needle does not move then the line is considered to have passed.
10. Fill line back up with water and use the following water to calculate minimum allowed loss as calculated using the formula below:
$$L = \frac{4NDP^{1/2}}{7400}$$
11. If amount of gallons lost is less than that calculated, then the test is considered to have passed.

3.11 Hydrostatic Testing of High Density Polyethylene (HDPE) Pipe in Pressurized Systems.

A. Restraint.

1. All valves, tees elbows and dresser couplings shall be

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restrained with stainless steel all thread.

2. Test gauge shall be installed at the lowest point in the test section.

B. Pipe filling:

1. Quantity of liquid needed to fill the internal volume of the pipe test section shall be estimated using the following formula:

$$V_{GAL} = 0.04 \times ID_{IN}^2 \times L_{FT}$$

where:

- a. V_{GAL} = pipe section volume in U.S. gallons
 - b. ID_{IN} = pipe inside diameter in inches
 - c. L_{FT} = test section length in feet
2. An appropriate excess quantity of liquid, up to forty percent (40%), may be needed to account for pipe expansion and possibility of leakage.
 3. Fill test section of pipe slowly, allowing all air to be purged from the pipe.
 4. Allow the test section and the test liquid to equalize in temperature.

C. Initial Expansion Phase.

1. Expansion Phase can take up to, but shall be no longer than, four hours (4 H).
2. Slowly pressurize the test section to test pressure, one hundred-fifty pounds per square inch (150 PSI), and maintain for three hours (3 H). During the initial expansion phase the polyethylene pipe will expand slightly. Additional test liquid will be required to maintain test pressure.

D. Testing Phase

1. Immediately following the initial expansion phase, monitor the amount of liquid required to maintain test pressure (150 psi) for one hour (1 H).

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2. If the amount of liquid does not exceed the amount listed in TABLE 4.10 MAKE-UP WATER ALLOWANCE, then no leakage is detected and the test section a passing test is indicated.
3. Should the test fail and retesting become necessary, depressurize test section in accordance with paragraph 3.11.E.
 - a. Do not attempt to correct faults or leaks until after test section is completely depressurized.
 - b. A minimum relaxation period of eight hours (8 H) shall be observed before re-pressurization. After relaxation period, retest starting with the initial expansion phase.

E. Post Test Procedures.

1. At the conclusion of the test, test section shall be depressurized by a controlled release of the test fluid. The potential of a pressure surge is avoided by a controlled release.

PART IV: TABLES

4.1 CONCRETE CLASSIFICATION MINIMUM SPECIFICATIONS

CONCRETE CLASSIFICATION MINIMUM SPECIFICATIONS					
Class of Concrete	Sacks of Cement per Cubic Yard Minimum	Minimum Compressive Strength at 28 Days	Maximum Cement to Water Ratio	Coarse Aggregate Grade Number	Slump
A	5.0	3000	6.25	2 – 3	3 – 5*
B	6.0	3600	6.00	1,2,3,4,5	4
C	4.0	2000	8.00	2,3,4,5,6,7	5
D	6.0	3000	6.00	2,3,4,5	5
E	6.0	As specified	5.50	3,4,5,6	5
F	8.75	5500	3.6	6	5

***When ASTM C494, Type F or Type G admixture is used to increase workability, this range may be 6 to 9.**

4.2 COARSE AGGREGATE GRADATION

COARSE AGGREGATE GRADATION CHART										
Aggregate Grade No.	Nomina l Size Inches	Percent Retained on Each Sieve								
		2-1/2 In.	2 In.	1-1/2 In.	1 In.	3/4 In.	1/2 In.	3/8 In.	No. 4	No. 8
1	2	0	0-20	15- 50		60- 80			95- 100	
2 (467)*	1-1/2		0	0-5		30- 65		70- 90	95- 100	
3	1-1/2		0	0-5		10- 40	40- 75		95- 100	
4 (57)*	1			0	0-5		40- 75		90- 100	95- 100
5 (67)*	3/4				0	0-10		45- 80	90- 100	95- 100
6 (7)*	1/2					0	0-10	30- 60	85- 100	95- 100
7	3/8						0	5-30	75- 100	
8	3/8						0	0-5	35- 80	90- 100

*** Numbers in parenthesis indicate that the gradations conform to Corresponding ASTM gradation in ASTM C33.**

4.3 FINE AGGREGATE GRADATION

FINE AGGREGATE GRADATION CHART								
Aggregate Grade No.	Percent Retained on Each Sieve							
	3/8 In.	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
1	0	0-5	0-20	15- 50	35- 75	65- 90	90-100	97-100

4.4 MINERAL FILLERS

MINERAL FILLER GRADATION CHART		
Percent Retained on Each Sieve		
No. 20	No. 30	No. 100
0 %	0 to 5 %	0 to 30 %

4.5 TEMPERATURE REQUIREMENTS FOR PLACEMENT

PLACEMENT TEMPERATURE REQUIREMENTS	
AMBIENT TEMPERATURE¹	
Minimum temperature to start placing concrete	35° and rising
Minimum temperature to stop placing concrete	40° and falling
Maximum temperature for placing concrete without ice	90°
Maximum temperature for placing concrete with ice	100°
CONCRETE TEMPERATURE	
Minimum concrete temperature	50°
Maximum concrete temperature without ice	90°
Maximum concrete temperature with ice	95°
MINIMUM CURING TIMES WHEN PLACED CONCRETE HAS BEEN EXPOSED TO FREEZING TEMPERATURES	
From 50° to 70°, minimum days	5
70° and above, minimum days	3
¹ Ambient temperature is to be taken as specified in paragraph 3.3.F.1 of this section.	

4.6 TRANSPORTING TIME REQUIREMENTS

TRANSPORTING TIME REQUIREMENTS FOR PLACEMENT		
Ambient Temperature	Maximum Time (No Retarding Agent) in Minutes	Maximum Time (With Retarding Agent) in Minutes ¹
Non-Agitated Concrete		
Above 80° F	15	30
80° F and Below	30	45
Agitated Concrete		
Above 90° F	45	75
75° F to 90° F	60	90
75° F and Below	90	120
NOTE: Time interval shall be from the addition of cement to the batch to start of placement of concrete in the forms.		
¹ Normal Dosage of retarder.		

4.7 TIME ALLOWED FOR PRESSURE LOSS FROM 5.0 PSI TO 4.0 PSI

Pipe Dia. In.	Min. Time mm:ss	Length for Min. Time	Time for Longer Length	Specification Time for Length (L) shown in MM:SS				
				100'	150'	200'	250'	300'
6	5:40	398	0.8548	5:40	5:40	5:40	5:40	5:40
8	7:33	298	1.5196	7:33	7:33	7:33	7:33	7:36
10	9:27	239	2.3743	9:27	9:27	9:27	9:54	11:52
12	11:20	199	3.4190	11:20	11:20	11:20	14:15	17:06
15	14:10	159	5.3423	14:10	14:10	17:48	22:16	26:43
18	17:00	133	7.6928	17:00	19:14	25:39	32:03	38:28
21	19:50	114	10.4708	19:50	26:11	34:54	43:38	52:21
24	22:40	99	13.6762	22:48	34:11	45:35	56:59	68:23
27	25:30	88	17.3089	28:51	43:16	57:42	72:07	86:33
30	28:20	80	21.3690	35:37	53:25	71:14	89:02	106:51
33	31:10	72	25.8565	43:06	64:38	86:11	107:44	129:17

Pipe Dia. In.	Min. Time mm:ss	Length for Min. Time	Time for Longer Length	Specification Time for Length (L) shown in MM:SS					
				350'	400'	450'	500'	550'	600'
6	5:40	398	0.8548	5:40	5:42	6:25	7:07	7:50	8:33
8	7:33	298	1.5196	8:52	10:08	11:24	12:08	13:56	15:12
10	9:27	239	2.3743	13:51	15:50	17:48	19:47	21:46	23:45
12	11:20	199	3.4190	19:57	22:48	25:39	28:30	31:20	34:11
15	14:10	159	5.3423	31:10	35:37	40:04	44:31	48:58	53:25
18	17:00	133	7.6928	44:52	51:17	57:42	64:06	70:31	76:56
21	19:50	114	10.4708	61:05	69:48	78:32	87:15	95:59	104:42
24	22:40	99	13.6762	79:47	91:10	102:34	113:58	125:22	136:46
27	25:30	88	17.3089	100:58	115:24	129:49	144:14	158:40	173:05
30	28:20	80	21.3690	124:39	142:28	160:16	178:05	195:53	213:41
33	31:10	72	25.8565	150:50	172:23	193:55	215:28	237:01	258:34

4.8 – VACUUM TESTING TIME TABLE

TIME ALLOWED FOR VACUUM LOSS FROM 10.0 Hg TO 9.0 Hg			
	TIME IN SECONDS BY DIAMETER OF MANHOLES		
Manhole Depth in Feet	48" Diameter	60" Diameter	72" Diameter
8' and less	14	18	23
10	17	23	28
12	21	28	34
14	25	32	40
16	28	37	45
18	23	41	51
20	35	46	57
22	39	51	62
24	42	55	68
26	46	60	74
28	49	64	80
30	53	69	85

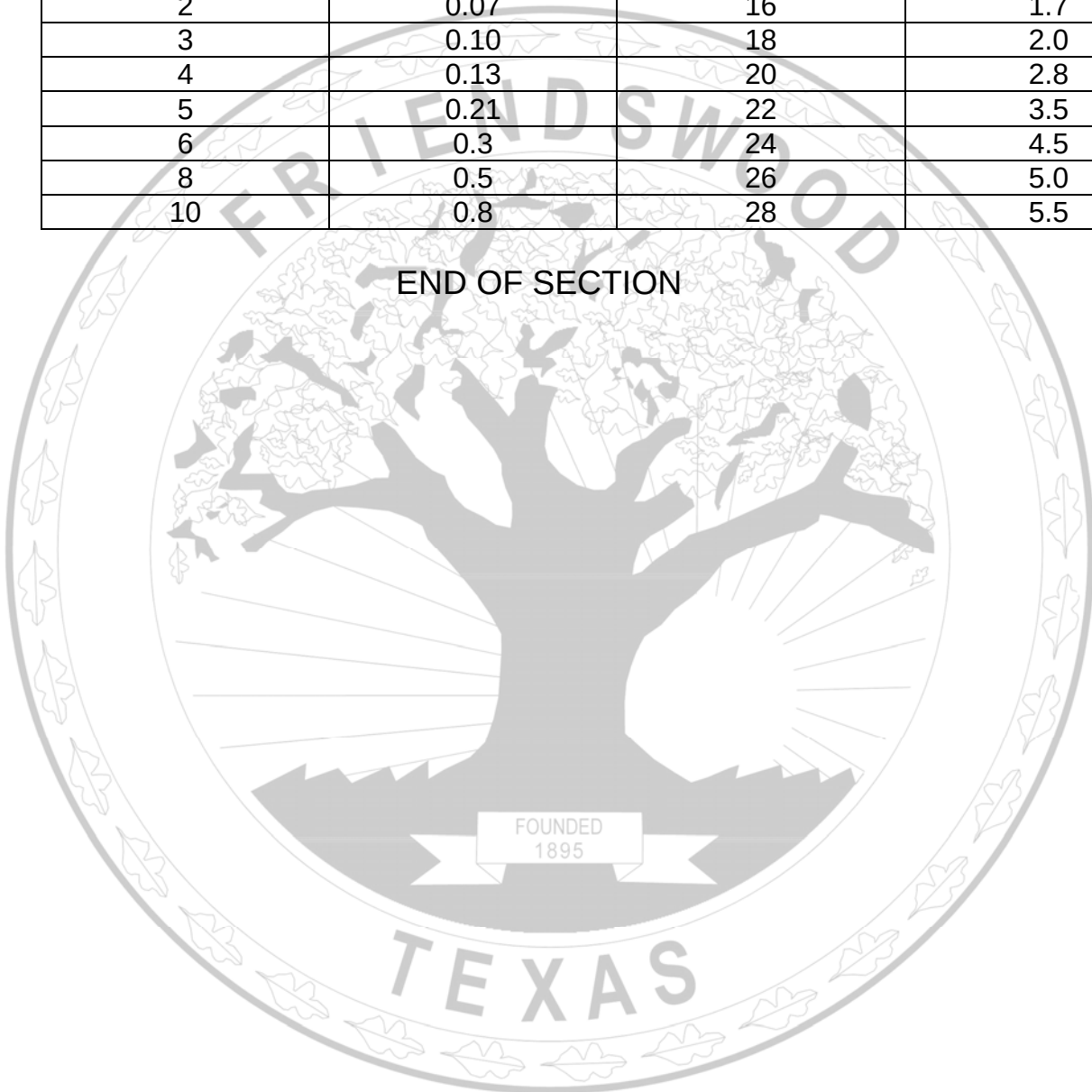
4.9 MINIMUM TESTING TIMES FOR LOW PRESSURE AIR TEST

Pipe Diameter (Inches)	Minimum Time (seconds)	Length of Pipe for Minimum Time (feet)	Time for Longer Length (seconds)
6	340	398	0.855 (L)
8	454	298	1.520 (L)
10	567	239	2.374 (L)
12	680	199	3.419 (L)
15	850	159	5.342 (L)
18	1020	133	7.693 (L)
21	1190	114	10.471 (L)
24	1360	99	13.676 (L)
27	1530	88	17.309 (L)
30	1700	80	21.369 (L)
33	1870	72	258.856 (L)

4.10 MAKE-UP WATER ALLOWANCE

Nominal Pipe Size (Inches)	Allowable Gallons per 100 Feet of Pipe	Nominal Pipe Size (Inches)	Allowable Gallons per 100 Feet of Pipe
1-1/4	0.06	12	1.1
1-1/2	0.07	14	1.4
2	0.07	16	1.7
3	0.10	18	2.0
4	0.13	20	2.8
5	0.21	22	3.5
6	0.3	24	4.5
8	0.5	26	5.0
10	0.8	28	5.5

END OF SECTION



SECTION 02125

EXCAVATION AND BACKFILL FOR UTILITIES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Excavation, trenching, foundation, embedment and backfill for installation of utilities, including manholes and other related structures.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. No separate payment will be made for trench excavation, embedment and backfill under this Section. Include cost in unit price for installed underground piping, sewer, conduit or duct work.
2. When the Project Manager directs the Contractor to over-excavate trench bottom, the Contractor shall be paid by the unit price bid per linear foot under Bid Item – Six inches (6 In) over-excavation of Trench Bottom.
 - a. No payment shall be paid if the Project Manager does not direct the Contractor to over-excavate trench bottom.
 - b. No over excavation shall be measured or paid when unsuitable conditions result from dewatering system not in conformance with Section 01585 – Control of Ground and Surface Water.
3. No separate payment shall be made for performing Critical Location exploratory excavation. Include cost in the unit price for work requiring critical location.
4. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for Work in

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this Section shall be included in Total Stipulated Price.

1.3 DEFINITIONS

- A. Pipe Foundation: Suitable and stable native soils that are exposed at trench subgrade after excavation to depth of bottom of bedding as shown on the Drawings or foundation backfill material placed and compacted in over-excavations.
- B. Pipe Bedding: Portion of trench backfill that extends vertically from top of foundation up to level line at bottom of pipe and horizontally from one (1) trench sidewall to opposite sidewall.
- C. Haunching: Material placed on either side of pipe from top of bedding up to springline of pipe and horizontally from one (1) trench sidewall to opposite sidewall.
- D. Initial Backfill: Portion of trench backfill that extends vertically from springline of pipe (top of haunching) up to level line twelve inches (12 In) above top of pipe and horizontally from one (1) trench sidewall to opposite sidewall.
- E. Pipe Embedment: Portion of trench backfill that consists of bedding, haunching and initial backfill.
- F. Trench Zone: Portion of trench backfill that extends vertically from top of pipe embedment up to pavement subgrade or up to final grade when not beneath pavement.
- G. Unsuitable Material: Unsuitable soil materials are the following:
 - 1. Materials that are classified as ML, CL-ML, MH, PT, OH and OL according to ASTM D2487.
 - 2. Materials that cannot be compacted to required density due to gradation, plasticity or moisture content.
 - 3. Materials that contain large clods, aggregates, stones greater than two inches (2 In) in any dimension, debris, vegetation, waste or any other deleterious materials.
 - 4. Materials that are contaminated with hydrocarbons or other chemical contaminants.
- H. Suitable Material: Suitable soil materials are those meeting specification requirements. Materials mixed with lime or cement that

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can be compacted to required density and meeting requirements for suitable materials may be considered suitable materials, unless otherwise indicated.

- I. Backfill: Suitable material meeting specified quality requirements placed and compacted under controlled conditions.
- J. Ground Water Control Systems: Installations external to trench, such as well points, eductors or deep wells. Ground water control includes dewatering to lower ground water, intercepting seepage which would otherwise emerge from side or bottom of trench excavation and depressurization to prevent failure or heaving of excavation bottom. Refer to Section 01585 – Control of Ground and Surface Water.
- K. Surface Water Control: Diversion and drainage of surface water runoff and rain water away from trench excavation. Rain water and surface water accidentally entering trench shall be controlled and removed as part of excavation drainage.
- L. Excavation Drainage: Removal of surface and seepage water in trench by sump pumping and using drainage layer, as defined in ASTM D2321, placed on foundation beneath pipe bedding or thickened bedding layer of Class I material.
- M. Trench Conditions are defined with regard to stability of trench bottom and trench walls of pipe embedment zone. Maintain trench conditions that provide for effective placement and compaction of embedment material directly on or against undisturbed soils or foundation backfill, except where structural trench support is necessary.
 - 1. Dry Stable Trench: Stable and substantially dry trench conditions exist in pipe embedment zone as result of typically dry soils or achieved by ground water control (dewatering or depressurization) for trenches extending below ground water level.
 - 2. Stable Trench with Seepage: Stable trench in which ground water seepage is controlled by excavation drainage.
 - a. Stable Trench with Seepage in Clay Soils: Excavation drainage is provided in lieu of or to supplement ground water control systems to control seepage and provide stable trench subgrade in predominately clayey soils prior to bedding placement.
 - b. Stable Wet Trench in Sandy Soils: Excavation

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drainage is provided in embedment zone in combination with ground water control in predominately sandy or silty soils.

- N. Unstable Trench: Unstable trench conditions exist in pipe embedment zone if ground water inflow or high water content causes soil disturbances, such as sloughing, sliding, boiling, heaving or loss of density.
- O. Sub-trench: Sub-trench is special case of benched excavation. Sub-trench excavation below trench shields or shoring installations may be used to allow placement and compaction of foundation or embedment materials directly against undisturbed soils. Depth of sub-trench depends upon trench stability and safety as determined by Contractor.
- P. Trench Dam: Placement of low permeability material in pipe embedment zone or foundation to prohibit ground water flow along trench.
- Q. Over-excavation and Backfill: Excavation of subgrade soils with unsatisfactory bearing capacity or composed of otherwise unsuitable materials below top of foundation as shown on the Drawings and backfilled with foundation backfill material.
- R. Foundation Backfill Materials: Natural soil or manufactured aggregate of controlled gradation and geotextile filter fabrics as required, to control drainage and material separation. Foundation backfill material is placed and compacted as backfill to provide stable support for bedding. Foundation backfill materials may include concrete seal slabs.
- S. Trench Safety Systems include both protective systems and shoring systems as defined in Section 02280 – Trench Safety Systems.
- T. Trench Shield (Trench Box): Portable worker safety structure moved along trench as work proceeds, used as protective system and designed to withstand forces imposed on it by cave-in, thereby protecting persons within trench. Trench shields may be stacked if so designed or placed in series depending on depth and length of excavation to be protected.
- U. Shoring System: Structure that supports sides of an excavation to maintain stable soil conditions and prevent cave-ins or to prevent movement of ground affecting adjacent installations or improvements.
- V. Special Shoring: Shoring system meeting special shoring as specified in Paragraph 1.8, Special Shoring Design Requirements, for locations

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identified on the Drawings.

1.4 REFERENCES

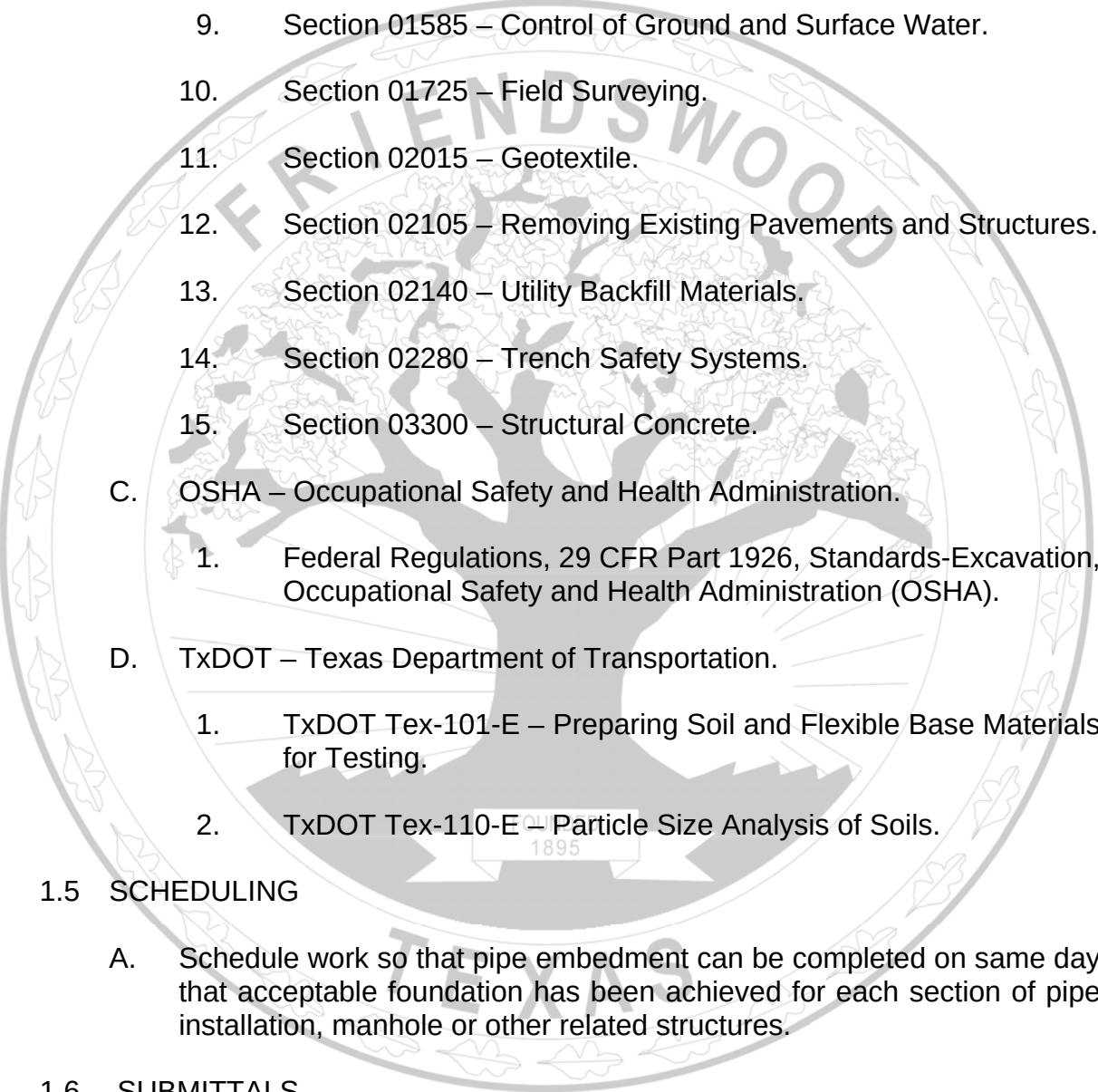
A. ASTM – American Society for Testing and Materials.

1. ASTM C12 – Standard Practice for Installing Vitrified Clay Pipe Lines.
2. ASTM D558 – Standard Test Methods for Moisture-Density Relations of Soil Cement Mixtures.
3. ASTM D698 – Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft).
4. ASTM D1556 – Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
5. ASTM D2321 – Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Applications.
6. ASTM D2487 – Standard Classification of Soils for Engineering Purposes.
7. ASTM D2922 – Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
8. ASTM D3017 – Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
9. ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.

B. CFTS – City of Friendswood Technical Specifications.

1. Section 01270 – Measurement and Payment.
2. Section 01330 – Submittal Procedures.
3. Section 01470 – Testing Laboratory Services.
4. Section 01475 – Quality Control Testing Procedures.
5. Section 01505 – Temporary Facilities and Controls.

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6. Section 01555 – Traffic Control and Regulation.
 7. Section 01560 – Tree and Plant Protection.
 8. Section 01580 – Waste Material Disposal.
 9. Section 01585 – Control of Ground and Surface Water.
 10. Section 01725 – Field Surveying.
 11. Section 02015 – Geotextile.
 12. Section 02105 – Removing Existing Pavements and Structures.
 13. Section 02140 – Utility Backfill Materials.
 14. Section 02280 – Trench Safety Systems.
 15. Section 03300 – Structural Concrete.
- C. OSHA – Occupational Safety and Health Administration.
1. Federal Regulations, 29 CFR Part 1926, Standards-Excavation, Occupational Safety and Health Administration (OSHA).
- D. TxDOT – Texas Department of Transportation.
1. TxDOT Tex-101-E – Preparing Soil and Flexible Base Materials for Testing.
 2. TxDOT Tex-110-E – Particle Size Analysis of Soils.

1.5 SCHEDULING

- A. Schedule work so that pipe embedment can be completed on same day that acceptable foundation has been achieved for each section of pipe installation, manhole or other related structures.

1.6 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit planned typical method of excavation, backfill placement and compaction including:

1. Trench widths.
 2. Procedures for foundation and pipe zone bedding placement and trench backfill compaction.
 3. Procedures for assuring compaction against undisturbed soil when pre-manufactured trench safety systems are proposed.
- C. Submit backfill material sources and product quality information in accordance with requirements of Section 02140 – Utility Backfill Materials.
- D. Submit trench excavation safety program in accordance with requirements of Section 02280 – Trench Safety Systems. Include designs for special shoring meeting requirements defined in Paragraph 1.8, Special Shoring Design Requirements contained herein.
- E. Submit record of location of utilities as installed, referenced to survey control points. Include locations of utilities encountered or rerouted. Give stations, horizontal dimensions, elevations, inverts and gradients.
- F. Submit eleven inch by seventeen inch (11 In x 17 In) copy of the Drawing with plotted utility or obstruction location titled "Critical Location Report" to the Project Manager.

1.7 TESTING

- A. Testing and analysis of backfill materials for soil classification and compaction during construction shall be performed by an independent laboratory in accordance with requirements of Sections 01470 – Testing Laboratory Services and 01475 – Quality Control Testing Procedures and as specified in this Section.
- B. Perform backfill material source qualification testing in accordance with requirements of Section 02140 – Utility Backfill Materials.

1.8 SPECIAL SHORING DESIGN REQUIREMENTS

- A. Have special shoring designed or selected by the Contractor's Professional Engineer to provide support for sides of excavations, including soils and hydrostatic ground water pressures as applicable and to prevent ground movements affecting adjacent installations or improvements such as structures, pavements and utilities. Special shoring may be a premanufactured system selected by the Contractor's Professional Engineer licensed by the State of Texas to meet project site requirements based on manufacturer's standard design.

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PART II: PRODUCTS

2.1 EQUIPMENT

- A. Perform excavation with hydraulic excavator or other equipment suitable for achieving requirements of this Section.
- B. Use only hand-operated pneumatic or hydraulic tamping equipment until minimum cover of twelve inches (12 In) is obtained over pipes, conduits and ducts. Do not use heavy compacting equipment until adequate cover is attained to prevent damage to pipes, conduits or ducts.
- C. Use trench shields or other protective systems or shoring systems which are designed and operated to achieve placement and compaction of backfill directly against undisturbed native soil.
- D. Use special shoring systems where required which may consist of braced sheeting, braced soldier piles and lagging, slide rail systems or other systems meeting requirements as specified in Paragraph 1.8, Special Shoring Design Requirements.

2.2 MATERIAL CLASSIFICATIONS

- A. Embedment and Trench Zone Backfill Materials: Conform to classifications and product descriptions of Section 02140 – Utility Backfill Materials.
- B. Concrete Backfill: Conform to requirements for Class A concrete as specified in Section 03300 – Structural Concrete.
- C. Geotextile (Filter Fabric): Conform to requirements of Section 02015 – Geotextile.
- D. Concrete for Trench Dams: Concrete backfill or three (3) sack premixed (bag) concrete.
- E. Timber Shoring Left in Place: Untreated oak.

PART III: EXECUTION

3.1 STANDARD PRACTICE

- A. Install flexible pipe, including "semi-rigid" pipe, to conform to standard

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practice described in ASTM D2321 and as described in this Section. Where an apparent conflict occurs between standard practice and requirements of this Section, this Section governs.

- B. Install rigid pipe to conform to standard practice described in ASTM C12 and as described in this Section. Where an apparent conflict occurs between standard practice and requirements of this Section, this Section governs.
- C. Classification of material will be determined by the Project Manager.

3.2 PREPARATION

- A. Establish traffic control to conform to requirements of Section 01555 – Traffic Control and Regulation. Maintain barricades and warning lights for streets and intersections affected by the Work and are considered hazardous to traffic movements.
- B. Perform work to conform to applicable safety standards and regulations. Employ trench safety system as specified in Section 02280 – Trench Safety Systems.
- C. Immediately notify agency or company owning any existing utility line which is damaged, broken or disturbed. Obtain approval from the Project Manager and agency for any repairs or relocations, either temporary or permanent.
- D. Remove existing pavements and structures, including sidewalks and driveways, to conform to requirements of Section 02105 – Removing Existing Pavements and Structures, as applicable.
- E. Install and operate necessary dewatering and surface-water control measures to conform to Section 01585 – Control of Ground and Surface Water. Provide stable trench to allow installation in accordance with the Technical Specifications.
- F. Maintain permanent benchmarks, monumentation and other reference points. Unless otherwise directed in writing, replace those which are damaged or destroyed in accordance with Section 01725 – Field Surveying.

3.3 CRITICAL LOCATION INVESTIGATION

- A. Horizontal and vertical location of various underground lines shown on the Drawings, including but not limited to water lines, gas lines, storm sewers, sanitary sewers, telecommunication lines, electric lines or

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power ducts, pipelines, concrete and debris, are based on best information available but are only approximate locations. **At Critical Locations shown on the Drawings, field verify horizontal and vertical locations of such lines within zone two feet (2 Ft) vertically and four feet (4 Ft) horizontally of the proposed work.**

1. Verify location of existing utilities a minimum of seven working days (7 wD) in advance of pipe laying activities based on daily pipe laying rate. Use extreme caution and care when uncovering these lines.
 2. Notify the Project Manager in writing immediately upon identification of obstruction. In event of failure to identify obstruction a minimum of seven days (7 D) in advance, the Contractor shall not be entitled to extra cost for downtime including, but not limited to, payroll, equipment, overhead, demobilization and remobilization, until seven days (7 D) has passed from the time the Project Manager is notified of obstruction.
 3. **Verify all locations where there is specified to be a tie-in into existing utilities or infrastructure before the start of excavation, so as to verify all grades and locations.** Failure to do so shall result in the replacement of the installed work at the Contractor's cost for any work installed before finding an error in elevations or locations.
- B. Notify involved utility companies of date and time that excavation will occur and request that their respective utility lines be marked in field. Comply with utility or pipeline company requirements that their representative be present during excavation. Provide the Project Manager with at least forty-eight hours (48 Hrs) notice prior to excavation or related work.
- C. Survey vertical and horizontal locations of obstructions relative to project baseline and datum and plot results on eleven inch by seventeen inch (11 In x 17 In) copy of the Drawings. For large diameter water lines, submit to the Project Manager for approval, with horizontal and vertical alignment dimensions for connections to existing lines tied into project baseline, and signed and sealed by Registered Professional Land Surveyor (R.P.L.S.) licensed by the State of Texas.

3.4 PROTECTION

- A. Protect trees, shrubs, lawns, existing structures and other permanent objects outside of grading limits and within grading limits as designated

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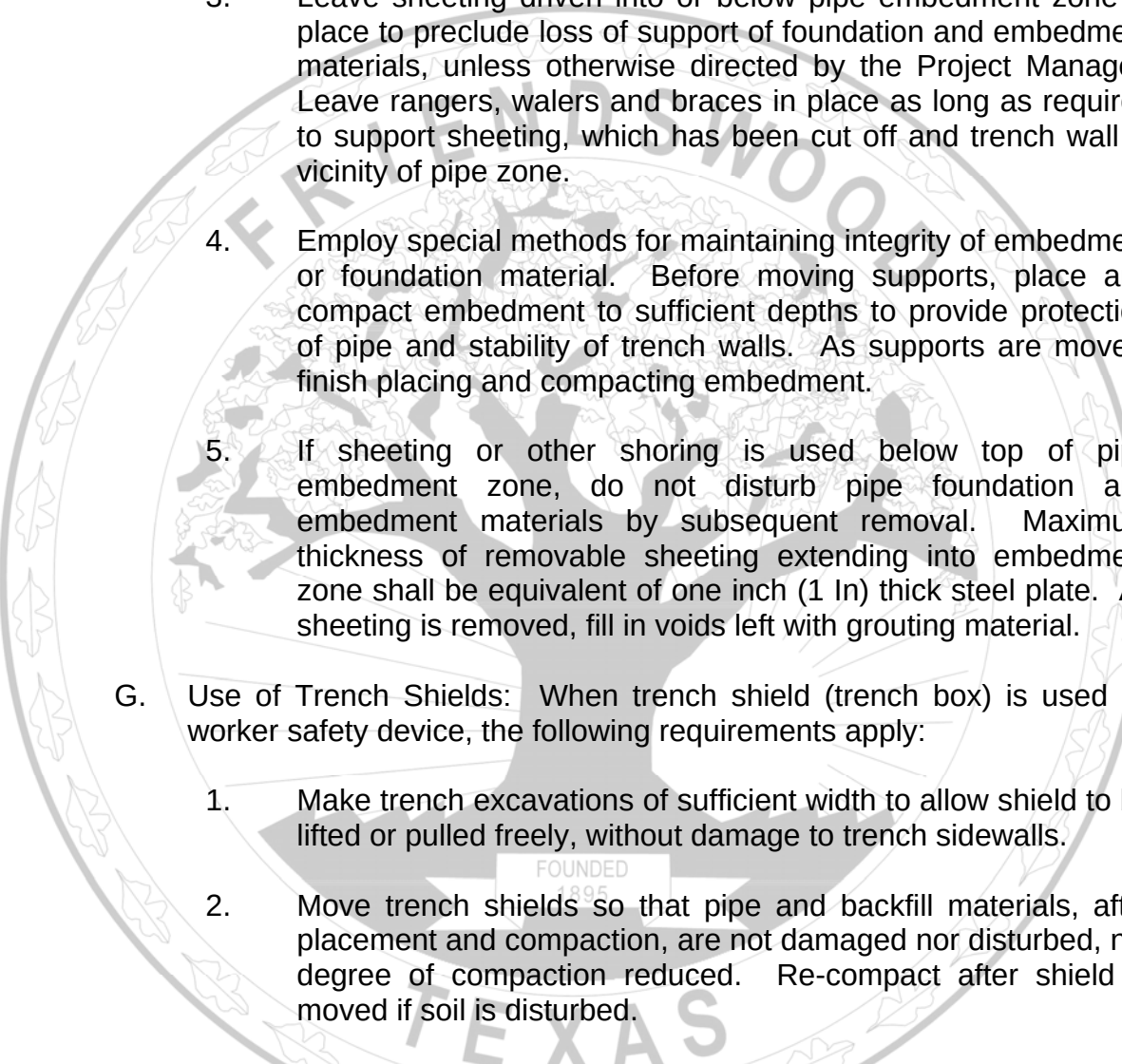
on Drawings and in accordance with requirements of Section 01560 – Tree and Plant Protection.

- B. Protect and support above-grade and below-grade utilities which are to remain.
- C. Restore damaged permanent facilities to pre-construction conditions unless replacement or abandonment of facilities is indicated on the Drawings.
- D. Take measures to minimize erosion of trenches. Do not allow water to pond in trenches. Where slides, washouts, settlements or areas with loss of density or pavement failures or potholes occur, repair, recompact and pave those areas at no additional cost to the City.

3.5 EXCAVATION

- A. Except as otherwise specified or shown on the Drawings, install underground utilities in open cut trenches with vertical sides.
- B. Perform excavation work so that pipe, conduit and ducts can be installed to depths and alignments shown on the Drawings. Avoid disturbing surrounding ground and existing facilities and improvements.
- C. Determine trench excavation widths using TABLE 4.1 – TRENCH EXCAVATION WIDTHS as related to pipe outside diameter (O.D.), in this Section.
- D. Use sufficient trench width or benches above embedment zone for installation of well point headers or manifolds and pumps where depth of trench makes it uneconomical or impractical to pump from surface elevation. Provide sufficient space between shoring cross braces to permit equipment operations and handling of forms, pipe, embedment and backfill and other materials.
- E. Upon discovery of unknown utilities, badly deteriorated utilities, utilities not designated for removal or concealed conditions, discontinue work at that location. Notify the Project Manager and obtain instructions before proceeding.
- F. Shoring of Trench Walls.
 - 1. Install Special Shoring in advance of trench excavation or simultaneously with trench excavation, so that soils within full height of trench excavation walls will remain laterally supported at all times.

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2. For all types of shoring, support trench walls in pipe embedment zone throughout installation. Provide trench wall supports sufficiently tight to prevent washing trench wall soil out from behind trench wall support.
 3. Leave sheeting driven into or below pipe embedment zone in place to preclude loss of support of foundation and embedment materials, unless otherwise directed by the Project Manager. Leave rangers, walers and braces in place as long as required to support sheeting, which has been cut off and trench wall in vicinity of pipe zone.
 4. Employ special methods for maintaining integrity of embedment or foundation material. Before moving supports, place and compact embedment to sufficient depths to provide protection of pipe and stability of trench walls. As supports are moved, finish placing and compacting embedment.
 5. If sheeting or other shoring is used below top of pipe embedment zone, do not disturb pipe foundation and embedment materials by subsequent removal. Maximum thickness of removable sheeting extending into embedment zone shall be equivalent of one inch (1 In) thick steel plate. As sheeting is removed, fill in voids left with grouting material.
- G. Use of Trench Shields: When trench shield (trench box) is used as worker safety device, the following requirements apply:
1. Make trench excavations of sufficient width to allow shield to be lifted or pulled freely, without damage to trench sidewalls.
 2. Move trench shields so that pipe and backfill materials, after placement and compaction, are not damaged nor disturbed, nor degree of compaction reduced. Re-compact after shield is moved if soil is disturbed.
 3. When required, place, spread and compact pipe foundation and bedding materials beneath shield. For backfill above bedding, lift shield as each layer of backfill is placed and spread. Place and compact backfill materials against undisturbed trench walls and foundation.
 4. Maintain trench shield in position to allow sampling and testing to be performed in safe manner.

- 5. Conform to applicable Government regulations.
- H. Voids under paving area outside shield caused by the Contractor's work will require removal of pavement, consolidation and replacement of pavement in accordance with the Contract Documents. Repair damage resulting from failure to provide adequate supports.
- I. Place sand or soil behind shoring or trench shield to prevent soil outside shoring from collapsing and causing voids under pavement. Immediately pack suitable material in outside voids following excavation to avoid caving of trench walls.
- J. Coordinate excavation within fifteen feet (15 Ft) of any products pipeline with company's representative. Support pipeline with methods agreed to by the Pipeline Company's representative. Use small, rubber tired excavator such as a backhoe, to do exploratory excavation. Bucket that is used to dig in close proximity to pipelines shall not have teeth or shall have guard installed over teeth to approximate bucket without teeth. Excavate by hand within one foot (1 Ft) of the pipeline. Do not use larger excavation equipment than normally used to dig trench in vicinity of pipeline until pipelines have been uncovered and fully exposed. Do not place large excavation and hauling equipment directly over pipelines unless approved by the Pipeline Company's representative.
- K. When, during excavation to uncover pipelines, a screwed collar or an oxyacetylene weld is exposed, immediately notify the Project Manager. Provide supports for collar or welds. Discuss with the Pipeline Company's representative and determine methods of supporting collar or weld during excavation and later backfilling operations. When collar is exposed, request the Pipeline Company to provide welder in a timely manner to weld ends of collar prior to backfilling of excavation.

3.6 HANDLING EXCAVATED MATERIALS

- A. Use only excavated materials, which are suitable as defined in this Section and conforming to Section 02140 – Utility Backfill Materials. Place material suitable for backfilling in stockpiles at distance from trench to prevent slides or cave-ins.
- B. When required, provide additional backfill material conforming to requirements of Section 02140 – Utility Backfill Materials.
- C. Do not place stockpiles of excess excavated materials on streets and adjacent properties. Protect backfill material to be used on site. Maintain site conditions in accordance with Section 01505 – Temporary

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Facilities and Controls. Excavate trench so that pipe is centered in trench. Do not obstruct sight distance for vehicles utilizing roadway or detours with stockpiled materials.

3.7 TRENCH FOUNDATION

- A. Excavate bottom of trench to uniform grade to achieve stable trench conditions and satisfactory compaction of foundation or bedding materials.
- B. When wet soil is encountered on trench bottom and dewatering system is not required, over excavate an additional six inches (6 In) with approval by the Project Manager. Place non-woven geotextile fabric and then compact twelve inches (12 In) of crushed stone in one lift on top of fabric. Compact crushed stone with four (4) passes of vibratory-type compaction equipment.
- C. Perform over-excavation, if directed by the Project Manager, in accordance with Paragraph 3.7.B above. Removal of unstable or unsuitable material may be required if approved by the Project Manager;
 - 1. Even though the Contractor has not determined material to be unsuitable or;
 - 2. If unstable trench bottom is encountered and an adequate ground water control system is installed and operating according to Section 01585 – Control of Ground and Surface Water.
- D. Place trench dams in Class I foundations in line segments longer than one hundred feet (100 Ft) between manholes and not less than one (1) in every five hundred feet (500 Ft) of pipe placed. Install additional dams as needed to achieve workable construction conditions. Do not place trench dams closer than five feet (5 Ft) from manholes.

3.8 PIPE EMBEDMENT, PLACEMENT AND COMPACTION

- A. Remove loose, sloughing, caving or otherwise unsuitable soil from bottoms and sidewalls of trenches immediately prior to placement of embedment materials.
- B. Place embedment including bedding, haunching and initial backfill as shown on the Drawings.
- C. For pipe installation, manually spread embedment materials around

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pipe to provide uniform bearing and side support when compacted. Protect flexible pipe from damage during placing of pipe zone bedding material. Perform placement and compaction directly against undisturbed soils in trench sidewalls or against sheeting which is to remain in place.

- D. Do not place trench shields or shoring within height of embedment zone unless means to maintain density of compacted embedment material are used. If moveable supports are used in embedment zone, lift supports incrementally to allow placement and compaction of material against undisturbed soil.
- E. Place geotextile to prevent particle migration from in-situ soil into open-graded (Class I) embedment materials or drainage layers.
- F. Do not damage coatings or wrappings of pipes during backfilling and compacting operations. When embedding coated or wrapped pipes, do not use crushed stone or other sharp, angular aggregates.
- G. Place haunching material manually around pipe and compact it to provide uniform bearing and side support. If necessary, hold small-diameter or lightweight pipe in place during compaction of haunch areas and placement beside pipe with sand bags or other suitable means.
- H. Place electrical conduit, if used, directly on foundation without bedding.
- I. Shovel in-place and compact embedment material using pneumatic or hydraulic tampers in restricted areas and vibratory-plate compactors or engine-powered jumping jacks in unrestricted areas. Compact each lift before proceeding with placement of next lift. Water tamping or jetting shall not allowed.
- J. For water lines construction embedment, use bank run sand concrete sand gem sand pea gravel or crushed limestone as specified in Section 02140 – Utility Backfill Material. For water lines adhere to the following subparagraph numbers 1 and 2; for utility installation other than water, adhere to numbers 3 and 4 below:

- 1. Class I, II and III Embedment Materials:
 - a. Maximum six inches (6 In) compacted lift thickness.
 - b. Compact to achieve minimum of ninety-five percent (95%) of maximum dry density as determined according to ASTM D698.

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- c. Moisture content to be within plus or minus three percent ($\pm 3\%$) of optimum as determined according to ASTM D698, unless otherwise approved by the Project Manager.
- 2. Cement-Stabilized Sand (where required for special installations):
 - a. Maximum six inches (6 In) compacted thickness.
 - b. Compact to achieve minimum of ninety-five percent (95%) of maximum dry density as determined according to ASTM D698.
 - c. Moisture content to be on dry side of optimum as determined according to ASTM D698 but sufficient for effective hydration.
- 3. Class I Embedment Materials:
 - a. Maximum six inches (6 In) compacted lift thickness.
 - b. Systematic compaction by at least two (2) passes of vibrating equipment. Increase compaction effort as necessary to effectively embed pipe to meet deflection test criteria.
 - c. Moisture content as determined by the Contractor for effective compaction without softening soil of trench bottom, foundation or trench walls.
- 4. Class II Embedment and Cement-Stabilized Sand:
 - a. Maximum six inches (6 In) compacted thickness.
 - b. Compaction by methods determined by the Contractor to achieve minimum of ninety-five percent (95%) of maximum dry density as determined according to ASTM D698 for Class II materials and according to ASTM D558 for Cement-Stabilized materials.
 - c. Moisture content of Class II materials within three percent ($\pm 3\%$) of optimum as determined according to ASTM D698. Moisture content of Cement-Stabilized sands on dry side of optimum as determined according

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to ASTM D558 but sufficient for effective hydration.

- K. Place trench dams in Class I embedment in line segments longer than one hundred feet (100 Ft) between manholes and not less than one (1) in every five hundred feet (500 Ft) of pipe placed. Install additional dams as needed to achieve workable construction conditions. Do not place trench dams closer than five feet (5 Ft) from manholes.

3.9 TRENCH ZONE BACKFILL PLACEMENT AND COMPACTION

- A. Place backfill for pipe or conduits and restore surface as soon as practicable. Leave only minimum length of trench open as necessary for construction.
- B. For water lines, backfill in trench zone, including auger pits, intermediate and site pits, with bank run sand select fill or random backfill material as specified in Section 02140 – Utility Backfill materials.
- C. For sewer pipes, use backfill materials described by trench limits. For "trench zone backfill" under pavement and to within one foot (1 Ft) back of curb, use Cement-Stabilized sand for pipes of nominal sizes thirty-six inches (36 In) in diameter and smaller to level twelve inches (12 In) below the pavement. For sewer pipes forty-two inches (42 In) in diameter and larger, under pavement or natural ground, in satisfactory soil conditions, backfill from twelve inches (12 In) above top of pipe to twelve inches (12 In) below pavement with suitable on-site material or select backfill. For sewer pipes forty-two inches (42 In) in diameter and larger, under pavement or natural ground, in unsatisfactory soil conditions, backfill from twelve inches (12 In) above top of pipe to twelve inches (12 In) below pavement with suitable on-site material or select backfill. Use select backfill for rigid pavements or flexible base material for asphalt pavements for twelve (12) inch backfill directly under pavement. For backfill materials reference Section 02140 – Utility Backfill Materials.
- D. Where damage to completed pipe installation work is likely to result from withdrawal of sheeting, leave sheeting in place. Cut off sheeting one and one-half feet (1-1/2 Ft) or more above crown of pipe. Remove trench supports within five feet (5 Ft) from ground surface.
- E. When shown on Drawings, random backfill of suitable material may be used in trench zone for trench excavations outside pavements.
- F. Place trench zone backfill in lifts and compact. Fully compact each lift before placement of next lift.

1. Class I, II, III or IV or combination thereof (Random Backfill):
 - a. Maximum eight inches (8 In) compacted lift thickness.
 - b. Compact by vibratory equipment to minimum of ninety-five percent (95%) of maximum dry density determined according to ASTM D698.
 - c. Moisture content within plus or minus three percent ($\pm 3\%$) of optimum determined according to ASTM D698, unless otherwise approved by the Project Manager.
 2. Cement-Stabilized Sand:
 - a. Maximum lift thickness determined by the Contractor to achieve uniform placement and required compaction, but not to exceed twelve inches (12 In).
 - b. Compact by vibratory equipment to minimum of ninety-five percent (95%) of maximum dry density determined according to ASTM D558.
 - c. Moisture content on dry side of optimum determined according to ASTM D558 but sufficient for cement hydration.
 3. Select Backfill:
 - a. Place in maximum eight inch (8 In) loose layers.
 - b. Compaction by equipment providing tamping or kneading impact to minimum of ninety-five percent (95%) of maximum dry density determined according to ASTM D698.
 - c. Moisture content within plus or minus three percent ($\pm 3\%$) above optimum determined according to ASTM D698, unless approved by the Project Manager.
- G. Unless otherwise shown on the Drawings, for trench excavations not under pavement or in the right of way, random backfill of suitable material may be used in trench zone as directed by the Project Manager.
1. Fat clays (CH) may be used as trench zone backfill outside

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paved areas at the Contractor's option. When required density is not achieved, rework, dry out, use lime stabilization or other approved methods to achieve compaction requirements or use different suitable material at no additional cost to the City.

2. Maximum eight inch (8 In) compacted lift thickness for clayey soils and maximum eight inch (8 In) lift thickness for granular soils.
 3. Compact to minimum of ninety percent (90%) of maximum dry density determined according to ASTM D698.
 4. Moisture content as necessary to achieve density.
- H. For electric conduits, remove form work used for construction of conduits before placing trench zone backfill.
- I. Water soaking, jetting or compaction by backhoe bucket is not acceptable and shall not be used.

3.10 MANHOLES, JUNCTION BOXES AND OTHER PIPELINE STRUCTURES

- A. Meet requirements of adjoining utility installations for backfill of pipeline structures, as shown on the Drawings.
- B. Below paved areas, encapsulate manhole with Cement-Stabilized sand; minimum of one foot (1 Ft) below base, minimum one foot (1 Ft) around walls, up to within twelve inches (12 In) of pavement subgrade. Compact in accordance with Paragraph 3.9.F.2 of this Section.
- C. In unpaved areas, use select fill for backfill. Existing material that qualifies as select material may be used, unless indicated otherwise on the Drawings. Deposit backfill in uniform layers and compact each layer as specified. Maintain backfill material at plus or minus three percent ($\pm 3\%$) of optimum moisture content, unless otherwise approved by the Project Manager. Place fill material in uniform eight inch (8 In) maximum loose layers. Compact fill to at least ninety-five percent (95%) of maximum Standard Proctor Density according to ASTM D698.

3.11 FIELD QUALITY CONTROL

- A. Test for material source qualifications as defined in Section 02140 – Utility Backfill Materials.
- B. Provide excavation and trench safety systems at locations and to depths required for testing and retesting during construction at no

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additional cost to the City.

- C. Tests will be performed on minimum of three (3) different samples of each material type for plasticity characteristics, in accordance with ASTM D4318 and for gradation characteristics, in accordance with Tex-101-E and Tex-110-E. Additional classification tests shall be performed whenever there is noticeable change in material gradation or plasticity or when requested by the Project Manager.
- D. At least three (3) tests for moisture-density relationships shall be performed initially for backfill materials in accordance with ASTM D698 and for cement-stabilized sand in accordance with ASTM D558. Perform additional moisture-density relationship tests once a month or whenever there is noticeable change in material gradation or plasticity.
- E. In-place density tests of compacted pipe foundation, embedment and trench zone backfill soil materials shall be performed according to ASTM D1556 or ASTM D2922 and ASTM D3017 and at following frequencies and conditions:
 - 1. For open cut construction projects and auger pits: Unless otherwise approved by the Project Manager, successful compaction to be measured by one (1) test per one hundred linear feet (100 Lf) measured along pipe for compacted embedment and one (1) test per one hundred linear feet (100 Lf) measured along pipe for compacted trench zone backfill material and one (1) test at each auger pit.
 - 2. A minimum of three (3) density tests for each full shift of Work.
 - 3. Density tests shall be distributed among placement areas. Placement areas are: foundation, bedding, haunching, initial backfill and trench zone.
 - 4. The number of tests shall be increased if inspection determines that soil type or moisture content are not uniform or if compacting effort is variable and not considered sufficient to attain uniform density, as specified.
 - 5. Density tests at various depths below fill surface, if required, shall be performed by pit excavation. Material in previously placed lifts may therefore be subject to acceptance/rejection.
 - 6. Two (2) verification tests shall be performed adjacent to in-place tests showing density less than acceptance criteria. Placement will be rejected unless both verification tests show

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acceptable results.

7. Recompacted placement shall be retested at same frequency as first test series, including verification tests.
 8. Identify elevation of test with respect to natural ground or pavement.
- F. Recondition, recompact and retest at the Contractor's expense if tests indicate the Work does not meet specified compaction requirements. For hardened soil cement with nonconforming density, core and test for compressive strength at the Contractor's expense.
- G. Acceptability of crushed rock compaction will be determined by inspection.

3.12 DISPOSAL OF EXCESS MATERIAL

- A. Excess material shall be the property of the Contractor and shall be disposed of properly with no cost to the City. Dispose of excess materials in accordance with requirements of Section 01580 – Waste Material Disposal.

PART IV: TABLES

4.1 TABLE EXCAVATION WIDTHS

Nominal Pipe Size, inches	Minimum Trench Width, inches
Less than 18"	O.D. + 18"
18" to 30"	O.D. + 24"
36" to 42"	O.D. + 36"
Greater than 42"	O.D. + 48"

END OF SECTION

SECTION 02140

UTILITY BACKFILL MATERIALS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

A. Material Classifications.

B. Utility Backfill Materials:

1. Concrete sand.
2. Gem sand.
3. Pea gravel.
4. Crushed stone.
5. Crushed concrete.
6. Bank run sand.
7. Select backfill.
8. Random backfill.

C. Material Handling and Quality Control Requirements.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. No separate payment will be made for backfill material. Include payment in unit price for applicable utility installation.
2. Payment for backfill material, when included as separate pay item or when directed by the Project Manager, shall be on a cubic yard basis for material placed and compacted within theoretical trench width limits and thickness of material according to the Drawings or as directed by the Project Manager.

3. Payment for backfill of authorized over-excavation is in accordance with Section 02130 – Extra Unit Price Work for Excavation and Backfill.
4. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section shall be included in Total Stipulated Price.

1.3 DEFINITIONS

A. Unsuitable Material:

1. Materials classified as ML, CL-ML, MH, PT, OH and OL according to ASTM D2487.
2. Materials that cannot be compacted to required density due to gradation, plasticity or moisture content.
3. Materials containing large clods, aggregates or stones greater than four inches (4 In) in any dimension; debris, vegetation or waste; or any other deleterious materials.
4. Materials contaminated with hydrocarbons or other chemical contaminants.

B. Suitable Material:

1. Materials meeting specification requirements.
2. Unsuitable materials meeting specification requirements for suitable soils after treatment with lime or cement.

C. Foundation Backfill Materials: Natural soil or manufactured aggregate meeting Class I requirements and geotextile filter fabrics as required, to control drainage and material separation. Foundation backfill material shall be placed and compacted as backfill where needed to provide stable support for structure foundation base. Foundation backfill materials may include concrete fill and seal slabs as directed by the Project Manager.

D. Foundation Base: Crushed stone aggregate with filter fabric as required, cement-stabilized sand or concrete seal slab. Foundation

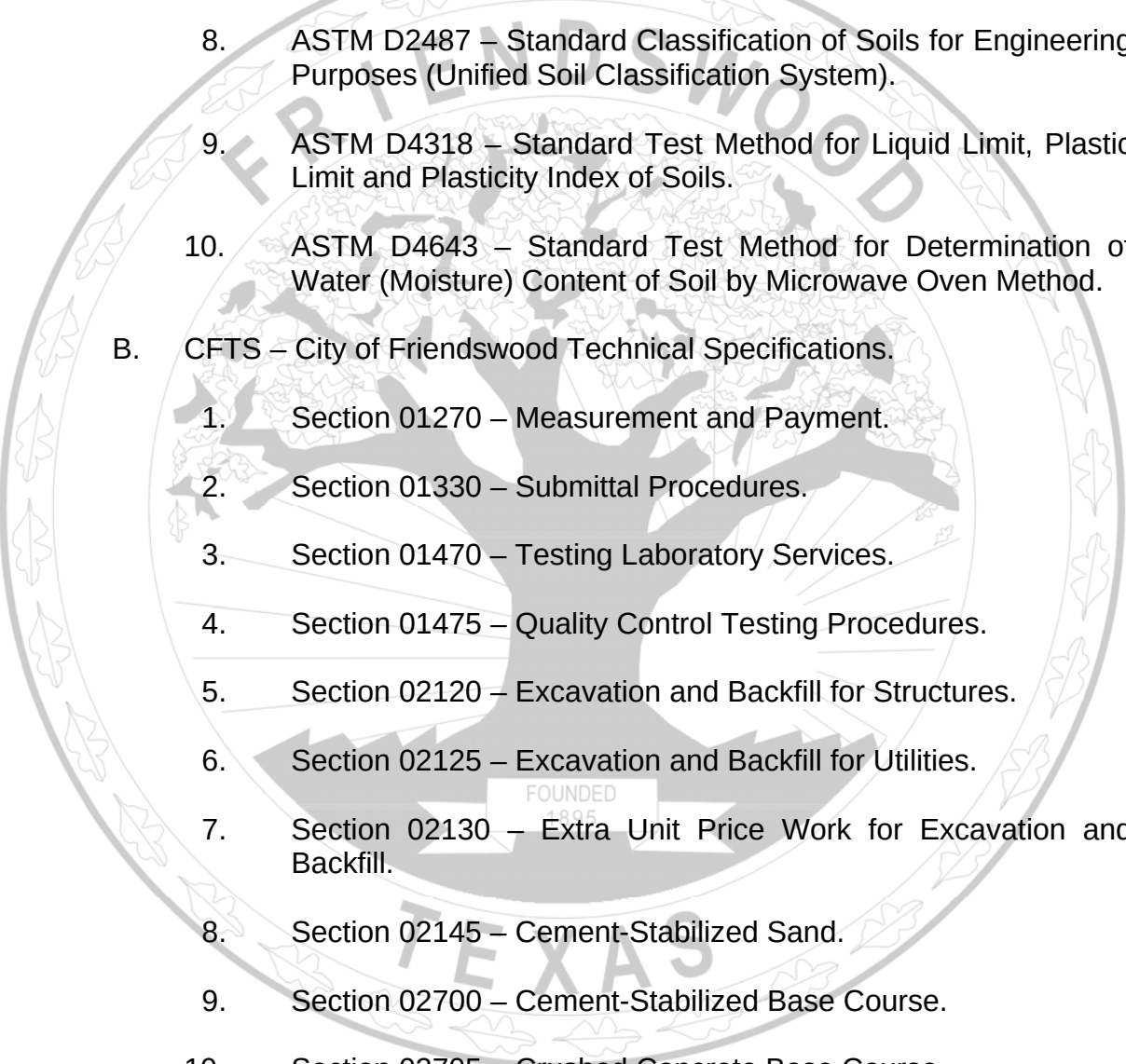
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base provides smooth, level working surface for construction of concrete foundation.

- E. Backfill Material: Classified soil material meeting specified quality requirements for designated application as embedment or trench zone backfill.
- F. Embedment Material: Soil material placed under controlled conditions within embedment zone extending vertically upward from top of foundation to an elevation twelve inches (12 In) above top of pipe and including pipe bedding, haunching and initial backfill.
- G. Trench Zone Backfill: Classified soil material meeting specified quality requirements and placed under controlled conditions in trench zone from top of embedment zone to base course in paved areas or to surface grading material in unpaved areas.
- H. Foundation: Either suitable soil of trench bottom or material placed as backfill of over-excavation for removal and replacement of unsuitable or otherwise unstable soils.
- I. Source: Source selected by the Contractor for supply of embedment or trench zone backfill material. Selected source may be project excavation, off-site borrow pits, commercial borrow pits or sand and aggregate production or manufacturing plants, subject to approval by the Project Manager.
- J. Refer to Section 02125 – Excavation and Backfill for Utilities for other definitions regarding utility installation by trench construction.

1.4 REFERENCES

- A. ASTM – American Society for Testing and Materials.
 - 1. ASTM C33 – Standard Specification for Concrete Aggregate.
 - 2. ASTM C40 – Standard Test Method for Organic Impurities in Fine Aggregates for Concrete.
 - 3. ASTM C123 – Standard Test Method for Lightweight Particles in Aggregate.
 - 4. ASTM C131 – Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in Los Angeles Machine.

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5. ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 6. ASTM C142 – Standard Test Method for Clay Lumps and Friable Particles in Aggregates.
 7. ASTM D1140 – Standard Test Method for Amount of Material in Soils Finer Than No. 200 Sieve.
 8. ASTM D2487 – Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 9. ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
 10. ASTM D4643 – Standard Test Method for Determination of Water (Moisture) Content of Soil by Microwave Oven Method.
 - B. CFTS – City of Friendswood Technical Specifications.
 1. Section 01270 – Measurement and Payment.
 2. Section 01330 – Submittal Procedures.
 3. Section 01470 – Testing Laboratory Services.
 4. Section 01475 – Quality Control Testing Procedures.
 5. Section 02120 – Excavation and Backfill for Structures.
 6. Section 02125 – Excavation and Backfill for Utilities.
 7. Section 02130 – Extra Unit Price Work for Excavation and Backfill.
 8. Section 02145 – Cement-Stabilized Sand.
 9. Section 02700 – Cement-Stabilized Base Course.
 10. Section 02705 – Crushed Concrete Base Course.
 11. Section 02715 – Hot-Mix Asphaltic Base Course.
 12. Section 02845 – Pavement Repair and Resurfacing.
 13. Section 03300 – Structural Concrete.

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C. TxDOT – Texas Department of Transportation.

1. TxDOT Tex-110-E – Determining Particle Size Analysis of Soils.
2. TxDOT Tex-460-A – Material Finer Than 75 Fm (No.200) Sieve In Mineral Aggregates (Decantation Test for Concrete Aggregates).

1.5 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit description of source, material classification and product description, production method and application of backfill materials.
- C. Submit test results for samples of off-site backfill materials. Comply with Paragraph 2.3, Material Testing.
- D. Before stockpiling materials, submit copy of approval from landowner for stockpiling backfill material on a private property.
- E. Provide delivery ticket which includes source location for each delivery of material that is obtained from off-site sources or is being paid as a specific bid item.

1.6 TESTS

- A. Perform tests of sources for backfill material in accordance with Paragraph 2.3.B.
- B. Verification tests of backfill materials shall be performed by the City in accordance with Sections 01470 – Testing Laboratory Services and 01475 – Quality Control Testing Procedures and in accordance with Paragraph 3.3.

1.7 EMBEDEMENT

- A. Gravity Sanitary Sewers and Storm sewers shall use Cement-Stabilized Sand for bedding, haunching and initial backfill.
- B. Water lines and Force Main Sewers shall use Bank run sand for bedding, haunching and initial backfill.

PART II: PRODUCTS

2.1 MATERIAL CLASSIFICATIONS

- A. Classify materials for backfill for purpose of quality control in accordance with Unified Soil Classification Symbols as defined in ASTM D2487. Material use and application is defined in utility installation specifications and the Drawings either by class, as described in Paragraph 2.1.B or by product descriptions, as given in Paragraph 2.2.
- B. Class Designations Based on Laboratory Testing:
1. Class I: Well-graded gravels and sands, gravel-sand mixtures, crushed well-graded rock, little or no fines (GW, SW):
 - a. Plasticity index: Non-plastic.
 - b. Gradation: D_{60}/D_{10} – greater than four percent (4%); amount passing No. 200 sieve – less than or equal to five percent (5%).
 2. Class II: Poorly graded gravels and sands, silty gravels and sands, little to moderate fines (GM, GP, SP, SM):
 - a. Plasticity index: Non-plastic to four (4).
 - b. Gradations:
 - 1) Gradation (GP, SP): amount passing No. 200 sieve – less than five percent (5%).
 - 2) Gradation (GM, SM): amount passing No. 200 sieve – between twelve percent (12%) and fifty percent (50%).
 - 3) Borderline gradations with dual classifications (e.g., SP-SM): amount passing No. 200 sieve – between five percent (5%) and twelve percent (12%).
 3. Class III: Clayey gravels and sands, poorly graded mixtures of gravel, sand, silt and clay (GC, SC and dual classifications, e.g., SP-SC):

- a. Plasticity index: Greater than seven (7).
 - b. Gradation: Amount passing No. 200 sieve – between twelve percent (12%) and fifty percent (50%).
4. Class IVA: Lean clays (CL).
- a. Plasticity Indexes:
 - 1) Plasticity index: Greater than seven (7) and above A line.
 - 2) Borderline plasticity with dual classifications (CL-ML): PI between four (4) and seven (7).
 - b. Liquid limit: Less than fifty (50).
 - c. Gradation: Amount passing No. 200 sieve – greater than fifty percent (50%).
 - d. Inorganic.
5. Class IVB: Fat clays (CH).
- a. Plasticity index: Above A line.
 - b. Liquid limit: Fifty (50) or greater.
 - c. Gradation: Amount passing No. 200 sieve – greater than fifty percent (50%).
 - d. Inorganic.
6. Use soils with dual class designation according to ASTM D2487 and which are not defined above, according to more restrictive class.

2.2 PRODUCT DESCRIPTIONS

- A. Soils classified as silt (ML) silty clay (CL-ML with PI of four (4) to seven (7), elastic silt (MH), organic clay and organic silt (OL, OH) and organic matter (PT) are not acceptable as backfill materials. These soils may be used for site grading and restoration in unimproved areas as approved by the Project Manager. Soils in Class IVB, fat clay (CH) may be used as backfill materials where allowed by applicable backfill installation specification. Refer to Section 02120 – Excavation and

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Backfill for Structures and Section 02125 – Excavation and Backfill for Utilities.

- B. Provide backfill material that is free of stones greater than six inches (6 In), free of roots, waste, debris, trash, organic material, unstable material, non-soil matter, hydrocarbon or other contamination, conforming to following limits for deleterious materials:
 - 1. Clay lumps: Less than one-half percent (1/2%) for Class I and less than two percent (2%) for Class II, when tested in accordance with ASTM C142.
 - 2. Lightweight pieces: Less than five percent (5%) when tested in accordance with ASTM C123.
 - 3. Organic impurities: No color darker than standard color when tested in accordance with ASTM C40.
- C. Manufactured materials, such as crushed concrete, may be substituted for natural soil or rock products where indicated in product specification and as approved by the Project Manager, provided that physical property criteria are determined to be satisfactory by testing.
- D. Bank Run Sand: Durable bank run sand classified as SP, SW or SM by Unified Soil Classification System (ASTM D2487) meeting following requirements:
 - 1. Less than fifteen percent (15%) passing No. 200 sieve when tested in accordance with ASTM D1140. Amount of clay lumps or balls may not exceed two percent (2%).
 - 2. Material passing No. 40 sieve shall meet the following requirements when tested in accordance with ASTM D4318: Plasticity index: not exceeding seven (7).
- E. Concrete Sand: Natural sand, manufactured sand or combination of natural and manufactured sand conforming to requirements of ASTM C33 and graded within limits specified in Table 4.1 – SIEVE ANALYSIS REQUIREMENTS FOR CONCRETE SAND in this section, when tested in accordance with ASTM C136.
- F. Gem Sand: Sand conforming to requirements of ASTM C33 for course aggregates specified for No. 8 size and graded within the limits specified in Table 4.2 – SIEVE ANALYSIS REQUIREMENTS FOR GEM SAND in this section, when tested in accordance with ASTM C136.

- G. Pea Gravel: Durable particles composed of small, smooth, rounded stones or pebbles and graded within the limits specified in Table 4.3 – SIEVE ANALYSIS REQUIREMENTS FOR PEA GRAVEL in this section, when tested in accordance with ASTM C136.
- H. Crushed Aggregates: Crushed aggregates consist of durable particles obtained from an approved source and meeting the following requirements:
1. Materials of one (1) product delivered for same construction activity from single source, unless otherwise approved by the Project Manager.
 2. Non-plastic fines.
 3. Los Angeles abrasion test wear not exceeding forty-five percent (45%) when tested in accordance with ASTM C131.
 4. Crushed aggregate shall have minimum of ninety percent (90%) of particles retained on a No. 4 sieve with two (2) or more crushed faces as determined by Tex-460-A, Part I.
 5. Crushed stone: Produced from oversize plant processed stone or gravel, sized by crushing to predominantly angular particles from naturally occurring single source. Uncrushed gravel is not acceptable materials for embedment where crushed stone is shown on applicable utility embedment drawing details.
 6. Crushed Concrete: Crushed concrete is an acceptable substitute for crushed stone as utility backfill. Gradation and quality control test requirements are same as crushed stone. Provide crushed concrete produced from normal weight concrete of uniform quality; containing particles of aggregate and cement material, free from other substances such as asphalt, reinforcing steel fragments, soil, waste gypsum (calcium sulfate) or debris.
 7. Gradations, as determined in Table 4.4 – SIEVE ANALYSIS REQUIREMENTS FOR CRUSHED AGGREGATE in this section, in accordance with Tex-110-E.
- I. Select Backfill: Class III clayey gravel or sand or Class IV lean clay with plasticity index between seven (7) and twenty (20) or clayey soils treated with lime in accordance with Section 02845 – Pavement Repair and Resurfacing, to meet plasticity criteria.

- J. Random Backfill: Any suitable soil or mixture of soils within Classes I, II, III and IV; or fat clay (CH) where allowed by applicable backfill installation specification. Refer to Section 02120 – Excavation and Backfill for Structures and Section 02125 – Excavation and Backfill for Utilities.
- K. Cement-Stabilized Sand: Conform to requirements of Section 02145 – Cement-Stabilized Sand.
- L. Concrete Backfill: Conform to Class A concrete as specified in Section 03300 – Structural Concrete.
- M. Flexible Base Course Material: Conform to requirements of applicable portions of Section 02700 – Cement-Stabilized Base Course, Section 02705 – Crushed Concrete Base Course and Section 02715 – Hot-Mix Asphaltic Base Course.

2.3 MATERIAL TESTING

- A. Source Qualification: Perform testing to obtain tests by suppliers for selection of material sources and products not from the project site. Test samples of processed materials from current production representing material to be delivered. Use tests to verify that materials meet specification requirements. Repeat qualification test procedures each time source characteristics change or there is planned change in source location or supplier. Include the following qualification tests, as applicable:
 - 1. Gradation: Report complete sieve analyses regardless of specified control sieves from largest particle through No. 200 sieve.
 - 2. Plasticity of material passing No. 40 sieve.
 - 3. Los Angeles abrasion wear of material retained on a No. 4 sieve.
 - 4. Clay lumps.
 - 5. Lightweight pieces.
 - 6. Organic impurities.
- B. Production Testing: Provide reports to the Project Manager from an independent testing laboratory that backfill materials to be placed in the

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Work meet applicable specification requirements.

- C. Assist the Project Manager in obtaining material samples for verification testing at source or at production plant.

PART III: EXECUTION

3.1 SOURCES

- A. Use of existing material in trench excavations is acceptable, provided applicable Technical Specification requirements are satisfied.
- B. Identify off-site sources for backfill materials at least fourteen days (14 D) ahead of intended use so that the Project Manager may obtain samples for verification testing.
- C. Materials may be subjected to inspection or additional verification testing after delivery. Materials which do not meet requirements of specifications shall be rejected. Do not use material which, after approval, has become unsuitable for use due to segregation, mixing with other materials or by contamination. Once material is approved by the Project Manager, expense for sampling and testing required to change to different material shall be arranged and paid for by the Contractor.
- D. Bank run sand, select backfill and random backfill, if available in project excavation, may be obtained by selective excavation and acceptance testing. Obtain additional quantities of these materials and other materials required to complete work from off-site sources.
- E. The City does not represent or guarantee that any soil found in excavation work will be suitable and acceptable as backfill material.

3.2 MATERIAL HANDLING

- A. When backfill material is obtained from either commercial or non-commercial borrow pit, open pit to expose vertical faces of various strata for identification and selection of approved material to be used. Excavate selected material by vertical cuts extending through exposed strata to achieve uniformity in product.
- B. Establish temporary stockpile locations for practical material handling, control and verification testing by the Project Manager in advance of final placement. Obtain approval from landowner for storage of backfill material on adjacent private property.

- C. When stockpiling backfill material near project site, use appropriate covers to eliminate blowing of materials into adjacent areas and prevent runoff containing sediments from entering drainage system.
- D. Place stockpiles in layers to avoid segregation of processed materials. Load material by making successive vertical cuts through entire depth of stockpile.

3.3 FIELD QUALITY CONTROL

A. Quality Control.

- 1. The Project Manager may sample and test backfill at:
 - a. Sources including borrow pits, production plants and Contractor's designated off-site stockpiles.
 - b. On-site stockpiles.
 - c. Materials placed in the Work.
- 2. The Project Manager may re-sample material at any stage of work or location if changes in characteristics are apparent.

- B. Production Verification Testing: A Certified testing laboratory as described in Section 01470 – Testing Laboratory Services, will provide verification testing on backfill materials, as directed by the Project Manager. Samples may be taken at source or at production plant, as applicable.

PART IV: TABLES

4.1 SIEVE ANALYSIS REQUIREMENTS FOR CONCRETE SAND

Sieve	Percent Passing
3/8"	100%
No. 4	95% to 100%
No. 8	80% to 100%
No. 16	50% to 85%
No. 30	25% to 60%
No. 50	10% to 30%
No. 100	2% to 10%

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4.2 SIEVE ANALYSIS REQUIREMENTS FOR GEM SAND

Sieve	Percent Passing
3/8"	95% to 100%
No. 4	60% to 80%
No. 8	15% to 40%

4.3 SIEVE ANALYSIS REQUIREMENTS FOR PEA GRAVEL

Sieve	Percent Passing
1/2"	100%
3/8"	85% to 100%
No. 4	10% to 30%
No. 8	0% to 10%
No. 16	0% to 5%

4.4 SIEVE ANALYSIS REQUIREMENTS FOR CRUSHED AGGREGATES

Sieve	Percent Passing by Weight for Pipe Embedment by Ranges of Nominal Pipe Sizes		
	>15"	15" to 8"	<8"
1"	95% to 100%	100%	--
3/4"	60% to 90%	90% to 100%	100%
1/2"	25% to 60%	--	90% to 100%
3/8"	--	20% to 55%	40% to 70%
No. 4	0% to 5%	0% to 10%	0% to 15%
No. 8	--	0% to 5%	0% to 5%

END OF SECTION

SECTION 02145

CEMENT-STABILIZED SAND

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Cement-stabilized sand.

1.2 MEASUREMENT AND PAYMENT

- A. Unit Prices:

1. No separate payment will be made for work performed under this Section. Include cost of such work in Contract unit prices for items listed in Unit Price Form requiring cement-stabilized sand.
2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

- B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section shall be included in Total Stipulated Price.

1.3 REFERENCES

- A. ASTM – American Society for Testing and Materials.

1. ASTM C33 – Standard Specification for Concrete Aggregates (Fine Aggregate).
2. ASTM C40 – Standard Test Method for Organic Impurities in Fine Aggregates for Concrete.
3. ASTM C42 – Standard Test Methods for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
4. ASTM C94 – Standard Specification for Ready-Mixed Concrete.
5. ASTM C123 – Standard Test Method for Lightweight Particles

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in Aggregate.

6. ASTM C142 – Standard Test Method for Clay Lumps and Friable Particles in Aggregates.
 7. ASTM C150 – Specification for Portland Cement.
 8. ASTM D558 – Standard Test Method for Moisture-Density Relations of Soil Cement-Mixtures.
 9. ASTM D1632 – Standard Practice for Making and Curing Soil-Cement Compression and Flexure Test Specimens in the Laboratory.
 10. ASTM D1633 – Standard Test Method for Compressive Strength of Molded Soil-Cement Cylinders.
 11. ASTM D2487 – Standard Test Method for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 12. ASTM D2922 – Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
 13. ASTM D3665 – Standard Practice for Random Sampling of Construction Materials.
 14. ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils.
- B. CFTS – City of Friendswood Technical Specifications.
1. Section 01270 – Measurement and Payment.
 2. Section 01330 – Submittal Procedures.
 3. Section 01470 – Testing Laboratory Services.
 4. Section 01475 – Quality Control Testing Procedures.
 5. Section 02140 – Utility Backfill Materials.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit proposed target cement content and production data for sand-

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cement mixture in accordance with requirements of Paragraph 2.3, Materials Qualifications.

1.5 DESIGN REQUIREMENTS

- A. Use sand-cement mixture producing minimum unconfined compressive strength of one hundred (100 psi) in forty-eight hours (48 Hrs).
 - 1. Design will be based on strength specimens molded in accordance with ASTM D558 at moisture content within three percent (3%) above or below of optimum moisture content and within four hours (4 Hrs) of batching.
 - 2. Determine minimum cement content from production data and statistical history. Provide no less than one and one tenth (1.1) sacks of cement per ton of dry sand.

PART II: PRODUCTS

2.1 MATERIALS

- A. Cement: Type I Portland cement conforming to ASTM C150.
- B. Sand: Clean, durable sand meeting grading requirements for fine aggregates of ASTM C33 or requirements for bank run sand of Section 02140 – Utility Backfill Materials and the following requirements:
 - 1. Classified as SW, SP, SW-SM, SP-SM or SM by Unified Soil Classification System of ASTM D2487.
 - 2. Deleterious materials:
 - a. Clay lumps, ASTM C142 – less than one-half percent (1/2%).
 - b. Lightweight pieces, ASTM C123; less than five percent (5%).
 - c. Organic impurities, ASTM C40, color no darker than standard color.
 - 3. Plasticity index of four (4) or less when tested in accordance with ASTM D4318.
- C. Water: Potable water, free of oils, acids, alkalies, organic matter or

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other deleterious substances, meeting requirements of ASTM C94.

2.2 MIXING MATERIALS

- A. Add required amount of water and mix thoroughly in pugmill-type mixer.
- B. Stamp batch ticket at plant with time of loading. Reject material not placed and compacted within four hours (4 Hrs) after mixing.

2.3 MATERIAL QUALIFICATION

- A. Determine target cement content of material as follows:
 - 1. Obtain samples of sand-cement mixtures at production facility representing range of cement content consisting of at least three (3) points.
 - 2. Complete molding of samples within four hours (4 Hrs) after addition of water.
 - 3. Perform strength tests [average of two (2) specimens] at forty-eight hours (48 Hrs) and seven days (7 D).
 - 4. Perform cement content tests on each sample.
 - 5. Perform moisture content tests on each sample.
 - 6. Plot average forty-eight hour (48 Hr) strength vs. cement content.
 - 7. Record scale calibration date, sample date, sample time, molding time, cement feed dial settings and silo pressure (if applicable).
- B. Test raw sand for following properties at point of entry into pug-mill:
 - 1. Gradation.
 - 2. Plasticity index.
 - 3. Organic impurities.
 - 4. Clay lumps and friable particles.
 - 5. Lightweight pieces.

6. Moisture content.
 7. Classification.
- C. Present data obtained in format similar to that provided in sample data form attached to this Section.

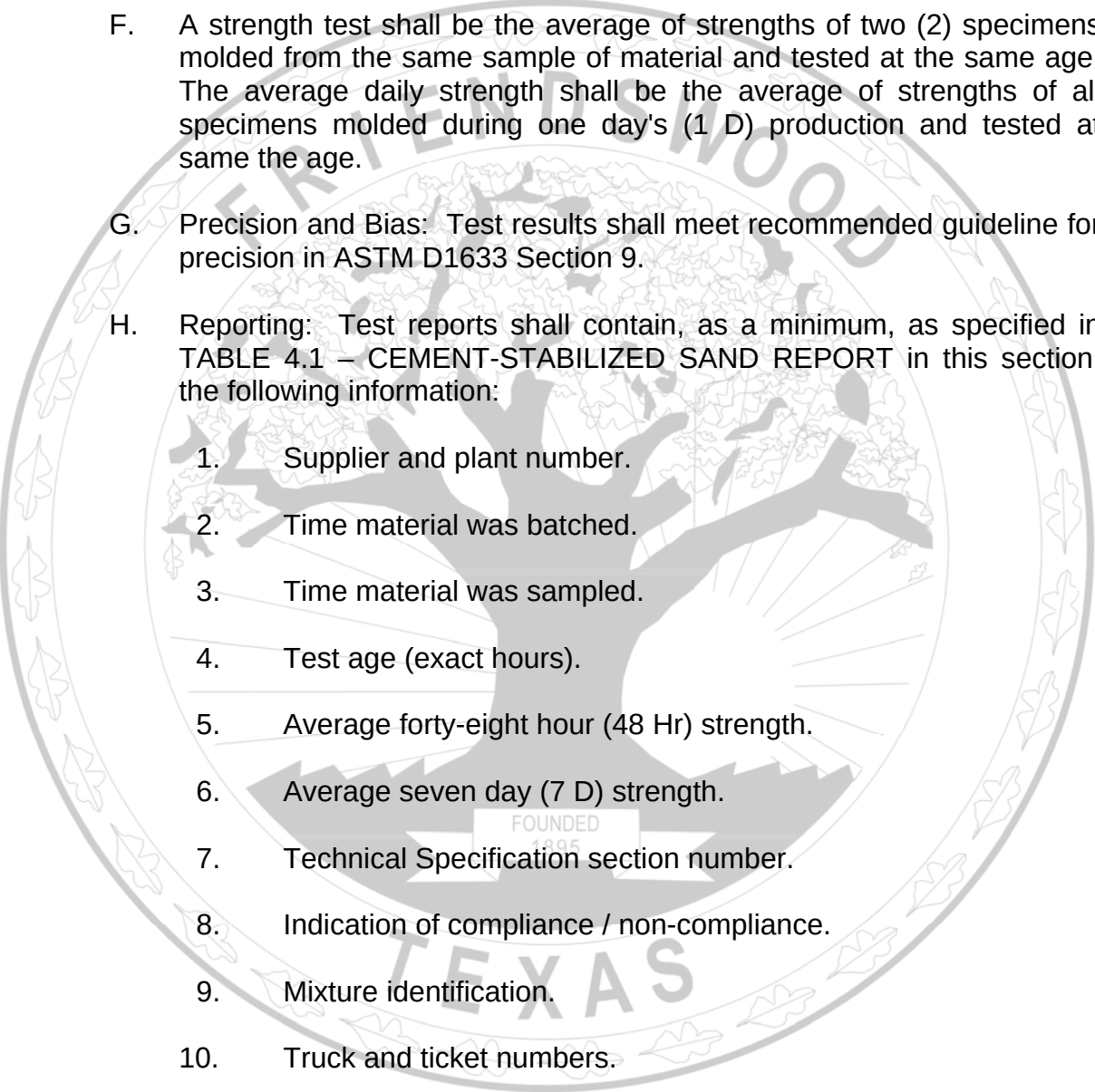
PART III: EXECUTION

3.1 PLACING

- A. Place sand-cement mixture in maximum twelve inch (12 In) thick loose lifts and compact to ninety-five percent (95%) of maximum density as determined in accordance with ASTM D558, unless otherwise specified. Refer to related specifications for thickness of lifts in other applications. Target moisture content during compaction is plus or minus three percent ($\pm 3\%$) of optimum moisture content. Perform and complete compaction of sand-cement mixture within four hours (4 Hrs) after addition of water to mix at plant.
- B. Do not place or compact sand-cement mixture in standing or free water.

3.2 FIELD QUALITY CONTROL

- A. Testing shall be performed under provisions of Sections 01470 – Testing Laboratory Services and 01475 – Quality Control Testing Procedures.
- B. One (1) sample of cement-stabilized sand shall be obtained for each one hundred fifty tons (150 Tn) of material placed per day with no less than one (1) sample per day of production. Random samples of delivered cement-stabilized sand shall be taken in the field at point of delivery in accordance with ASTM D3665. Obtain three (3) individual samples of approximately twelve pounds (12 Lbs.) to fifteen pounds (15 Lbs.) each from the first (1st), middle and last third (3rd) of the truck and composite them into one sample for test purpose.
- C. Prepare and mold four (4) specimens (for each sample obtained) in accordance with ASTM D558, Method A, without adjusting moisture content. Samples shall be molded at approximately same time material is being used, but no later than four hours (4 Hrs) after water is added to mix.
- D. After molding, specimens shall be removed from molds and cured in accordance with ASTM D1632.

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- E. Specimens shall be tested for compressive strength in accordance with ASTM D1633, Method A. Two (2) specimens shall be tested at forty-eight hours (48 Hrs) plus or minus two hours (± 2 Hrs) and two (2) specimens shall be tested at seven days (7 D) plus or minus four hours (± 4 Hrs).
- F. A strength test shall be the average of strengths of two (2) specimens molded from the same sample of material and tested at the same age. The average daily strength shall be the average of strengths of all specimens molded during one day's (1 D) production and tested at same the age.
- G. Precision and Bias: Test results shall meet recommended guideline for precision in ASTM D1633 Section 9.
- H. Reporting: Test reports shall contain, as a minimum, as specified in TABLE 4.1 – CEMENT-STABILIZED SAND REPORT in this section, the following information:
1. Supplier and plant number.
 2. Time material was batched.
 3. Time material was sampled.
 4. Test age (exact hours).
 5. Average forty-eight hour (48 Hr) strength.
 6. Average seven day (7 D) strength.
 7. Technical Specification section number.
 8. Indication of compliance / non-compliance.
 9. Mixture identification.
 10. Truck and ticket numbers.
 11. The time of molding.
 12. Moisture content at time of molding.
 13. Required strength.

14. Test method designations.
15. Compressive strength data as required by ASTM D1633.
16. Supplier mixture identification.
17. Specimen diameter and height, in.
18. Specimen cross-sectional area, sq.in.

3.3 ACCEPTANCE

- A. Strength level of material shall be considered satisfactory if:
 1. The average forty-eight hour (48 Hr) strength is greater than one hundred pounds per square inch (100 psi) with no individual strength test below seventy pounds per square inch (70 psi).
 2. All seven day (7 D) individual strength tests [average of two (2) specimens] are greater than or equal to one hundred pounds per square inch (100 psi).
- B. The material shall be considered unacceptable and subject to removal and replacement at the Contractor's expense when individual strength test [average of two (2) specimens] has seven day (7 D) strength] less than one hundred pounds per square inch (100 psi).
- C. When the moving average of three (3) daily forty-eight hour (48 Hr) averages falls below one hundred pounds per square inch (100 psi), discontinue shipment to project until plant is capable of producing material, which exceeds one hundred pounds per square inch (100 psi) at forty hours (48 Hrs). Five (5) – forty eight hour (48 Hr) strength tests shall be made in this determination with no individual strength tests less than one hundred one hundred pounds per square inch (100 psi).
- D. The Testing laboratory shall notify the Contractor, the Project Manager and the material supplier of tests by facsimile indicating results falling below specified strength requirements within twenty-four hours (24 Hrs).
- E. If any strength test of laboratory cured specimens falls below the specified strength, the Contractor may, at his own expense, request testing of cores drilled from the area(s) in question in accordance with ASTM C42. In such cases, three (3) cores shall be taken for each strength test that falls below the values given in paragraph 3.3.A.

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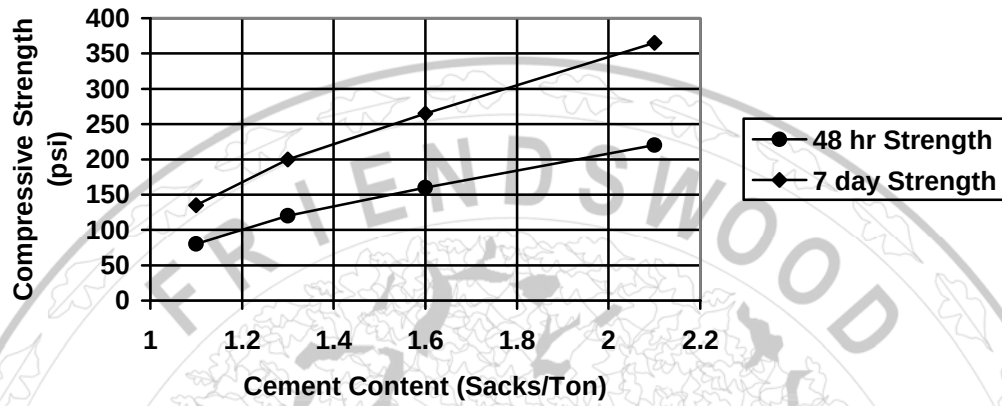
- F. Cement-stabilized sand in an area represented by core tests shall be considered satisfactory if the average of three (3) cores is equal to at least one hundred pounds per square inch (100 psi). Additional testing of cores extracted from locations represented by erratic core strength results shall be permitted.

PART IV: TABLES

4.1 CEMENT-STABILIZED SAND REPORT

Supplier: Stabilized Sand Co.		Plant No.: 3 – Friendswood		Date of Tests: June 3, 2005		
Item	Raw Sand	1.1 Sack	100 psi	1.5 Sack	2.0 Sack	
Moisture Content	10.9	15.7	14.0	13.8	13.7	
Cement Feed Dial Setting	--	2.25	2.5	2.75	3.75	
Silo Pressure (psi)	--	4	4	4	4	
Batch Time	10:00	10:10	10:15	10:20	10:25	
Sample Time	--	10:10	10:15	10:20	10:25	
Molding Time	--	12:30	12:45	1:00	1:15	
Cement Content (sacks/ton)	--	1.1	1.3	1.6	2.1	
Compressive Strength as 48 hrs (avg of 2)	--	80	120	160	220	
Compressive Strength at 7 days (avg of 2)	--	135	200	265	365	
Sieve Size		Percent Passing		COF Spec. Section 02140		
3/8 Inch		100%		100%		
No. 200		30%		30%		
Raw Sand Tests		Result		City of Friendswood		
Plasticity Index		Non-Plastic		4 Maximum		
Organic Impurities		Passing		No Darker Than		
Clay Lumps & Friable Parts (%)		0.0		0.5 % Maximum		
Lightweight Pieces (%)		0.0		5.0 % Maximum		
Classification		SP – SM		SW, SP, SW-SM, SP-SM, SM		

Compressive Strength vs Cement Content



END OF SECTION

SECTION 02230

POLYETHYLENE PLASTIC TUBING (PE)

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Polyethylene (PE) tubing for water service lines.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. No separate payment shall be made for Polyethylene (PE) tubing under this Section. Include cost in the unit prices for work, as specified in following sections:
 - a. Section 02430 – Water Tap and Service Line Installation.
2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. AWWA – American Water Works Association.

1. AWWA C901 – Standard for Polyethylene (PE) Pressure Pipe and Tubing for Water Service.

B. ASTM – American Society for Testing and Materials.

1. ASTM D2737 – Standard Specification for Polyethylene (PE) Tubing.
2. ASTM D3350 – Standard Specification for Polyethylene Plastics Pipe and Fittings Materials.

C. CFTS – City of Friendswood Technical Specifications.

1. Section 01270 – Measurement and Payment.
2. Section 01330 – Submittal Procedures.
3. Section 02125 – Excavation and Backfill for Utilities.
4. Section 02400 – Water Lines.
5. Section 02430 – Water Tap and Service Line Installation.
6. Section 02455 – Disinfection of Waterlines.
7. Section 02460 – Wet Connections.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit shop drawings showing design of pipe and fittings, laying dimensions, fabrication, fittings, flanges and special details.

1.5 QUALITY CONTROL

- A. Provide manufacturer's certificate of conformance to the Technical Specifications.
- B. Furnish pipe and fittings that are homogeneous throughout and free from visible cracks, holes, foreign inclusions or other injurious defects. Provide pipe as uniform as commercially practical in color, opacity, density and other physical properties.
- C. The Project Manager reserves the right to inspect pipes or witness pipe manufacturing. Inspection shall in no way relieve manufacturer of responsibilities to provide products that comply with applicable standards and these Technical Specifications.
 1. Manufacturer's Notification: Should the Project Manager wish to witness manufacture of specific pipes, manufacturer shall provide the Project Manager with minimum three weeks (3 Wks) notice of when and where production of those specific pipes shall take place.
 2. Failure to Inspect: Approval of products or tests shall not be implied by the Project Manager's decision not to inspect

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manufacturing, testing or finished pipes.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with documented experience of a minimum five years (5 Yrs) of pipe installations that have been in successful, continuous service for same type of service as the proposed Work.

PART II: PRODUCTS

2.1 GENERAL

- A. All polyethylene (PE) tubing shall be high density, high molecular weight plastic tubing meeting.
- B. Polyethylene (PE) tubing for water services shall be pressure rated at two hundred pounds per square inch (200 psi) working pressure and must bear the National Sanitation Foundation seal of approval.
- C. Pipe manufacturers shall be listed on SPL WW-65.
- D. Polyethylene (PE) tubing shall be designated PE3408, denoting Grade 34 with hydrostatic design stress of eight hundred pounds per square inch (800 psi).

2.2 MARKING

- A. Mark each standard and random length of pipe in compliance with these Technical Specifications with following information:
 - 1. Nominal tubing size.
 - 2. Standard PE code designation.
 - 3. Standard Dimension Ratio (SDR) and pressure rating.
 - 4. AWWA designation.
 - 5. Manufacturer Name or Trademark and testing agency name or seal.

PART III: EXECUTION

3.1 INSTALLATION

A. Conform to requirements of following Sections:

1. Section 02125 – Excavation and Backfill for Utilities.
2. Section 02400 – Water Lines.
3. Section 02430 – Water and Tap Service Line Installations.
4. Section 02460 – Wet Connections.
5. Section 02455 – Disinfection of Waterline.

B. Install pipe in accordance with the manufacturers recommended installation procedures.

C. Polyethylene (PE) tubing is not approved in applications requiring augering of pipe.

D. Bedding and backfill: Conform to requirements of Section 02125 – Excavation and Backfill for Utilities.

END OF SECTION

SECTION 02235

POLYVINYL CHLORIDE (PVC) PIPE

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Polyvinyl chloride pressure pipe for water distribution, in nominal diameters four inches (4 In) through twenty inches (20 In).
- B. Polyvinyl chloride sewer pipe for gravity sewers in nominal diameters four inches (4 In) through forty-eight inches (48 In).
- C. Polyvinyl chloride pressure pipe for gravity sewers and force mains in nominal diameters four inches (4 In) through twenty inches (20 In).

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

- 1. No separate payment will be made for PVC pipe under this Section. Include cost in the unit price for work included as specified in the following sections:
 - a. Section 02400 – Water Lines.
 - b. Section 02500 – Gravity Sanitary Sewers.
 - c. Section 02510 – Sanitary Sewer Force Mains.
 - d. Section 02600 – Storm Sewers.
- 2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

- 1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. ANSI – American National Standards Institute.

1. ANSI A21.16 (AWWA C116) – Protective Fusion Bonded Epoxy Coating for the Interior and Exterior Surfaces of Ductile Iron and Grey Iron Fittings for Water Supply Service.

B. ASTM – American Society for Testing and Materials.

1. ASTM D1248 – Standard Specification for Polyethylene Plastics Molding and Extrusion Materials.
2. ASTM D1784 – Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
3. ASTM D2241 – Standard Specification for Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).
4. ASTM D2321 – Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
5. ASTM D2444 – Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight).
6. ASTM D2680 – Specification for Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping.
7. ASTM D3034 – Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
8. ASTM D3139 – Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
9. ASTM D3212 – Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
10. ASTM F477 – Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
11. ASTM F679 – Standard Specification for Poly (Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings.

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12. ASTM F794 – Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter.
 13. ASTM F949 – Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with Smooth Interior and Fittings.
- C. AWWA – American Water Works Association.
1. AWWA C110 – American National Standard for Ductile-Iron and Gray-Iron Fittings, 3 Inches Through 48 Inches for Water.
 2. AWWA C111 – American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 3. AWWA C900 – Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 Inches Through 12 Inches for Water Distribution.
 4. AWWA C905 – Standard for Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 In. Through 48 In., for Water Transmission and Distribution.
 5. AWWA C909 – Standard for Molecularly-Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 Inches through 12 Inches (100mm through 300 mm), for Water Distribution.
- D. CTFS – City of Friendswood Technical Specification.
1. Section 01270 – Measurement and Payment.
 2. Section 01330 – Submittal Procedures.
 3. Section 02125 – Excavation and Backfill for Utilities.
 4. Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 5. Section 02260 – Polyethylene Wrap.
 6. Section 02400 – Water Lines.
 7. Section 02500 – Gravity Sanitary Sewers.
 8. Section 02510 – Sanitary Sewer Force Mains.

9. Section 02600 – Storm Sewers.

E. PPI – Plastic Pipe Institute.

1. PPI TR3 – Policies and Procedures for Developing Recommended Hydrostatic Design Stresses for Thermoplastic Pipe Materials.

F. UNI – Uni-Bell Standard.

1. UNI-B-13 – Recommended Standard Performance Specification for Joint Restraint Devices for Use with Polyvinyl Chloride Pipe.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit shop drawings showing design of new pipe and fittings indicating alignment and grade, laying dimensions, fabrication, fittings, flanges and special details.

1.5 QUALITY CONTROL

- A. Submit manufacturer's certifications that PVC pipe and fittings meet requirements of this Section and AWWA C900, AWWA C909 and AWWA C905 for pressure pipe applications or appropriate ASTM standard specified for gravity sewer pipe.
- B. Submit manufacturer's certification that PVC pressure pipe for water lines and force mains has been hydrostatically tested at factory in accordance with AWWA C900, AWWA C909 and AWWA C905 and this Section.
- C. When foreign manufactured material is proposed for use, have material tested for conformance to applicable ASTM requirements by certified independent testing laboratory located in United States. Certification from other source is not acceptable. Furnish copies of test reports to the Project Manager for review. Cost of testing paid by the Contractor.

PART II: PRODUCTS

2.1 MATERIAL

- A. Use PVC compounds in manufacture of pipe that contain no ingredient

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in amount that has been demonstrated to migrate into water in quantities considered to be toxic.

- B. Furnish PVC pressure pipe manufactured from Class 12454-A or Class 12454-B virgin PVC compounds as defined in ASTM D1784. Use compounds qualifying for rating of four thousand pounds per square inch (4000 psi) for water at seventy-three and four tenths degrees Fahrenheit (73.4° F) per requirements of PPI TR3. Provide pipe which is homogeneous throughout, free of voids, cracks, inclusions and other defects, uniform as commercially practical in color, density and other physical properties. Deliver pipe with surfaces free from nicks and scratches with joining surfaces of spigots and joints free from gouges and imperfections which could cause leakage.
- C. PVC Restrained Pipe: Must be listed on the City's current Product Approval List.
 - 1. Pipe Material:
 - a. DR 18: For restrained joints where shown on Drawings.
 - b. DR 14: For alternate to offset pipe sections shown on the Drawings. Do not use PVC for offset sections with depth of cover greater than twenty feet (20 Ft) or less than four feet (4 Ft). Do not use PVC in potentially petroleum contaminated areas.
- D. Water Service.
 - 1. Provide self-extinguishing PVC pipe that bears Underwriters' Laboratories mark of approval and is acceptable without penalty to Texas State Fire Insurance Committee for use in fire protection lines.
 - 2. Bear National Sanitation Foundation Seal of Approval (NSF-PW).
- E. Gaskets:
 - 1. Gaskets shall meet requirements of ASTM F477. Use elastomeric factory-installed gaskets to make joints flexible and watertight.
 - 2. Flat Face Mating Flange: Full faces one-eighth inch (1/8 In) thick ethylene propylene (EPR) rubber.

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- 3. Raised Face Mating Flange: Flat ring one-eighth inch (1/8 In) ethylene propylene (EDR) rubber, with filler gasket between OD of raised face and flange OD to protect flange from bolting moment.
- F. Lubricant for rubber-gasketed joints: Water soluble, non-toxic, non-objectionable in taste and odor imparted to fluid, non-supporting of bacteria growth, having no deteriorating effect on PVC or rubber gaskets.
- G. Do not use PVC in potentially or known contaminated areas.
- H. Do not use PVC in areas exposed to direct sunlight.

2.2 WATER SERVICE PIPE

- A. Pipe four inch (4 In) through twelve inch (12 In): AWWA C900, AWWA C909, Class 150, DR 18; AWWA C900, Class 200, DR 14 as alternate to offset pipe sections; nominal twenty foot (20 Ft) lengths; cast-iron equivalent outside diameters.
- B. Pipe fourteen inch (14 In) through twenty inch (20 In): AWWA C905; Class 235; DR 18; nominal twenty foot (20 Ft) lengths; cast-iron equivalent outside diameter.
- C. Provide Polyvinyl Chloride Pipe from approved manufacturers.
- D. Make curves and bends by deflecting joints. Do not exceed maximum deflection recommended by pipe manufacturer. Submit details of other methods of providing curves and bends for review by the Project Manager.
- E. Hydrostatic Test: AWWA C900, AWWA C905, AWWA C909, ANSI A21.10 (AWWA C110); at point of manufacture; submit manufacturer's written certification.

2.3 GRAVITY SEWER PIPE

- A. PVC gravity sanitary sewer pipe and storm sewer pipe shall be as specified in TABLE 4.1 – PVC PIPE DESIGNATION in the Section.
- B. When solid wall PVC pipe eighteen inches (18 In) to twenty-seven inches (27 In) in diameter is required in SDR 26, provide pipe conforming to ASTM F679, except provide wall thickness as required for SDR 26 and pipe strength of one hundred fifteen pounds per square

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inch (115 psi).

- C. For sewers up to twelve inch (12 In) diameter crossing over water lines or crossing under water lines with less than two feet (2 Ft) separation, provide minimum one hundred fifty pounds per square inch (150 psi) pressure-rated pipe conforming to ASTM D2241 with suitable PVC adapter couplings.
- D. Joints: Spigot and integral wall section bell with solid cross section elastomeric or rubber ring gasket conforming to requirements of ASTM D3212 and ASTM F477 or ASTM D3139 and ASTM F477. Gaskets shall be factory-assembled and securely bonded in place to prevent displacement. Manufacturer shall test sample from each batch conforming to requirements ASTM D2444.
- E. Fittings: Provide PVC gravity sewer sanitary bends, tee or wye fittings for new sanitary sewer construction. PVC pipe fittings shall be full-bodied, either injection molded or factory fabricated. Saddle-type tee or wye fittings shall not be acceptable.
- F. Conditioning: Conditioning of samples prior to and during tests is subject to approval by the Project Manager. When referee tests are required, condition specimens in accordance with Procedure A in ASTM D618 at seventy-three and four-tenths degrees Fahrenheit (73.4° F) plus or minus three and six-tenths degrees Fahrenheit ($\pm 3.6^\circ$ F) and fifty percent (50%) relative humidity plus or minus five percent (5%) relative humidity for not less than forty hours (40 Hrs) prior to test. Conduct tests under same conditions of temperature and humidity unless otherwise specified.
- G. Pipe Stiffness: Determine pipe stiffness at five percent (5%) deflection in accordance with Test Method D 2412. Minimum pipe stiffness shall be forty-six pounds per square inch (46 psi). For diameters four inches (4 In) through eighteen inches (18 In), test three (3) specimens, each a minimum of six inches (6 In) in length. For diameters twenty-one inch (21 In) through thirty-six inch (36 In), test three (3) specimens, each a minimum of twelve inch (12 In) in length.
- H. Flattening: Flatten three (3) specimens of pipe, prepared in accordance with Paragraph 2.3.F, in suitable press until internal diameter has been reduced to sixty percent (60%) of original inside diameter of pipe. Rate of loading shall be uniform. Test specimens, when examined under normal light and with unaided eye, shall show no evidence of splitting, cracking, breaking or separation of pipe walls or bracing profiles. Perform the flattening test in conjunction with pipe stiffness test.

- I. Joint Tightness: Test for joint tightness in accordance with ASTM D3212, except that joint shall remain watertight at minimum deflection of five percent (5%). Manufacturer shall be required to provide independent third (3rd) party certification for joint testing each diameter of storm sewer pipe.
- J. Purpose of Tests: Flattening and pipe stiffness tests are intended to be routine quality control tests. Joint tightness test is intended to qualify pipe to specified level of performance.

2.4 SANITARY SEWER FORCE MAIN PIPE

- A. Provide approved PVC pressure pipe conforming to requirements for water service pipe and conforming to minimum working pressure rating specified in Section 02510 – Sanitary Sewer Force Mains.
- B. Acceptable pipe joints are integral bell-and-spigot, containing a bonded-in elastomeric sealing ring meeting requirements of ASTM F477. In designated areas requiring restrained joint pipe and fittings, use approved joint restraint device conforming to UNI-B-13, for PVC pipe twelve inch (12 In) diameter and less.
- C. Fittings: Provide approved ductile iron fittings as per Section 02215 – Ductile Iron Pipe (DIP) and Fittings, Paragraph 2.4, except furnish fittings with one (1) of following approved internal linings:
 - 1. Nominal forty (40) mils [thirty-five (35) mils minimum] virgin polyethylene complying with ASTM D1248, heat fused to interior surface of fitting.
 - 2. Nominal forty (40) mils [thirty-five (35) mils minimum] polyurethane.
 - 3. Nominal forty (40) mils [thirty-five (35) mils minimum] ceramic epoxy.
 - 4. Nominal forty (40) mils [thirty-five (35) mils minimum] fusion bonded epoxy.
- D. Exterior Protection: Provide polyethylene wrapping of ductile-iron fittings as required by Section 02260 – Polyethylene Wrap.
- E. Hydrostatic Tests: Hydrostatically test pressure rated pipe in accordance with Paragraph 2.2.E.

2.5 BENDS AND FITTINGS FOR PVC PRESSURE PIPE

- A. Bends and Fittings: ANSI A 21.10 or ANSI A 21.53, ductile iron; ANSI A 21.11 single rubber gasket push-on type joint; minimum two hundred pounds per square inch (150) psi pressure rating. Approved restrained joints, two hundred pounds per square inch (200 psi) and two hundred fifty pounds per square inch (250 psi), may be provided for up to twelve (12) inches in diameter (water or sanitary).
- B. Provide approved restrained joint fittings: Integral restrained joint fittings and pipe shall not require secondary restraint.

PART III: EXECUTION

3.1 PROTECTION

- A. Store pipe under cover out of direct sunlight and protect from excessive heat or harmful chemicals in accordance with manufacturer's recommendations.

3.2 INSTALLATION

- A. Conform to requirements of Section 02400 – Water Lines, Section 02500 – Gravity Sanitary Sewers and Section 02510 – Sanitary Sewer Force Mains, as applicable.
- B. Install PVC pipe in accordance with Section 02125 – Excavation and Backfill for Utilities, ASTM D2321 for Sewer Pipe and manufacturer's recommendations.
- C. Install PVC water service pipe to clear utility lines and have minimum depth of cover below property line grade of street, unless otherwise required by Drawings:
 - 1. Water service pipe twelve (12) inches in diameter and smaller four feet (4 Ft) of cover.
 - 2. Water service pipe sixteen (16) inches in diameter and larger five (5) feet of cover.
- D. Avoid imposing strains that shall overstress or buckle pipe when lowering pipe into trench. Do not drop pipe more than two feet (2 Ft).
- E. Hand shovel pipe bedding under pipe haunches and along sides of pipe barrel and compact to eliminate voids and ensure side support.

- F. Store PVC pipe under cover out of direct sunlight. Protect pipe from excessive heat or harmful chemicals. Prevent damage by crushing or piercing.
- G. Allow PVC pipe to cool to ground temperature before backfilling when assembled out of trench to prevent pullout due to thermal contraction.

3.3 PVC RESTRAINED MECHANISM

- A. Do not apply lubricant to spline or pipe or coupling spline grooves.
- B. Do not use excessive force while inserting the spline through coupling.
- C. Insert spline until it is fully seated around circumference of pipe.
- D. Field Cutting of Pipe Ends:
 - 1. Perform by workers certified by manufacturer.
 - 2. Use a PVC pipe cutter and provide square ends.
 - 3. Use manufacturer approved power routing and grooving tool to field fabricate required pipe groove.

PART IV: TABLES

4.1 – PVC PIPE DESIGNATION

WALL CONSTRUCTION	MANUFACTURER	ASTM DESIGNATION	SDR (MAX.)/ STIFFNESS (MIN.)	DIAMETER SIZE RANGE
Solid	J-M Pipe	D3034	SDR 26 / PS 115	6" TO 10"
		D3034	SDR 35 / PS 46	12" & 15"
	CertainTeed	F679	SDR 35 / PS 46	18" to 27"
	Diamond	AWWA C900	DR 18 / N/A	4" to 12"
	Uponor ETI	AWWA C909	DR 18 / N/A	4" to 12"
	North American	AWWA C905	DR 18 / N/A	14" to 16"
Truss (Gasketed)	Contech	D2680	N/A / 200 psi	8" to 15"
Profile	Contech A-2000	F949	N/A / 46 psi	12" to 16"
	Contech A-2026	F949	N/A / 115 psi	8" to 10"
	ETI, Ultra-Rib	F794	N/A / 46 psi	8" to 30"
	ETI, Ultra-Corr	F794	N/A / 46 psi	24" to 36"

END OF SECTION

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SECTION 02280

TRENCH SAFETY SYSTEMS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Trench safety system for the construction of trench excavations.
- B. Trench safety system for structural excavations which fall under provisions of State and Federal trench safety laws.

1.2 MEASUREMENT AND PAYMENT

A. UNIT PRICES:

- 1. Measurement for trench safety systems used on trench excavations is on a linear foot basis measured along the centerline of the trench, including manholes and other line structures.
- 2. No payment will be made for trench safety systems for structural excavations under this section. Include payment for trench safety system in applicable structure installation sections.
- 3. Refer to Section 01270 - Measurement and payment for unit price procedures.

B. Stipulated Price (Lump Sum):

- 1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 DEFINITIONS

- A. A trench shall be defined as a narrow excavation (in relation to its depth) made below the surface of the ground at a minimum of five feet (5 Ft) in depth. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than fifteen feet (15 Ft).
- B. The trench safety system requirements shall apply to larger open excavations if the erection of structures or other installations limits the

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space between the excavation slope and these installations to dimensions equivalent of a trench as defined.

- C. Trench Safety Systems include, but are not limited to, sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage.

1.4 SUBMITTALS

- A. Submittals shall conform to requirements of Section 01330 - Submittal Procedures.
- B. Submit a safety program specifically for the construction of trench excavation. Design the trench safety program to be in accordance with OSHA 29CFR standards governing the presence and activities of individuals working in and around trench excavations.
- C. Construction and shop drawings containing deviations from OSHA standards or special designs shall be sealed by a Professional Engineer licensed by the State of Texas retained and paid by the Contractor.
- D. Review of the Contractor's safety program by the Project Manager shall only be in regard to compliance with this specification and shall not constitute approval by the Project Manager nor relieve the Contractor of obligations under State and Federal trench safety laws.

1.5 REGULATORY REQUIREMENTS

- A. Install and maintain trench safety systems in accordance with the detail the Specifications set out in the provision of Excavations, Trenching, and Shoring, Federal Occupation Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Final Rule, published in the Federal Register Vol. 54, No. 209 on Tuesday, October 31, 1989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652.
- B. A reproduction of the OSHA standards included in "Subpart P - Excavations" from the Federal Register Vol. 54, No. 209 is available upon request to the Contractors bidding on City projects. The City assumes no responsibility for the accuracy of the reproduction. The Contractor is responsible for obtaining a copy of this section of the Federal Register.
- C. Legislation that has been enacted by the Texas Legislature with regard to Trench Safety Systems, is hereby incorporated, by reference, into

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these specifications. Refer to Texas Health and Safety Code Ann., §756.022 (Vernon 1991).

- D. Reference materials, if developed for a specific project, shall be issued with the Bid Documents, including the following:

1. Section 00200 - Geotechnical Information: information obtained for use in design of the trench safety system.

1.6 INDEMNIFICATION

- A. The Contractor shall indemnify and hold harmless the City, its employees and agents, from any and all damages, costs (including, without limitation, legal fees, court costs, and the cost of investigation), judgments or claims by anyone for injury or death of persons resulting from the collapse or failure of trenches constructed under this Contract.
- B. The Contractor acknowledges and agrees that this indemnity provision provides indemnity for the City in case the City is negligent either by act or omission in providing for trench safety, including, but not limited to safety program and design reviews, inspections, failures to issue stop work orders, and the hiring of the Contractor.

1.7 REFERENCED STANDARDS

- A. CFCO – City of Friendswood Code of Ordinances.
1. Ordinance 70-114 – Trench Excavation Safety Compliance.
 2. Ordinance 70-147 – Violation of Conditions; Revocation; Repair by the City.
 3. Ordinance 70-148 – Surety Bond Required.
- B. CFTS – City of Friendswood Technical Specifications.
1. Section 00200 – Geotechnical Information.
 2. Section 01270 – Measurement and Payment.
 3. Section 01330 – Submittal Procedures.
- C. OSHA – Occupational Safety and Health Administration.
1. OSHA Standards, 29CFR, Part 1926, Subpart P.

2. Federal Register Vol. 54, No. 209.

D. Texas Health and Safety Code Ann., §756.022 (Vernon 1991).

PART II: PRODUCTS – Not Used

PART III: EXECUTION

3.1 INSTALLATION

- A. Install and maintain trench safety systems in accordance with provisions of OSHA 29CFR.
- B. Install specially designed trench safety systems in accordance with the Contractor's trench excavation safety program for the locations and conditions identified in the program.
- C. A competent person, as identified in the Contractor's Trench Safety Program, shall verify that trench boxes and other premanufactured systems are certified for the actual installation conditions.

3.2 INSPECTION

- A. The Contractor, or the Contractor's independently retained consultant, shall make daily inspections of the trench safety systems to ensure that the installed systems and operations meet OSHA 29CFR and other personnel protection regulations requirements.
- B. If evidence of possible cave-ins or slides is apparent, the Contractor shall immediately stop work in the trench and move personnel to safe locations until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench.
- C. Maintain a permanent record of daily inspections.

3.3 FIELD QUALITY CONTROL

- A. The Contractor shall verify specific applicability of the selected or specially designed trench safety systems to each field condition encountered on the project.
- B. The Project Manager, under written or oral authority of the Director or Deputy Director of Community Development shall stop work on portions of the Work where conditions, equipment or personnel put other personnel, the general public or adjacent property in danger of injury or damage. Work shall not resume until conditions have been remedied

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and verified by the Project Manager.

END OF SECTION



SECTION 02400

WATER LINES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Installation of water lines.
- B. Technical Specifications identify requirements for both small diameter water lines and large diameter water lines. When Technical Specifications for large diameter water lines differ from those for small diameter water lines, large diameter Technical Specifications shall govern for large diameter pipe.

1.2 MEASUREMENT AND PAYMENT

- A. Unit Prices:
 - 1. Payment for water lines installed by open-cut, augered with or without casing, aerial crossing and pipe offset section or within limits of Potentially Petroleum Contaminated Area (PPCA) is on linear foot basis for each size of pipe installed. Separate pay items are used for each type of installation.
 - a. Mains: Measure along axis of pipe and include fittings and valves.
 - b. Branch Pipe: Measure from axis of water line to end of branch.
 - 2. Payment for interconnection is on lump sum basis for each interconnection identified on the Drawings. Payment shall include tapping sleeve and valves piping, connections and other related work necessary for construction as shown on the Drawings or specified herein.
 - 3. Payment for removal of existing internal elliptical or dished head plug is on unit price basis for each internal elliptical or dished head plug removed. Payment shall include deletion of plug, drainage or dewatering of water lines, repair of damaged linings, rechlorination and items incidental to operation.

4. Payment for plug and clamp is on a unit price basis for each size of pipe.
5. Payment for drainline connection with service manhole is on unit price basis for each drainline shown on drawings. Payment includes valve, access manhole and connection.
6. Payment for cylindrical corrosion barriers is on a unit price basis for each pipe fitting installed with one or more barriers.
7. When directed by the Project Manager to install extra fittings as required to avoid unforeseen obstacles, payment shall be based on the following:
 - a. Each extra fitting requested by the Project Manager and delivered to jobsite shall be paid according to unit price bid for "Extra Fittings in Place."
 - b. Payment shall include and be full compensation for items necessary for installation and operation of water line.
8. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. ANSI – American National Standards Institute.

1. ANSI A21.11/AWWA C111 – Standard for Rubber-Gasket Joints for Ductile – Iron Pressure Pipe and Fittings.
2. ANSI/NSF Standard 61 – Drinking Water System -Health Components.

B. ASTM – American Society for Testing and Materials.

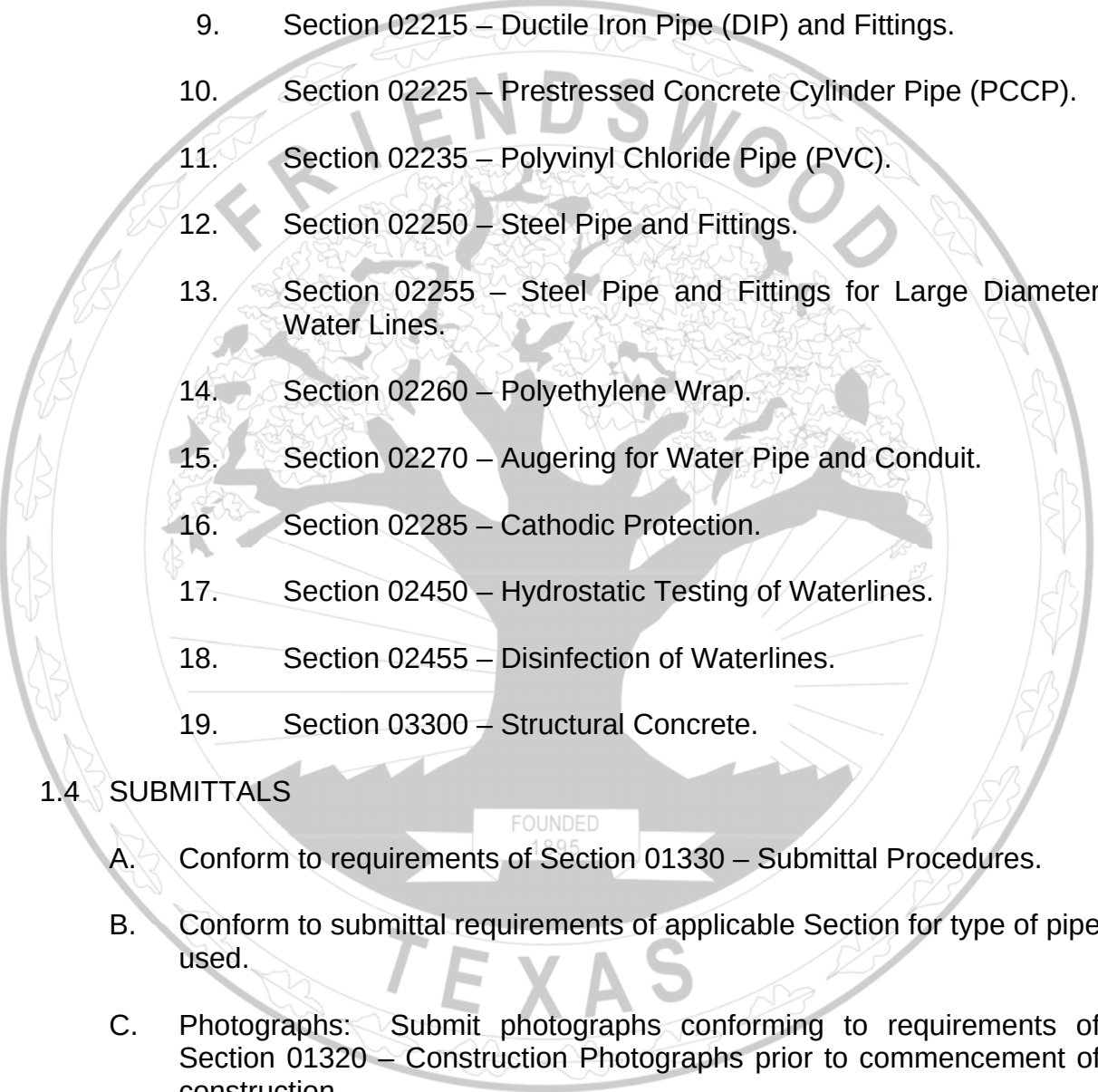
1. ASTM A36 – Standard Specification for Carbon Structural Steel.
2. ASTM A126 – Standard Specification for Gray Iron Castings for

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Valves, Flanges and Pipe Fittings.

3. ASTM A536 – Standard Specification for Ductile Iron Castings.
 4. ASTM B21 – Standard Specification for Naval Brass Rod, Bar and Shapes.
 5. ASTM B98 – Standard Specification for Copper-Silicon Alloy Rod, Bar and Shapes.
 6. ASTM B301 – Standard Specification for Free-Cutting Copper Rod and Bar.
 7. ASTM B584 – Standard Specification for Copper Alloy Sand Casting for General Application.
 8. ASTM E165 – Standard Test Method for Liquid Penetrant Examination.
 9. ASTM E709 – Standard Guide for Magnetic Particle Examination.
 10. ASTM F1674 – Standard Test Method for Joint Restraint Products for Use with PVC Pipe.
- C. AWWA – American Water Works Association.
1. AWWA C206 – Standard for Field Welding of Steel Water Pipe.
 2. AWWA C207 – Standard for Steel Pipe Flanges for Waterworks Service – Sizes 4 Inches through 144 Inches.
 3. AWWA C508 – Standard for Swing-Check Valves for Waterworks Service, 2 IN. through 24 IN. NPS.
- D. CFTS – City of Friendswood Technical Specifications.
1. Section 01110 – Summary of Work.
 2. Section 01270 – Measurement and Payment.
 3. Section 01320 – Construction Photographs.
 4. Section 01330 – Submittal Procedures.
 5. Section 01745 – Site Restoration.

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6. Section 02125 – Excavation and Backfill for Utilities.
 7. Section 02140 – Utility Backfill Materials.
 8. Section 02200 – Bar Wrapped Steel Cylinder Pipe.
 9. Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 10. Section 02225 – Prestressed Concrete Cylinder Pipe (PCCP).
 11. Section 02235 – Polyvinyl Chloride Pipe (PVC).
 12. Section 02250 – Steel Pipe and Fittings.
 13. Section 02255 – Steel Pipe and Fittings for Large Diameter Water Lines.
 14. Section 02260 – Polyethylene Wrap.
 15. Section 02270 – Augering for Water Pipe and Conduit.
 16. Section 02285 – Cathodic Protection.
 17. Section 02450 – Hydrostatic Testing of Waterlines.
 18. Section 02455 – Disinfection of Waterlines.
 19. Section 03300 – Structural Concrete.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Conform to submittal requirements of applicable Section for type of pipe used.
- C. Photographs: Submit photographs conforming to requirements of Section 01320 – Construction Photographs prior to commencement of construction.
- D. Submit One Call notification transmittal number(s) prior to beginning excavation.
- E. Submit, a minimum of fifteen days (15 D) before beginning pipe laying operations, layout drawing(s) identifying proposed sections for

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disinfecting, hydrostatic testing and site restoration for entire project for review and approval. Layout drawing(s) to identify sequence of sections for:

1. Disinfection; not to exceed four thousand linear feet (4000 Lf) per section.
2. Hydrostatic testing and transfer of services; to immediately follow sequence of disinfected section.
3. Site restoration; not to exceed limits specified; Sequence in order of disturbance.

PART II: PRODUCTS

2.1 PIPE MATERIALS

- A. Install pipe materials which conform to following:
 1. Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 2. Section 02250 – Steel Pipe and Fittings. Water line piping within plant site and aerial crossings to be welded joint steel pipe with flange or approved restraint joint connections, unless otherwise shown on the Drawings.
 3. Section 02235 – Polyvinyl Chloride Pipe (PVC).
 4. Section 02225 – Prestressed Concrete Cylinder Pipe (PCCP).
 5. Section 02255 – Steel Pipe and Fittings for Large Diameter Water Lines.
 6. Section 02200 – Bar Wrapped Steel Cylinder Pipe.
- B. Conform to American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61 and have certified by an organization accredited by ANSI.
- C. Type of pipe materials used is Contractor's option unless specifically identified on the Drawings.
- D. Provide minimum of three-eighths inch (3/8 In) inside joint recess between ends of pipe in straight pipe sections.

2.2 WELDED JOINT PROTECTION FITTING FOR SMALL DIAMETER STEEL PIPE

- A. Cylindrical Corrosion Barrier: Provide approved cylindrical corrosion barrier.
- B. O-rings: Conform to National Sanitary Foundation requirements.

2.3 RESTRAINED JOINTS

- A. Ductile Iron Pipe (DIP): See Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
- B. PVC Pipe: See Section 02235 – Polyvinyl Chloride Pipe (PVC). Perform hydrostatic testing in accordance with ASTM F1674.
- C. Prestressed Concrete Cylinder Pipe (PCCP), Bar-Wrapped Pipe and Steel Pipe: Welded joints (see Paragraph 3.6 D).
- D. Restrained Joints where required on DIP and PVC pipe:
 - 1. Restraint devices: Manufacture of high strength ductile iron, ASTM A536 up to twenty-four inches (24 In) and ASTM A36 for sizes greater than thirty inches (30 In). Working pressure rating twice that of design test pressure.
 - 2. Bolts and connecting hardware: High strength low alloy material in accordance with ANSI A21.11/AWWA C111.

2.4 COUPLINGS AND APPURTENANCES FOR LARGE DIAMETER WATERLINE

- A. Flexible (Dresser-type) Couplings.
 - 1. Install where shown on the Drawings or where allowed by the Project Manager for the Contractor's convenience. Use galvanized flexible couplings when installed on galvanized pipe which is cement lined or when underground. Provide gaskets manufactured from Neoprene or Buna-N.
 - 2. For steel pipe; provide approved sleeve-type flexible couplings. Thickness of middle ring equal to or greater than thickness of pipe wall.
 - 3. Provide approved flanged adapter couplings for steel pipe.

4. Use Type 316 stainless steel bolts, nuts and washers where flexible couplings are installed underground. Coat entire coupling with twenty (20) mil of approved coal tar coating.
- B. Flap Valves: Provide approved flap valves on discharge of manhole drainline as shown on the Drawings.
 1. Body and Flap: ASTM A126-B cast iron.
 2. Seats: ASTM B21-CA482 or ASTM B301-CA145 bronze.
 3. Resilient Seat: AWWA C508.
 4. Hinge Arms: ASTM B584-CA865 high tensile bronze.
 5. Hinge pins: ASTM B98-CA655 silicon bronze.

PART III: EXECUTION

3.1 PREPARATION

- A. Conform to applicable installation Technical Specifications for types of pipe used.
- B. Employ workmen who are skilled and experienced in laying pipe of type and joint configuration being furnished. Provide watertight pipe and pipe joints.
- C. Lay pipe to lines and grades shown on the Drawings.
- D. Confirm that nine feet (9 Ft) minimum separation from gravity sanitary sewers and manholes or separation of four feet (4 Ft) minimum from force mains as specified in this Section in all directions unless a special design is provided on the Drawings.
- E. Where above clearances cannot be attained and a special design has not been provided on the Drawings, obtain direction from the Project Manager before proceeding with construction.
- F. Inform the Project Manager if unmetered sprinkler or fire line connections exist which are not shown on the Drawings. Make transfer to new lines only after approval by the Project Manager.
- G. For projects involving multiple subdivisions or locations, limit water line installation to maximum of two (2) project site locations. Maximizing

two (2) pipe installation crews shall be permitted, unless otherwise approved by the Project Manager.

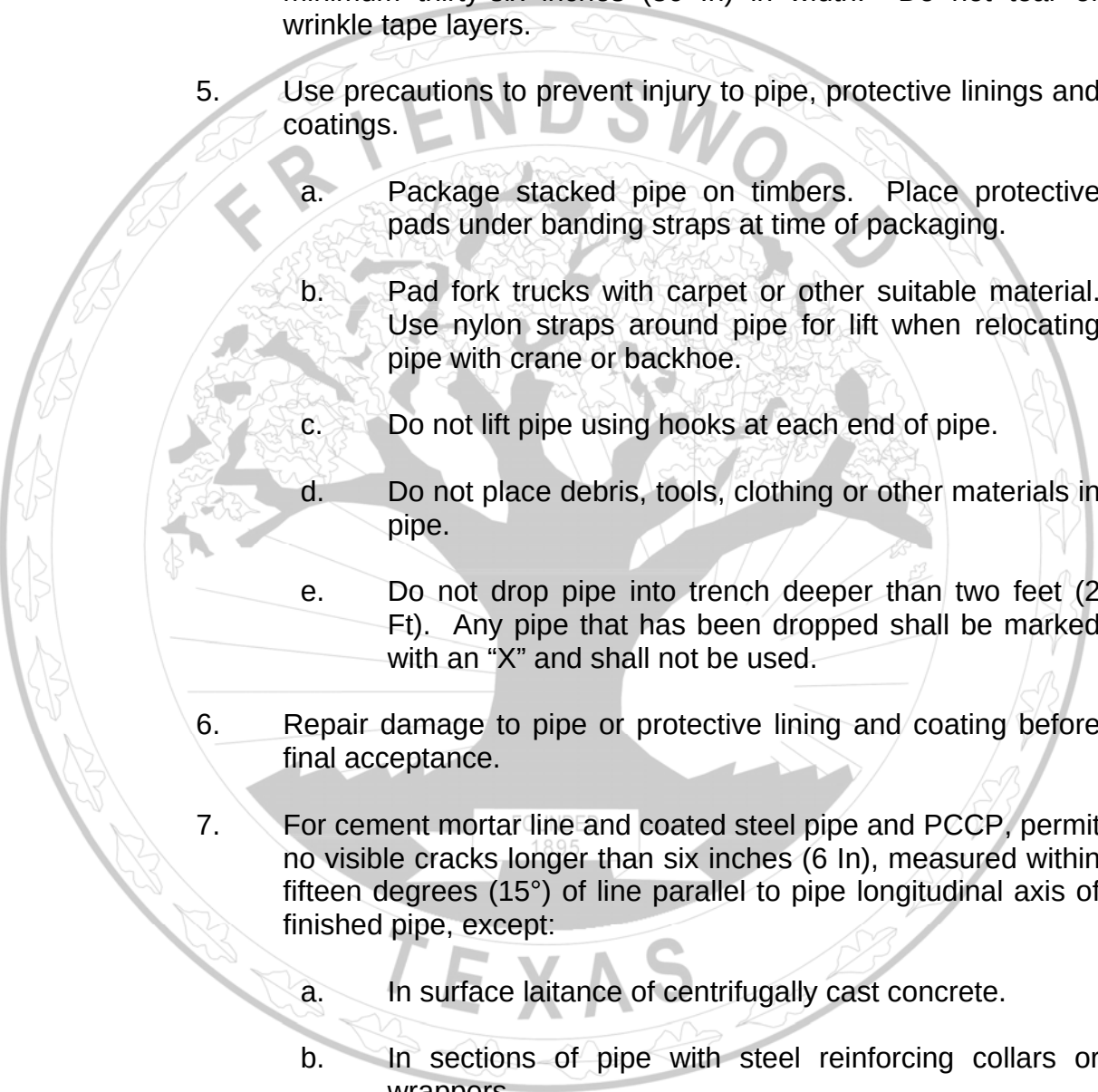
- H. The City of Friendswood Public Works Department shall handle, at no cost to the Contractor, operations involving opening and closing valves for wet connections and for chlorination. The Contractor is responsible for handling necessary installations and removal of chlorination and testing taps and risers.
- I. If asbestos-cement (A.C.) pipe is encountered, follow safety practices outlined in American Water Works Association's publication, "Work Practices for A/C Pipe". Strictly adhere to "recommended practices" contained in this publication and make them "mandatory practices" for this Project.
- J. For pipe diameters thirty-six inches (36 In) and greater, clearly mark each section of pipe and fitting with unique designation on inside of pipe along with pressure class. Locate unique identifying mark minimum of five feet (5 Ft) away from either end of each section of pipe. Provide one (1) unique identifying mark in middle of each fitting. Place markings at consistent locations. Use permanent black paint and minimum letter height of four inches (4 In) to mark designations.
- K. The Contractor is responsible for assuring chosen manufacturer fulfills requirements for extra fittings and, therefore, is responsible for costs due to downtime if requirements are not met by the manufacturer.
- L. Do not remove plugs or clamps during months of peak water demands; June, July and August, unless otherwise approved by the Project Manager.

3.2 HANDLING, CLEANING AND INSPECTION

A. Handling:

- 1. Place pipe along project site where storm water or other water shall not enter or pass through pipe.
- 2. Load, transport, unload and otherwise handle pipe and fittings to prevent damage of any kind. Handle and transport pipe with equipment designed, constructed and arranged to prevent damage to pipe, lining and coating. Do not permit bare chains, hooks, metal bars or narrow skids or cradles to come in contact with coatings. Where required, provide pipe fittings with sufficient interior strutting or cross bracing to prevent deflection under their own weight.

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3. Hoist pipe from trench side into trench by means of sling of smooth steel cable, canvas, leather, nylon or similar material.
 4. For large diameter water lines, handle pipe only by means of sling of canvas, leather, nylon or similar material. Sling shall be minimum thirty-six inches (36 In) in width. Do not tear or wrinkle tape layers.
 5. Use precautions to prevent injury to pipe, protective linings and coatings.
 - a. Package stacked pipe on timbers. Place protective pads under banding straps at time of packaging.
 - b. Pad fork trucks with carpet or other suitable material. Use nylon straps around pipe for lift when relocating pipe with crane or backhoe.
 - c. Do not lift pipe using hooks at each end of pipe.
 - d. Do not place debris, tools, clothing or other materials in pipe.
 - e. Do not drop pipe into trench deeper than two feet (2 Ft). Any pipe that has been dropped shall be marked with an "X" and shall not be used.
 6. Repair damage to pipe or protective lining and coating before final acceptance.
 7. For cement mortar line and coated steel pipe and PCCP, permit no visible cracks longer than six inches (6 In), measured within fifteen degrees (15°) of line parallel to pipe longitudinal axis of finished pipe, except:
 - a. In surface laitance of centrifugally cast concrete.
 - b. In sections of pipe with steel reinforcing collars or wrappers.
 - c. Within twelve inches (12 In) of pipe ends.
 8. Reject pipe with visible cracks (not meeting exceptions) and remove from project site.

- B. Cleaning: Thoroughly clean and dry interior of pipe and fittings of foreign matter before installation and keep interior clean until the Work has been accepted. Keep joint contact surfaces clean until jointing is completed. Do not place debris, tools, clothing or other materials in pipe. After pipe laying and joining operations are completed, clean inside of pipe and remove any debris.
- C. Inspection: Before installation, inspect each pipe and fitting for defects. Reject defective, damaged or unsound pipe and fittings and remove them from site.

3.3 EARTHWORK

- A. Conform to applicable provisions of Section 02125 – Excavation and Backfilling for Utilities and Section 02270 – Augering for Water Pipe and Conduit.
- B. Bedding: Use bedding materials in conformance with Section 02140 – Utility Backfill Materials.
- C. Backfill: Use bank run sand or earth or native soil as specified in Section 02140 – Utility Backfill Materials. Backfill excavated areas in same day excavated. When not possible, cover excavated areas using steel plates on paved areas and other protective measures elsewhere.
- D. Place material in uniform layers of prescribed maximum loose thickness and wet or dry material to approximately optimum moisture content. Compact to prescribed density. Water tamping or jetting is not allowed.
- E. Pipe Embedment: Including six (6) inch pipe bedding and backfill to twelve inches (12 In) above top of pipe.

3.4 PIPE CUTTING

- A. Cut pipe twelve inches (12 In) and smaller with standard wheel pipe cutters. Cut pipe larger than twelve inches (12 In) in manner approved by the Project Manager. Make cuts smooth and at right angles to axis of pipe. Bevel plain end with heavy file or grinder to remove sharp edges.

3.5 PIPING INSTALLATION

- A. General Requirements:
 - 1. Lay pipe in subgrade free of water.

2. Make adjustments of pipe to line and grade by scraping away subgrade or filling in with granular material.
 3. Properly form bedding to fully support bell without wedging or blocking up bell.
 4. Open Cut Construction: Keep pipe trenches free of water which might impair pipe laying operations. Grade pipe to provide uniform support along bottom of pipe. Excavate for bell holes after bottom has been graded and in advance of placing pipe. Lay not more than nominal city block length of not more than three hundred feet (300 Ft) of pipe in trench ahead of backfilling operations. Cover or backfill laid pipe if pipe laying operations are interrupted and during non-working hours. Place backfill carefully and simultaneously on each side of pipe to avoid lateral displacement of pipe and damage to joints. If adjustment of pipe is required after it has been laid, remove and re-lay as new pipe.
- B. Install pipe continuously and uninterrupted along each street on which the Work is to be performed. Obtain approval of the Project Manager prior to skipping any portion of the Work.
- C. Protection of Pipeline: Securely place stoppers or bulkheads in openings and in end of line when construction is stopped temporarily and at end of each day's work.
- D. Perform Critical Location as shown on the Drawings. Refer to Section 02125 – Excavation and Backfill for Utilities for additional requirements at critical locations.
- E. Laying Large Diameter Water Line:
1. Lay not more than fifty feet (50 Ft) of pipe in trench ahead of backfilling operations.
 2. Dig trench to proper width as shown on the Drawings. When trench width below top of pipe becomes four feet (4 Ft) wider than specified, install higher class of pipe or improved bedding, as determined by the Project Manager. No additional payment shall be made for higher class of pipe or improved bedding.
 3. Use adequate surveying methods and equipment; employ personnel competent in use of this equipment. Horizontal and vertical deviations from alignment as indicated on the Drawings shall not exceed one-tenth foot (0.10 Ft). Measure and record

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"as-built" horizontal alignment and vertical grade at maximum of every one hundred feet (100 Ft) on record drawings.

4. Prevent damage to coating when placing backfill. Use backfill material free of large rocks or stones or other material which could damage coatings.
5. Before assembling couplings, lightly coat pipe ends and outside of gaskets with cup grease or liquid vegetable soap to facilitate installation.
6. Prior to proceeding with critical tie-ins submit sequence of work based on findings from "critical location" effort.

F. Perform following additional procedures when working on plant sites.

1. Seventy-two hours (72 Hrs) prior to each plant shut down or connection, schedule coordination meeting with the Project Manager and Water Production personnel. At this meeting, present proposed sequencing of the Work and verification of readiness to complete the Work as required and within time permitted. Do not proceed with the Work until the Project Manager agrees key personnel, equipment and materials are on hand to complete the Work.
2. Prior to fully excavating around existing piping, excavate as minimal as possible to confirm type and condition of existing joints. Verify size, type and condition of pipe prior to ordering materials or fully mobilizing for the Work.
3. Do not proceed with connections to existing piping and identified critical stages of work unless approved by the Project Manager and the City's Utilities Superintendent is present to observe.
4. Coordinate with the City's Utilities Superintendent to obtain reduction in operating pressures prior to performing connections to existing piping.
5. Make connections to existing piping only when two (2) valves are closed off between connection and source of water pressure. Do not make connection relying solely on one (1) valve being closed, unless otherwise approved by the Project Manager.
6. Perform critical stages of the Work identified on the Drawings at

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night or during low water demand months as specified in Section 01110 – Summary of Work.

7. Excavation equipment used on plant sites to have smooth bucket; no teeth or side cutters.
 8. Submit to the Project Manager One Call Notification transmittal number prior to beginning excavation.
 9. Before each "dig" with mechanical excavator, probe ground to determine potential obstructions. Repeat procedure until existing pipe is located or excavation reaches desired elevation. Perform excavations within one foot (1 Ft) of existing piping by hand methods.
 10. Provide adequate notice to pipe manufacture's representative when connecting or modifying existing Prestressed Concrete Cylinder Pipe (PCCP).
 11. Provide field surveyed (horizontal and vertical elevations) "as-builts" of new construction and existing underground utilities encountered. Submit in accordance with Section 01330 – Submittal Procedures.
 12. Prior to performing plant work to be done on weekend, provide list of sites and contact person with phone numbers to the Project Manager by noon on each Thursday of week when such work is contemplated. Contact person must be accessible during weekend, have local Metro Area phone number and be authorized to make emergency decisions.
 13. No night work or plant shut down shall be scheduled to begin two (2) working days before or after designated City holidays.
- G. For tie-ins to existing water lines, provide necessary material on hand to facilitate connection prior to shutting down existing water line. Provide the City a minimum of seventy-two hours (72 Hrs) notice prior to shutting down existing water line.
1. Any work that has not been scheduled seventy-two hours (72 Hrs) before work is to commence, with the exception of emergency operations, shall not be allowed to start.

3.6 JOINTS AND JOINTING

- A. Rubber Gasketed Bell-and-Spigot Joints for Prestressed Concrete
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Cylinder Pipe (PCCP), Bar Wrapped Pipe PVC, Steel and DIP:

1. After rubber gasket is placed in spigot groove of pipe, equalize rubber gasket cross section by inserting tool or bar recommended by manufacturer under rubber gasket and moving it around periphery of pipe spigot.
 2. Lubricate gaskets with nontoxic water-soluble lubricant before pipe units are joined.
 3. Fit pipe units together in manner to avoid twisting or otherwise displacing or damaging rubber gasket.
 4. After pipe sections are joined, check gaskets to ensure that no displacement of gasket has occurred. If displacement has occurred, remove pipe section and remake joint as for new pipe. Remove old gasket, inspect for damage and replace if necessary before remaking joint.
 5. Where preventing movement of sixteen inch (16 In) diameter or greater pipe is necessary due to thrust, use restrained joints as shown on the Drawings.
 - a. Include buoyancy conditions for soil unit weight when computing thrust restraint calculations.
 - b. Do not include passive resistance of soil in thrust restraint calculations.
 6. Except for PVC pipe, provide means to prevent full engagement of spigot into bell as shown on the Drawings. Means may consist of wedges or other types of stops as approved by the Project Manager.
- B. Flanged Joints where required on Prestressed Concrete Cylinder Pipe (PCCP), Bar Wrapped Pipe, Ductile Iron Pipe (DIP) or Steel Pipe:
1. AWWA C207. Prior to installation of bolts, accurately center and align flanged joints to prevent mechanical prestressing of flanges, pipe and equipment. Align bolt holes to straddle vertical, horizontal or north-south center line. Do not exceed three sixty-fourths inch per foot (3/64 In/Ft) inclination of flange face from true alignment.
 2. Use full-face gaskets for flanged joints. Provide one-eighth inch (1/8 In) thick cloth inserted rubber gasket material. Cut

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gaskets at factory to proper dimensions.

3. Use galvanized or black nuts and bolts to match flange material. Use cadmium plated steel nuts and bolts underground. Tighten bolts progressively to prevent unbalanced stress. Maintain at all times approximately same distance between two (2) flanges at points around flanges. Tighten bolts alternately one hundred eighty degrees (180°) apart until all are evenly tight. Draw bolts tight to ensure proper seating of gaskets. Provide Densco petroleum based tape or approved equal for all exposed portions of nuts, bolts and pipe.
4. Full length bolt isolating sleeves and washers shall be used with flanged connections.
5. For in-line flange joints thirty inches (30 In) in diameter and greater and at butterfly valve flanges, provide Pyrox G-10 with nitrite seal, conforming to ANSI A 21.11 mechanical joint gaskets. For in-line flange joints sized between twelve inches (12 In) in diameter and greater and twenty-four inches (24 In) in diameter and smaller, provide Phenolic PSI with nitrite seal gasket conforming to ANSI A 21.11 mechanical joint gaskets.

C. Welded Joints (Prestressed Concrete Cylinder Pipe (PCCP), Bar Wrapped Pipe, Steel Pipe):

1. Prior to starting work, provide certification of qualification for welders employed on project for type of work procedures and positions involved.
2. Joints: AWWA C206. Full-fillet, single lap-welded slip-type either inside or outside or double butt-welded type; use automatic or hand welders; completely penetrate deposited metal with base metal; use filler metal compatible with base metal; keep inside of fittings and joints free from globules of weld metal which would restrict flow or become loose. Do not use mitered joints. For interior welded joints, complete backfilling before welding. For exterior field-welded joints, provide adequate working room under and beside pipe. Use exterior welds for thirty inch (30 In) and smaller.
3. Furnish welded joints with trimmed spigots and interior welds for thirty-six inch (36 In) and larger pipe.
4. Bell-and-spigot, lap-welded slip joints: Deflection may be taken at joint by pulling joint up to three-quarters inch (3/4 In) as long

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as one and one-half inch (1-1/2 In) minimum lap is maintained. Spigot end may be miter cut to take deflections up to five degrees (5°) as long as joint tolerances are maintained. Miter end cuts of both ends of butt-welded joints may be used for joint deflections of up to five degrees (5°).

5. Align piping and equipment so that no part is offset more than one-eighth inch (1/8 In). Set fittings and joints square and true and preserve alignment during welding operation. For butt welded joints, align abutting ends to minimize offset between surfaces. For pipe of same nominal wall thickness, do not exceed one-sixteenth inch (1/16 In) offset. Use line-up clamps for this purpose; however, take care to avoid damage to linings and coatings.
6. Protect coal-tar-epoxy lining during welding by draping an eighteen inch (18 In) wide strip of heat resistant material over top half of pipe on each side of lining holdback to avoid damage to lining by hot splatter. Protect tape coating similarly if external welding is required.
7. Welding rods: Compatible with metal to be welded to obtain strongest bond, E-70XX.
8. Deposit metal in successive layers to provide at least two (2) passes or beads for automatic welding and three (3) passes or beads for manual welding in completed weld.
9. Deposit no more than one-quarter inch (1/4 In) of metal on each pass. Thoroughly clean each individual pass with wire brush or hammer to remove dirt, slag or flux.
10. Do not weld under weather condition that would impair strength of weld, such as wet surface, rain or snow, dust or high winds, unless work is properly protected.
11. Make tack weld of same material and by same procedure as completed weld. Otherwise, remove tack welds during welding operation.
12. Remove dirt, scale and other foreign matter from inside piping before tying in sections, fittings or valves.
13. Welded Joints for Large Diameter Water Lines:
 - a. Furnish pipe with trimmed spigots and interior welds for

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thirty-six inch (36 In) and larger pipe.

- b. Use exterior welds for thirty inch (30 In) and smaller.
- c. Only one (1) end may be miter cut. Miter end cuts of both ends of butt-welded joints may be used for joint deflections of up to two and one-half degrees (2-1/2°).
- d. For large diameter water lines, employ an independent certified testing laboratory, approved by the Project Manager, to perform weld acceptance tests on welded joints. Include cost of such testing and associated work to accommodate testing in contract unit price bid for water line. Furnish copies of test reports to the Project Manager for review. The Project Manager has the final decision as to suitability of welds tested.
 - 1) Weld acceptance criteria:
 - a) Conduct in accordance with ASTM E165-Standard Test Method for Liquid Penetrant Examination and ASTM E709 Standard Guide for Magnetic Particle Examination. Use X-ray methods for butt welds, for one hundred percent (100%) of joint welds.
 - b) Examine welded surfaces for the following defects:
 - i) Cracking.
 - ii) Lack of fusion/penetration.
 - iii) Slag which exceeds one-third (1/3) of (t) where (t) equals material thickness.
 - iv) Porosity/Relevant rounded indications greater than three-sixteenths inch (3/16 In); rounded indication is one (1) of circular or elliptical shape with length equal to or less than three (3) times its width.
 - v) Relevant linear indications in which length of linear indication exceeds

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three (3) times its width.

- vi) Four (4) or more relevant one-sixteenth inch (1/16 In) rounded indications in line separated by one-sixteenth inch (1/16 In) or less edge to edge.

14. After pipe is joined and prior to start of welding procedure, make spigot and bell essentially concentric by jacking, shimming or tacking to obtain clearance tolerance around periphery of joint except for deflected joints.

15. Furnish each welder employed steel stencil for marking welds, so work of each welder can be identified. Mark pipe with assigned stencil adjacent to weld. When welder leaves job, stencil must be voided and not duplicated. Welder making defective welds must discontinue work and leave project site. Welder may return to project site only after recertification.

16. Provide cylindrical corrosion barriers for epoxy lined steel pipe twenty-four inch (24 In) diameter and smaller, unless minimum wall thickness is one-half inch (1/2 In) or greater.

- a. In addition to welding requirements contained here in Paragraph 3.6, conform to protection fitting manufacturer's installation recommendations.

- b. Provide services of technical representative of manufacturer available on site at beginning of pipe laying operations. Representative to train welders and advise regarding installation and general construction methods. Welders must have twelve months (12 Mos) prior experience installing protection fittings.

- c. All steel pipe is to have cutback three-quarters inch (3/4 In) to not greater than one inch (1 In) of internal diameter coating from weld bevel.

- d. Furnish steel fittings with cylindrical corrosion barriers with shop welded extensions to end of fittings. Extension length to measure no less than diameter of pipe. Shop apply lining in accordance with AWWA C210 or AWWA C213.

- e. All steel pipe receiving field adjustments are to be cold

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cut using standard practices and equipment. No cutting using torch is to be allowed.

D. Harnessed Joints (Prestressed Concrete Cylinder Pipe (PCCP), Bar Wrapped Pipe):

1. Use of snap-ring type restrained joints on pipe is limited to twenty inch (20 In) through forty-eight inch (48 In) diameters.
2. Position snap-ring joint bolt on top [twelve (12) o'clock position]. Provide minimum one-half inch (1/2 In) joint recess. Use joint "diapers" minimum of twelve inches (12 In) wide.
3. For field adjustments with deflections beyond manufacturer's recommendations:
 - a. Field trim spigot.
 - b. Do not engage ring.
4. Harnessed joints shall not be permitted in areas defined on the Drawings as potentially petroleum contaminated material, in tunnels or at bend greater than five degrees (5°).
5. Install harness type joints including snap rings at straight sections of pipe.

E. Restrained Joints

1. For existing water lines and water lines less than sixteen inches (16 In) in diameter, restrain pipe joints with concrete thrust blocks.
2. Thrust restraint lengths shown on the Drawings are minimum anticipated lengths. These lengths are based on deflections indicated and on use of Prestressed Concrete Cylinder Pipe (PCCP) for large diameter lines and ductile Iron Pipe (DIP) for small diameter lines. Adjustments in deflections or use of other pipe material may result in reduction or increase of thrust lengths. Perform calculations by pipe manufacturer to verify proposed thrust restraint lengths. Submit calculations for all pipe materials sealed by a Professional Engineer licensed by the State of Texas for review by the Project Manager. Make adjustments in thrust restraint lengths at no additional cost to the City.

3. Passive resistance of soil shall not be permitted in calculation of thrust restraint.
4. For sixteen inch (16 In) lines and larger use minimum sixteen foot (16 Ft) length of pipe in and out of joints made up of beveled pipe where restraint joint lengths are not identified on the Drawings. Otherwise, provide restraint joints for a minimum length of sixteen feet (16 Ft) on each side of beveled joints.
5. Restraint Devices:
 - a. Prestressed Concrete Cylinder Pipe (PCCP), bar wrapped pipe and steel pipe, that has either welded or flanged fittings or valves, shall not need to be further restrained.
 - b. Mega-lug fittings are the acceptable and preferred method of restraint for all other piping with the exception of those listed in paragraph 3.7.E.5.d of this Section.
 - c. Use of Ellison clamps and all-threaded rod is allowed with the approval of the Project Manager. Ellison clamps, all-threaded rod and other hardware shall be 316 stainless steel. Ellison clamp shall be a minimum of two feet (2 Ft) from edge of fitting.
 - d. All offsets, even if Mega-lugs are used on the fittings, shall have Ellison clamps on the end and/or sides of the offset and shall have stainless steel all-threaded rod connections in between fittings to prevent movement.
5. Installation:
 - a. Install restrained joints mechanism in accordance with manufacturer's recommendations.
 - b. Examine and clean mechanism; remove dirt, debris and other foreign material.
 - c. Apply gasket and joint NSF 61 FDA food grade approved lubricant.
 - d. Verify gasket is evenly seated.

- e. Do not over stab pipe into mechanism.
- 6. Prevent any lateral movement of thrust restraints throughout pressure testing and operation.
- 7. Place Class C, two thousand five hundred pounds per square inch (2500 psi) concrete conforming to Section 03300 – Structural Concrete, for blocking at each change in direction of existing water lines, to brace pipe against undisturbed trench walls. Finish placement of concrete blocking, made from Type I cement, four days (4 D) prior to hydrostatic testing of pipeline. Test may be made two days (2 D) after completion of blocking if Type II cement is used.
- F. Joint Grout (Prestressed Concrete Cylinder Pipe (PCCP), Bar Wrapped Pipe, Steel Pipe):
 - 1. Mix cement grout mixture by machine except when less than one-half cubic yard (1/2 Cy) is required. When less than one-half cubic yard (1/2 Cy) is required, grout may be hand mixed. Mix grout only in quantities for immediate use. Place grout within twenty minutes (20 Min) after mixing. Discard grout that has set. Retempering of grout by any means is not permitted.
 - 2. Prepare grout in small batches to prevent stiffening before it is used. Do not use grout which has become so stiff that proper placement cannot be assured without rettempering. Use grout for filling grooves of such consistency that it shall adhere to ends of pipe.
 - 3. Surface Preparation: Remove defective concrete, laitance, dirt, oil, grease and other foreign material from concrete surfaces with wire brush or hammer to sound, clean surface. Remove rust and foreign materials from metal surfaces in contact with grout.
 - 4. Follow established procedures for hot and cold weather concrete placement.
 - 5. Complete joint grout operations and backfilling of pipe trenches as closely as practical to pipe laying operations. Allow grouted exterior joints to cure at least one hour (1 Hr) before compacting backfill.
 - 6. Grouting exterior joint space: Hold wrapper in place on both sides of joint with minimum five-eighths inch (5/8 In) wide steel

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straps or bands. Place no additional bedding or backfill material on either side of pipe until after grout band is filled and grout has mechanically stiffened. Pull ends of wrapper together at top of pipe to form access hole. Pour grout down one side of pipe until it rises on other side. Rod or puddle grout to ensure complete filling of joint recess. Agitate for fifteen minutes (15 Min) to allow excess water to seep through joint band. When necessary, add more grout to fill joint completely. Protect gap at top of joint band from backfill by allowing grout to stiffen or by covering with structurally protective material. Do not remove band from joint. Proceed with placement of additional bedding and backfill material.

7. Interior Joints for Pipe twenty-four inches (24 In) and smaller: Circumferentially butter bell with grout prior to insertion of spigot, strike off flush surplus grout inside pipe by pulling filled burlap bag or inflated ball through pipe with rope. After joint is engaged, finish off joint grout smooth and clean. Use swab approved by the Project Manager for twenty inch (20 In) pipe and smaller.
8. Protect exposed interior surfaces of steel joint bands by metallizing, by other approved coatings or by pointing with grout. Joint pointing may be omitted on potable water pipelines if joint bands are protected by zinc metallizing or other approved protective coatings.
9. Remove and replace improperly cured or otherwise defective grout.
10. Strike off grout on interior joints and make smooth with inside diameter of pipe.
11. When installed in tunnel or encasement pipe and clearance within casing does not permit outside grout to be placed in normal manner, apply approved flexible sealer, such as Flex Protex or equal, to outside joint prior to joint engagement. Clean and prime surfaces receiving sealer in accordance with manufacturer's recommendations. Apply sufficient quantities of sealer to assure complete protection of steel in joint area. Fill interior of joint with grout in normal manner after joint closure.
12. Interior Joints for Water Lines thirty inches (30 In) and larger: Clean joint space, wet joint surfaces, fill with stiff grout and trowel smooth and flush with inside surfaces of pipe using steel trowel so that surface is smooth. Accomplish grouting at end of

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each work day. Obtain written acceptance from the Project Manager of inside joints before proceeding with next day's pipe laying operation. During inspection, insure no delamination of joint mortar has occurred by striking joint mortar lining with rubber mallet. Remove and replace delaminated mortar lining.

13. Work which requires heavy equipment to be over water line must be completed before mortar is applied to interior joints.
- G. Large Diameter Water Main Joint Testing: In addition to testing individual joints with feeler gauge approximately one-half inch (1/2 In) wide and fifteen thousandths inch (0.015 In) thick, use other joint testing procedure approved or recommended by pipe manufacturer which shall help ensure watertight installation prior to backfilling. Perform tests at no additional cost to the City.
- H. Make curves and bends by deflecting joints or other method as recommended by manufacturer and approved by the Project Manager. Submit details of other methods of providing curves and bends which exceed manufacturer's recommended deflection prior to installation.
 1. Deflection of pipe joints shall not exceed maximum deflection recommended by pipe manufacturer, unless otherwise indicated on the Drawings.
 2. If deflection exceeds that specified but is less than five percent (5%), repair entire deflected pipe section such that maximum deflection allowed is not exceeded.
 3. If deflection is equal to or exceeds five percent (5%) from that specified, remove entire portion of deflected pipe section and install new pipe.
 4. Replace, repair or reapply coatings and linings as required.
 5. Assessment of deflection may be measured by the Project Manager at location along pipe. Arithmetical averages of deflection or similar average measurement methods shall not be deemed as meeting the intent of this standard.
 6. When rubber gasketed pipe is laid on curve, join pipe in straight alignment and then deflect to curved alignment.
- I. Closures Sections and Approved Field Modifications to Steel, Prestressed Concrete Cylinder Pipe (PCCP), Bar Wrapped Pipe and Fittings:

1. Apply welded-wire fabric reinforcement to interior and exterior of exposed interior and exterior surfaces greater than six inches (6 In) in diameter. Welded-wire fabric: minimum W1; maximum spacing two inches by four inches (2 In x 4 In); three-eighths inch (3/8 In) from surface of steel plate or middle third (3rd) of lining or coating thickness for mortar thickness less than three-quarters inch (3/4 In).
2. Fill exposed interior and exterior surfaces with nonshrink grout.
3. For pipe diameters thirty-six inches (36 In) and greater, perform field welds on interior and exterior of pipe.
4. For large diameter water lines, provide minimum overlap of four inches (4 In) of butt strap over adjacent piece on butt-strap closures.

3.7 CATHODIC PROTECTION APPURTENANCES

- A. Conform to requirements of Section 02285 – Cathodic Protection.
- B. Where identified on the Drawings, modify pipe for cathodic protection as detailed on the Drawings and specified. Unless otherwise noted, provide insulation kits including test stations at connections to existing water system or at locations to isolate one (1) type of cathodic system from another type, between water line, access manhole piping and other major openings in water line or as shown on the Drawings.
- C. Bond joints for pipe installed in tunnel or open cut, except where insulating flanges are provided. Weld strap or clip between bell and spigot of each joint or as shown on the Drawings. No additional bonding required where joints are welded for thrust restraint. Repair coatings as specified by appropriate AWWA standard, as recommended by manufacturer and as approved by the Project Manager.
- D. Bonding Strap or Clip: Free of foreign material that may increase contact resistance between wire and strap or clip.

3.8 SECURING, SUPPORTING AND ANCHORING

- A. Support piping as shown on the Drawings and as specified in this Section, to maintain line and grade and prevent transfer of stress to adjacent structures.

- B. Where shown on the Drawings, anchor pipe fittings and bends installed on water line by welding consecutive joints of pipe together to distance each side of fitting. Restrained length, as shown on the Drawings, assumes that installation of pipe and subsequent hydrostatic testing begins upstream and proceed downstream, with respect to normal flow of water in pipe. If installation and testing differs from this assumption, submit for approval revised method of restraining pipe joints upstream and downstream of device used to test against (block valve, blind flange or dished head plug).
- C. Use adequate temporary blocking of fittings when making connections to distribution system and during hydrostatic tests. Use sufficient anchorage and blocking to resist stresses and forces encountered while tapping existing water line.

3.9 POLYETHYLENE WRAP FOR DUCTILE IRON PIPE (DIP)

- A. Double wrap pipe and appurtenances (except fire hydrants and fusion bond or polyurethane coated fittings) with eight (8) mil polyethylene film.
- B. Do not use polyethylene wrap if pipe is cathodically protected.
- C. Conform to requirements of Section 02260 – Polyethylene Wrap.

3.10 CLEANUP AND RESTORATION

- A. Provide cleanup and restoration crews to work closely behind pipe laying crews and where necessary, during disinfection and hydrostatic testing, service transfers, abandonment of old water lines, backfill and surface restoration.
- B. Unless otherwise approved by the Project Manager, comply with the following;
 - 1. Once water line is installed to limits approved in layout submitted, immediately begin preparatory work for disinfection effort.
 - 2. Immediately after transfer of services, begin abandonment of old water lines and site restoration.
 - 3. Do not exceed a total of fifty percent (50%) of total project linear feet of disturbed right-of-way and easement until site is restored in accordance with Section 01745 – Site Restoration.
 - 4. Exceeding any of the above footage limitations shall be

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considered a material breach of the Contract and subject to termination in accordance with the General Conditions.

- C. For large diameter water lines, do not install more than two thousand linear feet (2000 Lf) of water line, without previous two thousand linear feet (2000 Lf) being restored in accordance with Section 01745 – Site Restoration. Schedule paving crews so repaving work shall not lag behind pipe laying work by more than one thousand linear feet (1000 Lf). Failure to comply with this requirement shall be considered a material breach of the Contract and subject to termination in accordance with the General Conditions.

3.11 CLEANING PIPING SYSTEMS

- A. Remove construction debris or foreign material and thoroughly broom clean and flush piping systems. Provide temporary connections, equipment and labor for cleaning. The City must inspect water line for cleanliness prior to filling.

3.12 DISINFECTION OF WATER LINES

- A. Conform to requirements of Section 02455 – Disinfection of Waterlines.
 - 1. No later than three days (3 D) after completing disinfection preparatory work, submit to the City appropriate request for disinfection.
 - 2. Schedule City' Utilities Superintendent at least seventy-two hours (72 Hrs) before disinfection or blowing off of lines. The City Water personnel shall turn all valves on and off for the duration.
 - 3. Water Lines shall not be placed into service until all Bac-T testing has passed.

3.13 FIELD HYDROSTATIC TESTS

- A. Conform to requirements of Section 02450 – Hydrostatic Testing of Waterlines.

END OF SECTION

SECTION 02410

GATE VALVES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Gate valves.

1.2 MEASUREMENT AND PAYMENT

- A. Unit Prices:

1. Payment for gate valves is on a unit price basis. The unit price includes cost of required box for gate valves and extensions.
2. Payment for two inch (2 In) blow-off valve with box is on a unit price basis for each installation.
3. Refer to Section 01270 – Measurement and Payment for unit price procedures.

- B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

- A. ASTM – American Society for Testing and Materials.

1. ASTM A307 – Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.
2. ASTM B62 – Standard Specification for Composition Bronze or Ounce Metal Casting.
3. ASTM B763 – Standard Specification for Copper Alloy Sand Casting for Valve Application.
4. ASTM D429 – Standard Test Methods for Rubber Property-Adhesion to Rigid Substrates.

B. AWWA – American Water Works Association.

1. AWWA C500 – Standard for Metal-Seated Gate Valves for Water Supply Service.
2. AWWA C509 – Standard for Resilient-Seated Gate Valves for Water Supply Service.
3. AWWA C515- Standard for Reduced Wall, Resilient- Seated Gate Valves for Water Supply Service.
4. AWWA C550 – Standard for Protective Epoxy Interior Coatings for Valves and Hydrants.

C. CFTS – City of Friendswood Technical Specifications.

1. Section 01270 – Measurement and Payment.
2. Section 01330 – Submittal Procedures.
3. Section 02125 – Excavation and Backfill for Utilities.
4. Section 02450 – Hydrostatic Testing of Waterlines.
5. Section 02455 – Disinfection of Waterlines.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit manufacturer's product data for proposed valves for approval.
- C. Provide detailed drawings of gearing mechanism for twenty inch (20 In) and larger gate valves.

1.5 QUALITY CONTROL

- A. Submit manufacturer's affidavit that gate valves are manufactured in the United States and conform to stated requirements of AWWA C500, AWWA C509, AWWA C515 and this Section and that they have been satisfactorily tested in the United States in accordance with AWWA C500, AWWA C509 and AWWA C515.

PART II: PRODUCTS

2.1 MATERIALS

- A. Gate Valves: AWWA C500, AWWA C509, AWWA C515 and additional requirements of this Section. Direct bury valves and those in subsurface vaults shall open counterclockwise (left hand).
- B. If type of valve is not indicated on the Drawings, use gate valves as line valves for sizes twenty inches (20 In) and smaller. When type of valve is indicated, no substitute is allowed.
- C. Gate Valves one and one-half inches (1-1/2 In) in diameter and smaller: one hundred twenty-five pounds per square inch (125 psi) pressure rating; bronze; rising-stem; singlewedge; disc type; screwed ends
- D. Coatings for Gate Valves two inches (2 In) and larger: AWWA C550 non-toxic, imparts no taste to water, functions as physical, chemical and electrical barrier between base metal and surroundings, minimum eight (8) mil-thick, fusion-bonded epoxy. Prior to assembly of valve, apply protective coating to interior and exterior surfaces of body.
- E. Gate Valves two inches (2 In) in diameter: Iron body, double disc or resilient-seated, non-rising stem, one hundred fifty pounds per square inch (150 psi) pressure rating, two inch (2 In) square nut operating to open counterclockwise (left hand).
- F. Gate Valves three inches (3 In) to twelve inches (12 In) in diameter: Non-directional, standard-wall resilient seated (AWWA C509), parallel seat double disc (AWWA C500) or reduced-wall resilient seated gate valves (AWWA C515), two hundred pounds per square inch (200 psi) pressure rating, bronze mounting, push-on bell ends with rubber joint rings and nut-operated unless otherwise specified. Provide approved standard-wall resilient seated valves. Provide approved reduced-wall resilient seated valves. Provide approved double disc valves. Comply with following requirements unless otherwise specified in the Drawings:
 - 1. Design: Fully encapsulated rubber wedge or rubber seat ring mechanically attached with minimum 304 stainless-steel fasteners or screws; threaded connection isolated from water by compressed rubber around opening.
 - 2. Body: Cast or ductile iron, flange bonnet and stuffing box together with ASTM A307 Grade B bolts. Manufacturer's initials, pressure rating and year manufactured shall be cast in body.

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3. Bronze: Valve components in waterway shall contain not more than fifteen percent (15%) zinc and not more than two percent (2%) aluminum.
 4. Stems: ASTM B763 bronze, alloy number-995 minimum yield strength of forty thousand pounds per square inch (40,000 psi); minimum elongation in two inches (2 In) of twelve percent (12%), non-rising.
 5. O-rings: For AWWA C500, Section 3.12.2. For AWWA C509, Sections 2.2.6 and 4.8.2. For AWWA C515, Section 4.2.2.5.
 6. Stem Seals: Consist of three (3) O-rings, two (2) above and one (1) below thrust collar with anti-friction washer located above thrust collar for operating torque.
 7. Stem Nut: Independent or integrally cast of ASTM B62 bronze.
 8. Resilient Wedge: Molded, synthetic rubber, vulcanized and bonded to cast or ductile iron wedge or attached with 304 stainless steel screws tested to meet or exceed ASTM D429 Method B; seat against epoxy-coated surface in valve body.
 9. Bolts: AWWA C500 Section 3.4, AWWA C509 Section 4.4 or AWWA C515 Section 4.4.4; stainless steel; cadmium plated or zinc coated.
- G. Gate valves fourteen inch (14 In) and larger in Diameter: AWWA C500; parallel seat double disc gate valves; push-on bell ends with rubber rings and nut-operated unless otherwise specified. Provide approved double disc valves with one hundred fifty pounds per square inch (150 psi) pressure rating. Comply with following requirements unless otherwise specified on the Drawings:
1. Body: Cast iron or ductile iron; flange together bonnet and stuffing box with ASTM A307 Grade B bolts. Cast following into valve body manufacturer's initials, pressure rating and year manufactured. When horizontally mounted, equip valves greater than twelve inches (12 In) in diameter with rollers, tracks and scrapers.
 2. O rings: For AWWA C500, Section 3.12.2. For AWWA C515, Section 4.2.2.5.
 3. Stems: ASTM B763 bronze, alloy number-995 minimum yield

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strength of forty thousand pounds per square inch (40,000 psi); minimum elongation in two inches (2 In) of twelve percent (12%), non-rising.

4. Stem Nut: Machined from ASTM B62 bronze rod with integral forged thrust collar machined to size; non-rising.
 5. Stem Seals: Consist of three (3) O-rings, two (2) above and one (1) below thrust collar with antifriction washer located above thrust collar for operating torque.
 6. Bolts: AWWA C500 Section 3.4 or AWWA C515 Section 4.4.4; stainless steel; cadmium plated or zinc coated.
 7. Discs: Cast iron with bronze disc rings securely pinned into machined dovetailed grooves.
 8. Wedging Device: Solid bronze or cast-iron, bronze-mounted wedges. Thin plates or shapes integrally cast into cast-iron surfaces are acceptable. Other moving surfaces integral to wedging action shall be bronze monel or nickel alloy-to-iron.
 9. Provide bypass for valves sixteen inches (16 In) and larger.
 10. Bronze Mounting: Built as integral unit mounted over or supported on, cast-iron base and of sufficient dimensions to be structurally sound and adequate for imposed forces.
 11. Gear Cases: Cast iron; furnished on eighteen (18) inch and larger valves and of extended type with steel side plates, lubricated, gear case enclosed with oil seal or O-rings at shaft openings.
 12. Stuffing Boxes: Located on top of bonnet and outside gear case.
- H. Gate valves fourteen inches (14 In) to twenty-four inches (24 In): Provide AWWA C515; reduced-wall, resilient seated gate valves with 250 psi pressure rating. Furnish with spur or bevel gearing.
1. Mount valves horizontally if proper ground clearance cannot be achieved by normal vertical installation. For horizontally mounted gate valves, provide bevel operation gear mounted vertically for above ground operation.
 2. Use valve body, bonnet, wedge and operator nut constructed of

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- ductile iron. Fully encapsulate exterior of ductile iron wedge with rubber.
3. Ensure wedge is symmetrical and seals equally well with flow in either direction.
 4. Provide ductile iron operator nut with four (4) flats at stem connection to apply even input torque to the stem.
 5. Bolts: AWWA C515, Section 4.4.4, Stainless Steel; cadmium plated or zinc coated.
 6. Provide high strength bronze stem and nut.
 7. O-rings: AWWA C515, Section 4.2.2.5, pressure O-rings as gaskets.
 8. Provide stem sealed by three (3) O-rings. Top two (2) O-rings are to be replaceable with valve fully open at full rated working pressure.
 9. Provide thrust washers to the thrust collar for easy valve operation.
- I. Gate Valves Extension Stem: When shown on the Drawings, provide non-rising, extension stem having coupling sufficient to attach securely to operating nut of valve. Upper end of extension stem shall terminate in square wrench nut no deeper than four feet (4 Ft) from finished grade or as shown on the Drawings. Support extension stem with an arm attached to wall of manhole or structure that loosely holds extension stem and allows rotation in the axial direction only.
- J. Gate Valves in Factory Mutual (Fire Service) Type Meter Installations: Conform to provisions of this specification; outside screw and yoke valves; carry label of Underwriters' Laboratories, Inc.; flanged, Class 125; clockwise to close.
- K. Gate Valves for Tapping Steel Pipe: Provide double disc gate valve. Resilient wedge gate valve shall only be installed in a vertical position.
- L. Provide flanged joints when valve is connected to steel or PCCP.

PART III: EXECUTION

3.1 INSTALLATION

- A. Earthwork: Conform to applicable provisions of Section 02125 – Excavation and Backfill for Utilities.
- B. Operation: Do not use valves for throttling without prior approval of the manufacturer.

3.2 SETTING VALVES AND VALVE BOXES

- A. Remove foreign matter from within valves prior to installation. Inspect valves in open and closed positions to verify that parts are in satisfactory working condition.
- B. Install valves and valve boxes where shown on the Drawings. Set valves plumb and as detailed. Center valve boxes on valves. Carefully tamp earth around each valve box for minimum radius of four feet (4 Ft) or to undisturbed trench face when less than four feet (4 Ft). Install valves completely closed when placed in water line.
- C. For pipe section of each riser, use only six inch (6 In), ductile iron Class 51 or DR18 PVC pipe cut to proper length. Riser must be installed to allow complete access for operation of valve. Assemble and brace box in vertical position as indicated on the Drawings.

3.3 DISINFECTION AND TESTING

- A. Contractor shall disinfect valves and appurtenances as required by Section 02455 – Disinfection of Waterlines and test as required by Section 02450 – Hydrostatic Testing of Waterlines.
- B. Double-Disc Gate Valves: Apply hydrostatic test pressure equal to twice rated working pressure of valve between discs. Valve shall show no leakage through metal, flanged joints or stem seals. Test at rated working pressure, applied between discs. Valve shall show no leakage through metal, flanged joints or stem seals. Do not exceed leakage rate of one ounce per hour per inch (1 Oz/Hr/In) of nominal valve size.
- C. Solid-Wedge Gate Valves: Apply hydrostatic pressure equal to twice rated working pressure of valve with both ends bulkheaded and gate open. Valve shall show no leakage through metal, flanged joints or stem seals. Test at rated working pressure, applied through bulkheads alternately to each side of closed gate with opposite side open for inspection. Valve shall show no leakage through metal, flanged joints

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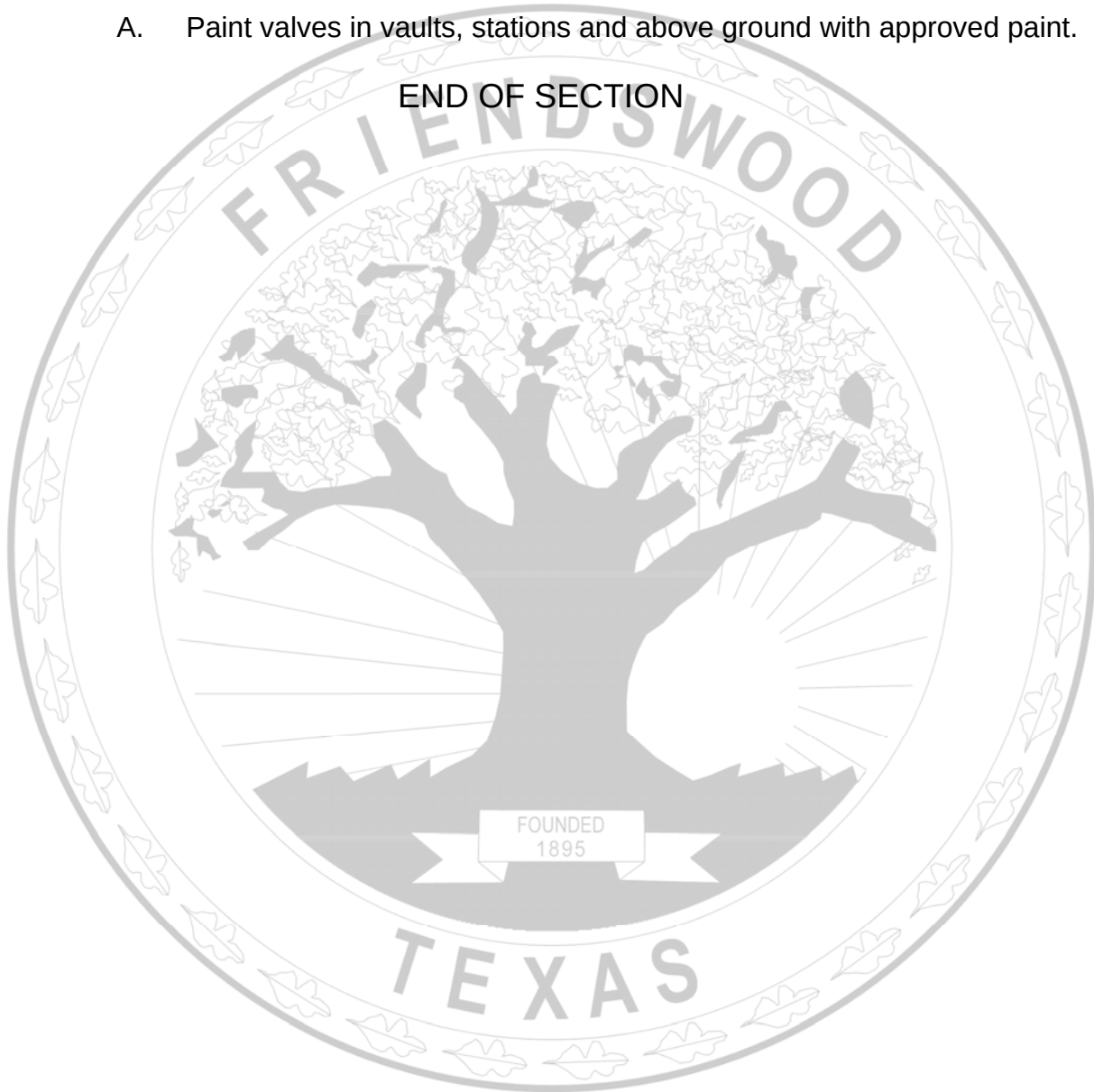
or stem-seals. Do not exceed leakage rate of one ounce per hour per inch (1 Oz/Hr/In) of nominal valve size.

- D. Repair or replace valves which exceed leakage rate.

3.4 PAINTING OF VALVES

- A. Paint valves in vaults, stations and above ground with approved paint.

END OF SECTION



SECTION 02435

FIRE HYDRANT ASSEMBLIES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Fire hydrants.
- B. Adjustment of fire hydrants and gate valves.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. Payment is on a unit price basis for each fire hydrant assembly, including six inch (6 In) gate valve and box, installed regardless of barrel depth.
2. Payment for fire hydrant branches (leads) is on linear foot basis for each branch installed. Separate pay items are used for open-cut and augered branches.
3. No separate payment for salvaged fire hydrants returned to the City's Public Works yard.
4. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. AWWA – American Water Works Association.

1. AWWA C550 – Standard for Protective Epoxy Interior Coatings for Valves and Hydrants
2. AWWA C502 – Standard for Dry-Barrel Fire Hydrants
3. AWWA C503 – Standard for Wet-Barrel Fire Hydrants

- B. CFTS – City of Friendswood Technical Specifications.
 - 1. Section 01270 – Measurement and Payment.
 - 2. Section 01330 – Submittal Procedures.
 - 3. Section 01580 – Waste Material Disposal.
 - 4. Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 - 5. Section 02235 – Polyvinyl Chloride Pipe (PVC).
 - 6. Section 02250 – Steel Pipe and Fittings.
 - 7. Section 02400 – Water Lines.
- C. Federal Standard A-A-2962A – Enamel, Alkyd, Solvent Based Low VOC.
- D. SSPC – Steel Structures Painting Council.
 - 1. SSPC SP2 – Hand Tool Cleaning.
 - 2. SSPC SP3 – Power Tool Cleaning.
 - 3. SSPC SP10 – Near-White Blast Cleaning.
 - 4. SSPC SP11 – Power Tool Cleaning to Bare Metal.
 - 5. SSPC Paint Spec No.21.
 - 6. SSPC-Paint 21 – White or Colored Silicone Alkyd Paint.
 - 7. SSPC-Paint 25 – Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand Cleaned Steel, Type I and Type II.
 - 8. SSPC-Paint 104 – White or Tinted Alkyd Paint.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit name of hydrant manufacturer, type of bonnet paint and engineering control drawing number for hydrant proposed for use.

PART II: PRODUCTS

2.1 HYDRANTS

- A. Provide approved fire hydrants.
- B. The Project Manager may, at any time prior to or during installation of hydrants, randomly select furnished hydrant for disassembly and laboratory inspection, at the Contractor expense, to verify compliance with the Specifications. When hydrant is found to be non-compliant, replace, at the Contractor's expense, all hydrants with new hydrants that comply with the Specifications.
- C. Provide lower hydrant barrel fabricated from Ductile Iron Pipe (DIP) as single piece, connected to upper hydrant barrel by means of joint coupling that shall provide three hundred sixty degree (360°) rotation of upper barrel.
- D. Fire Hydrants shall be Mueller or American Darling. NO EXCEPTIONS.

2.2 LEADS

- A. Branches (Leads): Conform to requirements of Section 02501 – Ductile Iron Pipe (DIP) and Fittings, Section 02250 – Steel Pipe and Fittings and Section 02235 – Polyvinyl Chloride Pipe (PVC).

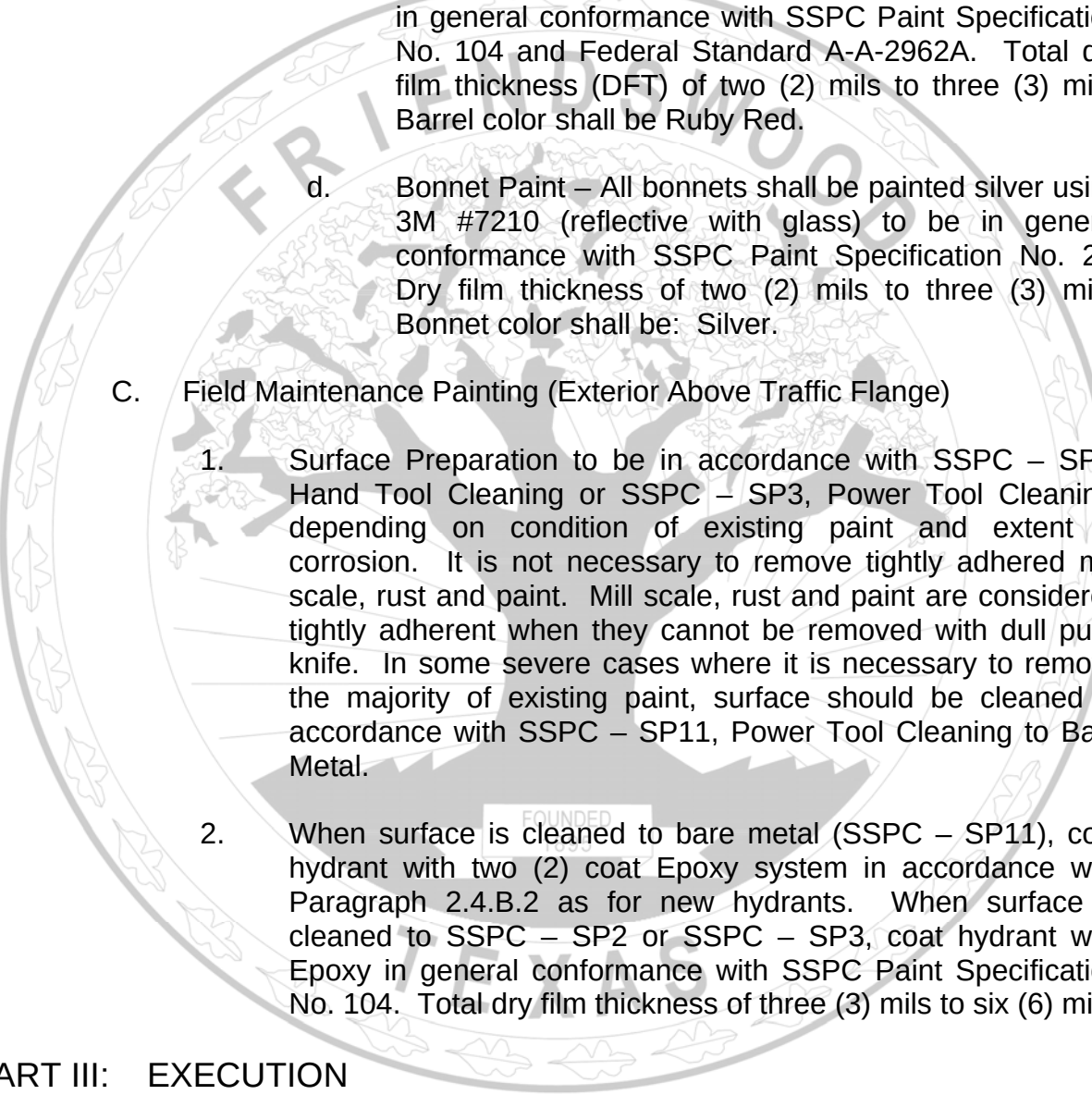
2.3 AUDITING

- A. Cycle Fire Hydrant and Valve to seals, Plugs, etc.
- B. Flow test each hydrant in accordance with AWWA C502, AWWA C503, and AWWA Manual M17 – Installation, Field Testing and Maintenance of Fire Hydrants.

2.4 HYDRANT PAINTING

- A. New hydrants and refurbished hydrants shall be coated as specified herein.
- B. Exterior Above Traffic Flange (Including Bolts & Nuts).
 - 1. Surface preparation to be in accordance with SSPC-SP 10 (MACE 2) near white blast cleaned surface.
 - 2. Coat with three (3) coat alkyd/silicone alkyd system with total dry film thickness (DFT) of four (4) mils to six (6) mils as follows:

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- a. Prime Coat – Tnemec Series 20 Epoxy Primer, to be in general conformance with SSPC Paint Specification No. 10. Total dry film thickness (DFT) two (2) mils to three (3) mils. Primer color shall be Grey.
 - b. Hydrant Barrels – All hydrant barrels shall be painted red using Tnemec Series 76 Endura-Shield paint to be in general conformance with SSPC Paint Specification No. 104 and Federal Standard A-A-2962A. Total dry film thickness (DFT) of two (2) mils to three (3) mils. Barrel color shall be Ruby Red.
 - d. Bonnet Paint – All bonnets shall be painted silver using 3M #7210 (reflective with glass) to be in general conformance with SSPC Paint Specification No. 21. Dry film thickness of two (2) mils to three (3) mils. Bonnet color shall be: Silver.
- C. Field Maintenance Painting (Exterior Above Traffic Flange)
- 1. Surface Preparation to be in accordance with SSPC – SP2, Hand Tool Cleaning or SSPC – SP3, Power Tool Cleaning, depending on condition of existing paint and extent of corrosion. It is not necessary to remove tightly adhered mill scale, rust and paint. Mill scale, rust and paint are considered tightly adherent when they cannot be removed with dull putty knife. In some severe cases where it is necessary to remove the majority of existing paint, surface should be cleaned in accordance with SSPC – SP11, Power Tool Cleaning to Bare Metal.
 - 2. When surface is cleaned to bare metal (SSPC – SP11), coat hydrant with two (2) coat Epoxy system in accordance with Paragraph 2.4.B.2 as for new hydrants. When surface is cleaned to SSPC – SP2 or SSPC – SP3, coat hydrant with Epoxy in general conformance with SSPC Paint Specification No. 104. Total dry film thickness of three (3) mils to six (6) mils.

PART III: EXECUTION

3.1 INSTALLATION

- A. Set fire hydrant plumb and brace at locations and grades as shown on the Drawings.
- B. Locate nozzle center line minimum eighteen inches (18 In) above finish

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grade.

- C. Place twelve inch by twelve inch (12 In x 12 In) yellow indicators (plastic, sheet metal, plywood or other material approved by the Project Manager) on pumper nozzles of new or relocated fire hydrants installed on new water lines not in service. Remove indicators after new water line is tested and approved by the Project Manager.
- D. Do not cover drain ports when placing concrete thrust block.
- E. Place pea gravel from top of pipe to six inches (6) above barrel connection as shown in the City of Friendswood Standard Details.
- F. Obtain the Project Manager's approval in writing prior to installation of hydrants which require changes in bury depth due to obstructions not shown on the Drawings. Unit price adjustments shall not be allowed for changes in water line flow line or fire hydrant barrel length caused by obstructions.
- G. Plug branch lines to valves and fire hydrants shown on the Drawings to be removed. Deliver fire hydrants designated for salvage to Public Works Facility.
- H. Install branches (leads) in accordance with Section 02400 – Water Lines.
- I. Coating Requirements:
 - 1. Apply coatings in strict accordance with manufacturer's recommendations. No requirements of this Technical Specification shall cancel or supersede written directions and recommendations of the specific manufacturer so as to jeopardize the integrity of an applied system.
 - 2. Furnish affidavit of compliance that coatings furnished complies with requirements of this Technical Specification and referenced standards, as applicable.
- J. Remove and dispose of unsuitable materials and debris in accordance with requirements of Section 01580 – Waste Material Disposal.

END OF SECTION

SECTION 02440

VALVE BOXES, METER BOXES AND METER VAULTS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Valve boxes for water service.
- B. Meter boxes for water service.
- C. Meter vaults for water service.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

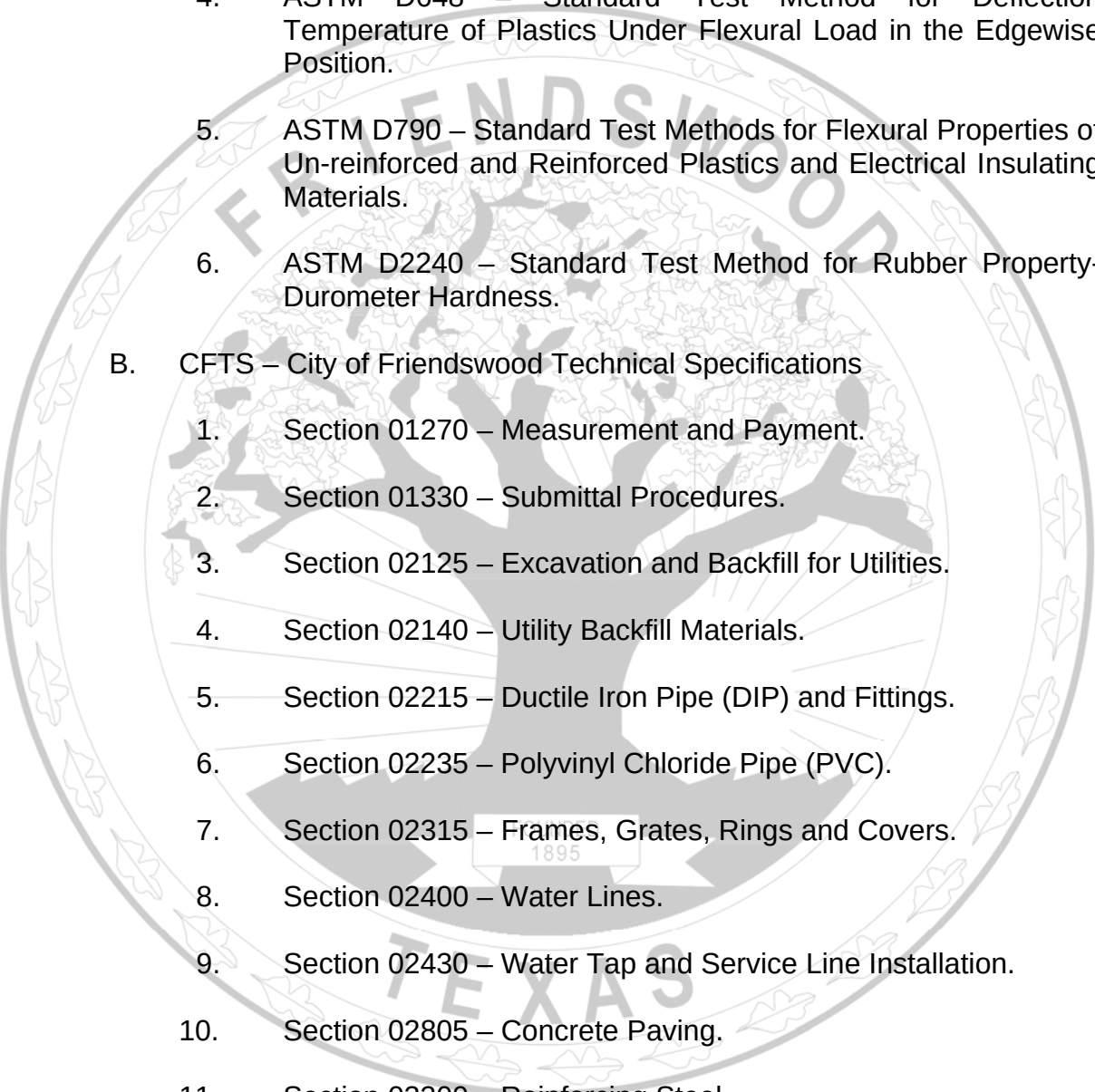
- 1. No separate payment shall be made for valve boxes under this Section. Include payment in the unit price for Section 02400 – Water Lines.
- 2. No separate payment shall be made for meter boxes under this Section. Include payment in the unit price for Section 02430 – Water Tap and Service Line Installation.
- 3. Payment for each size of meter vaults is on the unit price basis per vault. Payment shall be made for each vault installed, regardless of depth.
- 4. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

- 1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

- A. ASTM – American Society for Testing and Materials.
 - 1. ASTM A48 – Standard Specification for Gray Iron Castings.

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2. ASTM D256 – Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
 3. ASTM D638 – Standard Test Method for Tensile Properties of Plastics.
 4. ASTM D648 – Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.
 5. ASTM D790 – Standard Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials.
 6. ASTM D2240 – Standard Test Method for Rubber Property-Durometer Hardness.
 - B. CFTS – City of Friendswood Technical Specifications
 1. Section 01270 – Measurement and Payment.
 2. Section 01330 – Submittal Procedures.
 3. Section 02125 – Excavation and Backfill for Utilities.
 4. Section 02140 – Utility Backfill Materials.
 5. Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 6. Section 02235 – Polyvinyl Chloride Pipe (PVC).
 7. Section 02315 – Frames, Grates, Rings and Covers.
 8. Section 02400 – Water Lines.
 9. Section 02430 – Water Tap and Service Line Installation.
 10. Section 02805 – Concrete Paving.
 11. Section 03200 – Reinforcing Steel.
 12. Section 03300 – Structural Concrete.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.

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- B. Submit manufacturers' product data for following items for approval:
 - 1. Each type of valve box and lid.
 - 2. Each type of meter box and cover.
 - 3. Each type of meter vault frame and cover.
- C. Submit design calculations and shop drawings for precast vault elements, sealed by a Professional Engineer licensed by the State of Texas.
- D. Submit shop drawings for cast-in-place meter vaults for approval if proposed construction varies from the Drawings.
- E. Submit manufacturer's certification that plastic meter boxes meet requirements of Paragraph 2.5, Plastic Meter Boxes.

PART II: PRODUCTS

2.1 VALVE BOXES

- A. Provide approved Type A, cast-iron/ductile-iron, slide-type, valve boxes. Design of valve box shall minimize stresses on valve imposed by loads on box lid.
- B. Cast letter "W" into lid, one-half inch (1/2 In) in height and raised three-thirty-seconds inch (3/32 In), for valves serving potable water lines.
- C. Unless otherwise specified, constructed of uncoated cast iron.
- D. Riser Pipe:
 - 1. Provide six inch (6 In) PVC, Class 150, DR 18, riser pipes in accordance with Section 02235 – Polyvinyl Chloride Pipe (PVC) or
 - 2. Six inch (6 In) ductile-iron, thickness Class 51 riser pipes in accordance with Section 02215 – Ductile Iron Pipe (DIP) and Fittings.
 - 3. Provide single section of pipe.

E. Concrete for valve box placement:

1. For locations in new concrete pavement, provide strength and mix design of new pavement.
2. For other locations, provide concrete for sidewalks conforming to requirements of Section 02805 – Concrete Paving.

F. Valve box lids are to be painted blue.

2.2 METER BOXES

A. Provide meter boxes for five-eighths inch (5/8 In) through one inch (1 In) meters of the following materials:

1. Non-traffic bearing locations: Cast iron, concrete or plastic.
2. Traffic bearing locations: Cast iron or concrete.

B. Provide meter boxes for one and one-half inch (1-1/2 In) and two inch (2 In) meters of concrete.

C. Provide meter box with reading lid: Provide lids with spring-type latching devices. Lids shall contain sufficient metal that meter box can be easily located with metal detector. Cast words "CITY OF FRIENDSWOOD" and "WATER METER" into lid with letters of one-half inch (1/2 In) height and raised three-thirty-seconds inch (3/32 In).

D. Meter box dimensions shall conform to the following approximate dimensions:

1. Length: At top – fifteen and one-half inches (15-1/2 In); at bottom twenty inches (20 In).
2. Width: At top – twelve and one-half inches (12-1/2 In); at bottom fourteen and three-quarters inches (14-3/4 In).
3. Height: Twelve inches (12 In).

E. Extensions: Meter box extensions three (3 In) inches and six inches (6 In) in height shall be available from the manufacturer as a standard item.

2.3 CAST-IRON METER BOXES

A. Cast-Iron Boxes: Clean and free from sand blow-holes or other defects

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conforming to requirements of ASTM A48, Class 30B. Bearing surfaces shall be machined so that covers seat evenly in frames.

- B. Boxes and lids shall have dipped, coal-tar-pitch, varnish finish.
- C. Provide lock-type meter boxes when required by the Drawings. Lock mechanisms shall work with ease.

2.4 CONCRETE METER BOXES

- A. Concrete Meter Boxes: Made of Class B concrete, with minimum four thousand pounds per square inch (4000 psi) compressive strength, conforming to requirements of Section 03300 – Structural Concrete. Construct to dimensions shown on the Drawings.
- B. Castings: Free from fractures, large or deep cracks, blisters or surface roughness or any other defects that may affect serviceability.

2.5 PLASTIC METER BOXES

- A. Plastic Meter Boxes: Made of high density polyethylene conforming to the following ASTM standards:
 - 1. ASTM REQUIREMENT:
 - a. D256 Impact Strength = One and nine-tenths foot-pounds per inch (1.9 Ft-Lb/In) (Izod, Notched).
 - b. D256 Impact Strength = Six and four-tenths foot-pounds per inch (6.4 Ft-Lb/In) (Izod, Un-Notched).
 - c. D638 Tensile Strength (2.0 min.) = Three thousand four hundred pounds per square inch (3400 psi).
 - d. D648 Deflection Temperature = One hundred seventy degrees Fahrenheit (170° F).
 - e. D2240 Shore D, Hardness, fifty-five (55) to sixty-five (65) Impact Strength, Falling Dart Method: One hundred sixty inch-pounds (160 In-Lb).
 - f. D790 Flexural Modulus = Ninety thousand pounds per square inch (90,000 psi).

B. Meter boxes shall meet the following test requirements:

1. Static Load: Not less than two thousand five hundred pounds (2500 psi) using six inch (6 In) disc with direct compression exerted at center of top of meter box with solid plastic lid.
2. Deflection: Not less than one thousand pounds (1000 Lbs) load required to deflect top edge of meter box one-eighth inch (1/8 In).

C. Meter box body, without lid, shall weigh approximately seven pounds (7 Lbs).

2.6 METER VAULTS

- A. Meter vaults may be constructed of precast concrete or cast-in-place concrete unless a specific type of construction is required by the Drawings.
- B. Concrete for Meter Vaults: Class B concrete, conforming to requirements of Section 03300 – Structural Concrete with minimum compressive strength of four thousand pounds per square inch (4000 psi) at twenty-eight days (28 D).
- C. Reinforcing steel for meter vaults: Conform to requirements of Section 03200 – Reinforcing Steel.
- D. Grates and Covers: Conform to requirements of Section 02315 – Frames, Grates, Rings and Covers.

PART III: EXECUTION

3.1 EXAMINATION

- A. Obtain approval from the Project Manager for exact location of meter vault.
- B. Verify lines and grade are correct.
- C. Verify compacted subgrade shall support loads imposed by vaults.
- D. At no time shall a valve box, meter box or meter vault be installed in a driveway, sidewalk or wheelchair ramp.

3.2 VALVE BOXES

- A. Install riser pipe with suitable length for depth of cover indicated on the Drawings or to accommodate actual finish grade.
 - 1. Install with bell on top of valve.
 - 2. Place riser pipe in plumb, vertical position.
- B. Install valve box and riser piping plumbed in a vertical position. Provide six inches (6 In) telescoping freeboard space between riser pipe top butt end and interior contact flange of valve box, for vertical movement damping. End of riser pipe resting on valve shall be notched out sufficiently to provide a snug fit around the valve bonnet and to center valve inside of pipe.
- C. Set, align and adjust valve box so that lid is level with final grade.
- D. Install twenty-four inch by twenty-four inch (24 In x 24 In) concrete valve collar using Class A concrete, conforming to requirements of Section 03300 – Structural Concrete with minimum compressive strength of three thousand pounds per square inch (3000 psi) at twenty-eight days (28 D).
- E. Paint covers of new valve boxes in blue when installed for completion and acceptance by the City.

3.3 METER BOXES

- A. Install cast iron or plastic boxes in accordance with manufacturer's instructions.
- B. Construct concrete meter boxes to dimensions shown on the Drawings.
- C. Adjust top of meter boxes to conform to cover elevations specified in Paragraph 3.5, Frame and Cover for Meter Vaults.
- D. Do not locate under paved areas unless approved by the Project Manager. Use approved traffic type box with cast iron lid when meter must be located in paved areas.
- E. Locate Meter Boxes in the City right-of-way, perpendicular to the centerline of the roadway.

3.4 METER VAULTS

- A. Construct concrete meter vaults to dimensions shown on the Drawings. Do not cast in presence of water. Make bottom uniform. Verify lines and grades are correct and compacted subgrade shall support loads imposed by vaults.
- B. Precast Meter Vaults:
 - 1. Install precast vaults in accordance with the manufacturer's recommendations. Set level on a minimum three inch (3 In) thick bed of sand conforming to requirements of Section 02140 – Utility Backfill Materials.
 - 2. Seal lifting holes with cement-sand mortar or non-shrink grout.
- C. Meter Vault Floor Slab:
 - 1. Construct floor slabs of six inch (6 In) thick reinforced concrete. Slope floor one-quarter inch per foot (1/4 in/ft) toward sump. Make sump twelve inches (12 In) in diameter or twelve inches (12 In) square and four inches (4 In) deep, unless other dimensions are required by the Drawings. Install dowels at maximum of eighteen inches (18 In), center-to-center for keying walls to floor slab.
 - 2. Precast floor slab elements may be used for precast vault construction
- D. Cast-in-Place Meter Vault Walls:
 - 1. Key walls to floor slab and form to dimensions shown on the Drawings. Minimum wall thickness shall be four inches (4 In).
 - 2. Cast walls monolithically: One (1) cold joint shall be allowed when vault depth exceeds twelve feet (12 ft).
 - 3. Set frame for cover in concrete.

3.5 FRAME AND COVER FOR METER VAULTS

- A. Set cast iron frame in a mortar bed and adjust elevation of cover as follows:
 - 1. In unpaved areas, set top of meter box or meter vault cover two inches (2 In) to three inches (3 In) above natural grade.

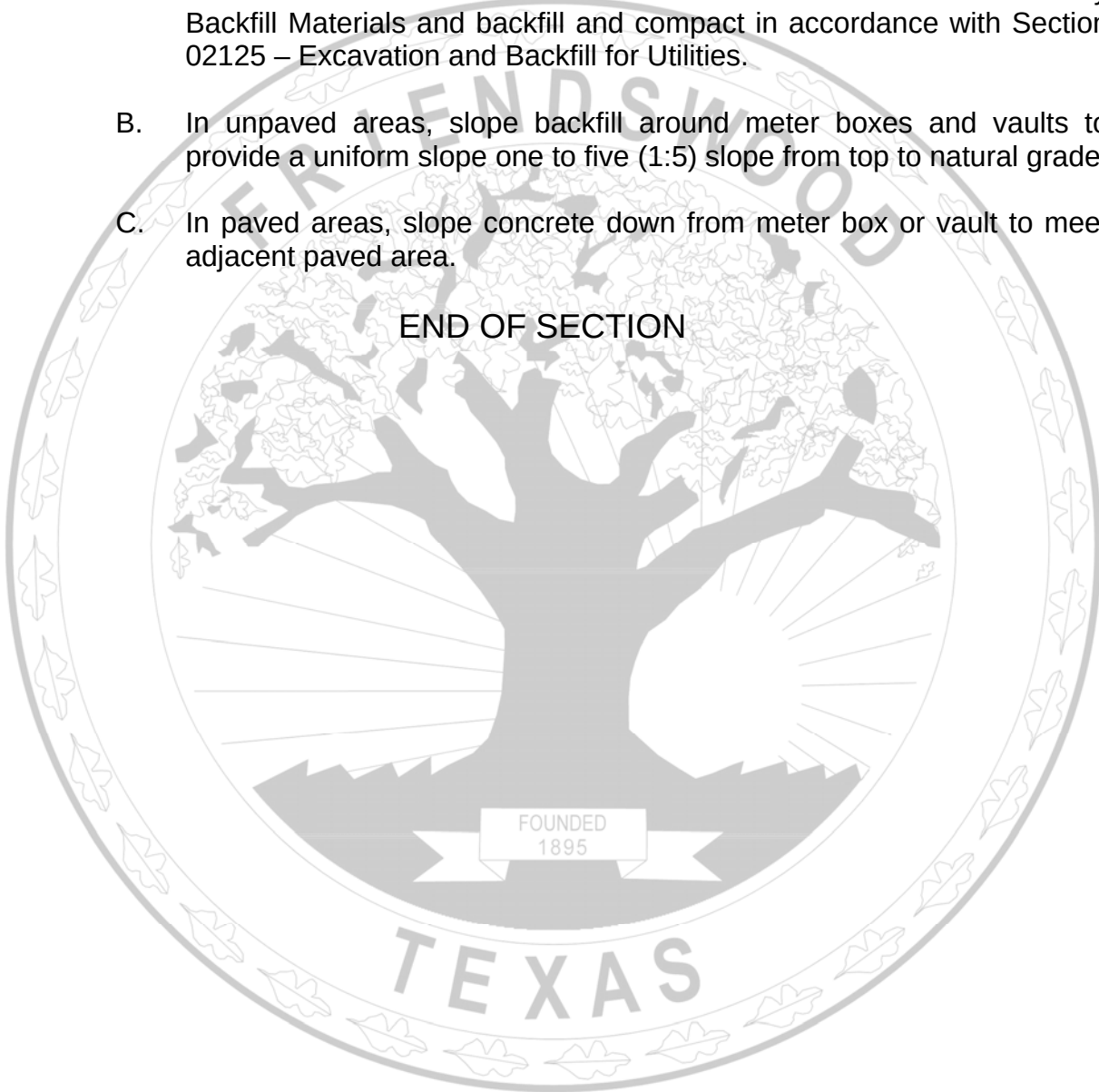
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2. In paved areas, set top of meter box or meter vault cover flush with adjacent concrete but no higher than one-half inch (1/2 in).

3.6 BACKFILL

- A. Provide bank run sand in accordance with Section 02140 – Utility Backfill Materials and backfill and compact in accordance with Section 02125 – Excavation and Backfill for Utilities.
- B. In unpaved areas, slope backfill around meter boxes and vaults to provide a uniform slope one to five (1:5) slope from top to natural grade.
- C. In paved areas, slope concrete down from meter box or vault to meet adjacent paved area.

END OF SECTION



SECTION 02450

HYDROSTATIC TESTING OF WATERLINES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Field hydrostatic testing of newly installed water waterlines.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. No separate payment shall be made for hydrostatic testing of waterlines under this Section. Include cost in the unit price of waterlines being tested.
2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. CFTS – City of Friendswood Technical Specifications.

1. Section 01140 – Work Restrictions
2. Section 01270 – Measurement and Payment.
3. Section 02455 – Disinfection of Waterlines.

PART II: PRODUCTS – NOT USED

PART III: EXECUTION

3.1 PREPARATION

- A. Disinfect water system waterlines prior to hydrostatic testing.

- B. Hydrostatically test newly installed water waterlines after disinfection, when required and before connecting to the City water distribution system.
- C. Water for testing shall be at no cost to the Contractor in accordance with the City Ordinances. Prior to hydrostatic testing, obtain a transient meter from the City. A deposit is required for transient meter.
- D. Test waterlines in lengths between valves or plugs, of not more than four thousand feet (4000 Ft).
- E. Conduct hydrostatic tests in presence of the Project Manager.

3.2 TEST PROCEDURES

- A. Furnish, install and operate connections, pump, meter and gages necessary for hydrostatic testing.
- B. Allow pipeline to sit a minimum of twenty-four hours (24 Hrs) from time it is initially disinfected until testing begins, to allow pipe wall or lining material to absorb water. Periods of up to seven days (7 D) may be required for mortar lining to become saturated.
- C. Expel air from all waterlines and apply a minimum test pressure of one hundred fifty pounds per square inch (150 psi) for a minimum of four hours (4 Hrs).
 - 1. Fire line Testing is required to be two hundred pounds per square inch (200 psi) for a minimum of two hours (2 Hrs).
- D. Begin pressure test by 9:00 a.m. unless otherwise approved by the Project Manager. Maintain test pressure for required amount of time. When large quantity of water is required to maintain pressure during test, discontinue testing until cause of water loss is identified and corrected.
 - 1. At no time shall a hydrostatic test start after 1:00 P.M.
- E. Keep valves inside pressure reducing stations closed during hydrostatic pressure test.

3.3 ALLOWABLE LEAKAGE FOR WATERLINES

- A. During hydrostatic tests, no leakage shall be allowed for sections of water lines consisting of welded joints.

- B. Maximum allowable leakage for water lines with rubber gasketed joints: Three and nineteen-hundredths gallons (3.19 Gal) per inch nominal diameter per mile of pipe per twenty-four hours (24 Hrs) while testing.

1. The following formula shall be used, either manually or electronically, for the amount of leakage:

$$L = \frac{NDP^{1/2}}{7400}$$

where: L = Allowable leakage, gallons per hour (Gal/Hr)
N = Number of joints in the length of the pipe
D = Nominal diameter of the pipe, in inches (In)
P = Average test pressure during the leakage test, pounds per square inch (psi)

- C. For meter run installation, when work cannot be isolated and line fails pressure test, visual inspection of work by the Project Manager for leakage during pressure test may be used to fulfill requirements of this Section.

3.4 CORRECTION FOR FAILED TESTS

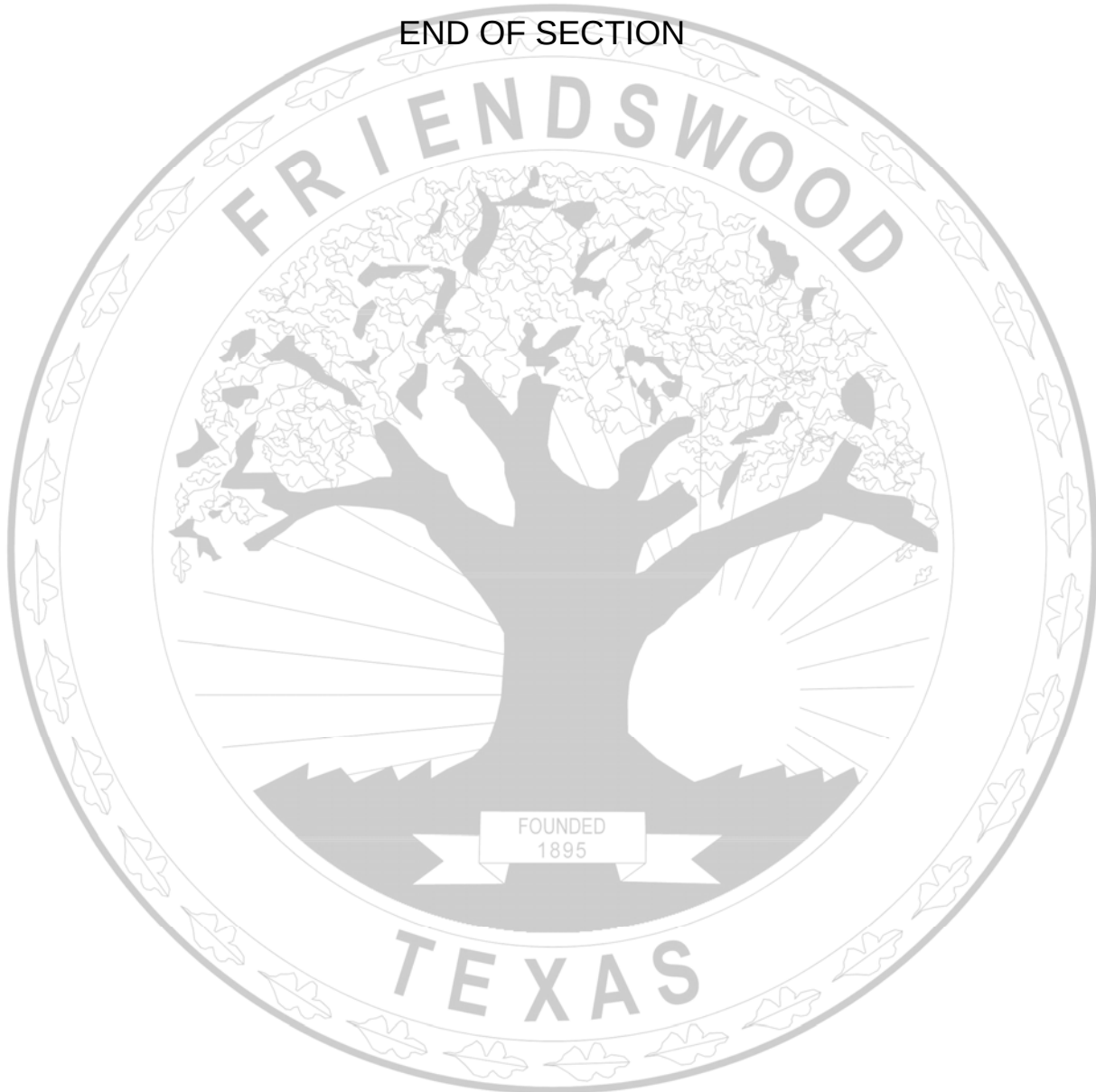
- A. Repair joints showing visible leaks on surface regardless of total leakage shown on test. Check valves and fittings to ensure that no leakage occurs that could affect or invalidate test. Remove cracked or defective pipes, fittings and valves discovered during pressure test and replace with new items.
- B. The Project Manager shall require failed lines to be disinfected after repair and prior to retesting. Conduct and pay for subsequent disinfection operations in accordance with requirements of Section 02455 – Disinfection of Waterlines. Pay for water required for additional disinfection and retesting.
- C. After the second (2nd) failed test;
1. For City Projects, the Project Manager shall deduct the amounts of money from the Contract as stated in Section 01140 – Work Restrictions for each additional test taken.
 2. For Private Development, the Contractor shall pay the City the amount stated in Section 01140 – Work Restrictions for each additional test, before the test is taken.

- C. Repeat test until satisfactory results are obtained.

3.5 COMPLETION

- A. Upon satisfactory completion of testing, remove risers remaining from disinfection and hydrostatic testing and backfill excavation promptly.

END OF SECTION



SECTION 02455

DISINFECTION OF WATERLINES

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Disinfection of potable water lines.

1.2 MEASUREMENT AND PAYMENT

- A. Unit Prices:

1. No separate payment shall be made for disinfection of water lines under this Section. Include cost in the unit price of water lines being disinfected.
2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

- B. Payment for Testing and Retesting.

1. Subsequent disinfection operations which may be necessary due to nonconforming or incomplete construction shall be charged to the Contractor for each additional Bacterial Test.
2. Charge shall consist of base charge of eighteen dollars (\$18.00) per sample.

- C. Stipulated Price (Lump Sum):

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

- A. AWWA – American Water Works Association.

1. AWWA C651 – Standard for Disinfecting Water Mains

- B. CFTS – City of Friendswood Technical Specifications.

1. Section 01270 – Measurement and Payment.

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C. TCEQ – Texas Commission on Environmental Quality

1. TCEQ – Approved Disinfection Methods and Products.

PART II: PRODUCTS – NOT USED

PART III: EXECUTION

3.1 CONDUCTING DISINFECTION

- A. Promptly disinfect water lines constructed before tests are conducted on water lines and before water lines are connected to the City water distribution system.
- B. Water for disinfection and flushing shall be furnished by the City without charge.
- C. Unless otherwise provided in the Contract Documents, the Contractor shall be responsible for disinfection of water lines.
- D. Coordinate chlorination operations through the Project Manager. A minimum of forty-eight hours (48 Hrs) notice shall be given.

3.2 PREPARATION

- A. Provide temporary blind flanges, cast-iron sleeves, plugs, necessary service taps, copper service leads, risers and jumpers of sizes, location and materials and other items needed to facilitate disinfection of new water lines prior to connection to the City water distribution system. Normally, each valved section of water line requires two (2) each three-quarter inch (3/4 In) taps.⁸⁹ A two inch (2 In) minimum blow-off is required for water lines up to and including six inch (6 In) diameter.
- B. Use fire hydrants as blow-offs to flush newly constructed water lines eight inch (8 In) diameters and above. Where fire hydrants are not available on newly constructed water lines, install temporary blow-off valves and remove promptly upon successful completion of disinfection and testing.
- C. Slowly fill each section of pipe with water in manner approved by the Project Manager. Average water velocity when filling pipeline should be less than one foot per second (1 ft/sec) and shall not, under any circumstance, exceed two feet per second (2 ft/sec). Before beginning disinfection operations, expel air from pipeline.

- D. Backfill excavations immediately after installation of risers or blow-offs.
- E. Install blow-off valves at end of water line to facilitate flushing of dead-end water lines. Install permanent blow-off valves according to the Drawings.

3.3 DISINFECTION BY THE CONTRACTOR

- A. The following procedure shall be used when disinfection by the Contractor is required by the Contract Documents:
 - 1. Use not less than one hundred parts of chlorine (100 CL) per million parts of water (1,000,000 H₂O).
 - 2. Introduce chlorinating material to water lines in accordance with AWWA C651.
 - 3. After contact period of not less than twenty-four hours (24 Hrs), flush system with clean water until residual chlorine is no less than one part of chlorine (1.0 CL) per million parts of water (1,000,000 H₂O) nor greater than four parts chlorine (4.0 CL) per million parts of water (1,000,000 H₂O).
 - 4. Open and close valves in lines being sterilized several times during contact period.
 - 5. If chemical compound is used for sterilizing agent, place in pipes as directed by the Project Manager.

3.4 BACTERIOLOGICAL TESTING

- A. After disinfection and flushing of water lines, bacteriological tests shall be performed by the City at 10:00 A.M. Tuesdays and Thursdays. The Project Manager shall need to be informed of prospective testing forty-eight hours (48 Hrs) before these times, no exceptions.
- B. The Project Manager shall determine the quantity of tests that shall need to be taken and the location of each test.
- C. If the entire water line is being chlorinated and the bacteriological testing is being taken without isolating various parts of the water line and one (1) Bac-T fails, then all are deemed to have failed and new tests shall be taken on the entire line.

When isolating parts of the line for Bac-T testing, no isolated part of the

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line shall be opened to the existing City utilities until the Bac-T has passed.

There shall be no Bac-T taken on any isolated section of line where the previous isolated section of line has either not passed or not been tested.

- D. After two (2) failed sets of tests, line shall be re-chlorinated and flushed before any further tests can be taken. Additional disinfection of water lines based upon Texas Commission on Environmental Quality (TCEQ) requirements, the Contractor is responsible for additional disinfection operations.

3.5 COMPLETION

- A. Upon completion of disinfection and testing, and after passing test results have been received in writing, remove risers except those approved for use in subsequent hydrostatic testing and backfill excavation promptly.

END OF SECTION

SECTION 02460

WET CONNECTIONS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Wet connections for new water lines and service lines to existing water lines.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. Payment for wet connections shown on the Drawings is on a unit price basis for each wet connection. Separate payment shall be made for each size of water line.
2. No compensation shall be given for extra work or for damages occurring as result of incomplete shutoff.
3. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Stipulated Price (Lump Sum).

1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

A. AWWA – American Water Works Association.

1. AWWA C800 – Standard for Underground Service Line Valves and Fittings.

B. CFTS – City of Friendswood Technical Specifications.

1. Section 01270 – Measurement and Payment.
2. Piping Sections 02200 through 02285.
3. Section 02410 – Gate Valves.

4. Section 02430 – Water Tap and Service Line Installation.

1.4 DEFINITIONS

- A. Wet connections consist of isolating sections of pipe to be connected with existing valves, draining isolated sections and completing connections.
- B. Connection of two inch (2 In) or smaller lines, which may be referred to on the Drawings as "two inch (2 In) standard connections" or "gooseneck connections" shall be measured as two inch (2 In) wet connections. This item is not to be used as part of two (2) inch service line.

PART II: PRODUCTS

2.1 MATERIALS

- A. Pipe shall conform to requirements of applicable portions of Sections 02200 through 02285 related to piping materials and to water distribution.
- B. Corporation cocks and saddles shall conform to requirements of Section 02430 – Water Tap and Service Line Installation.
- C. Valves shall conform to requirements of Section 02410 – Gate Valves.
- D. Brass fittings shall conform to requirements of AWWA C800.

PART III: EXECUTION

3.1 CONNECTION OPERATIONS

- A. Plan wet connections in manner and at hours with least inconvenience public. Notify the Project Manager at least seventy-two hours (72 Hrs) in advance of making connections.
- B. Do not operate valves on water lines in use by the City. The City of Friendswood Public Works Department shall handle, at no cost to the Contractor, operations involving opening and closing valves for wet connections.
- C. Conduct connection operations when the Project Manager is at job site. Connection work shall progress without interruption until complete once existing water lines have been cut or plugs have been removed for

making connections.

3.2 TWO INCH (2 IN) WET CONNECTIONS

- A. Tap water line: Use corporation cocks, saddles, copper tubing as required for line and grade adjustment and brass fittings necessary to adapt to existing water line. Use two inch (2 In) valves when indicated on the Drawings for two inch (2 In) copper gooseneck connections.

END OF SECTION



SECTION 02465

PROCEDURE FOR SAMPLING BACTERIOLOGICAL TESTS (BAC-T)

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Bacteriological Testing of potable water lines.

1.2 MEASUREMENT AND PAYMENT

A. Unit Prices:

1. No separate payment shall be made for Bacteriological Testing of water lines under this Section. Include cost in the unit price of water lines being tested.
2. Refer to Section 01270 – Measurement and Payment for unit price procedures.

B. Payment for Testing and Retesting.

1. Subsequent disinfection operations which may be necessary due to nonconforming or incomplete construction shall be charged to the Contractor for each additional Bacteriological Test.
2. Charge shall consist of base charge of eighteen dollars (\$18.00) per sample if the City is taking the samples. Checks are to be made payable to Eastex Environmental.

C. Stipulated Price (Lump Sum):

If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

- A. AWWA – American Water Works Association.

AWWA C651 – Standard for Disinfecting Water Mains.

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- B. CFTS – City of Friendswood Technical Specifications.
 - 1. Section 01270 – Measurement and Payment.
 - 2. Section 02450 – Hydrostatic Testing of Waterlines.
 - 3. Section 02455 – Disinfection of Waterlines.
- C. TCEQ – Texas Commission on Environmental Quality
TCEQ – Approved Disinfection Methods and Products.

PART II: PRODUCTS – NOT USED

PART III: EXECUTION

- 3.1 UNDER NO CIRCUMSTANCES SHALL ANY PERSON, OTHER THAN AUTHORIZED CITY PERSONNEL, OPEN OR OPERATE ANY VALVE THAT IS CONNECTED TO AN EXISTING CITY SERVICE MAIN, BE IT A TAPPING SLEEVE AND VALVE (TS&V) MADE BY THE CONTRACTOR OR AN EXISTING STUB OUT.
- 3.2 CONDUCTING DISINFECTION
 - A. Promptly disinfect water lines constructed before tests are conducted on water lines and before water lines are connected to the City water distribution system.
 - B. Water for disinfection and flushing shall be furnished by the City without charge for the first two (2) sets of tests. If additional testing is needed, please refer to Section 3.4.E.95
 - C. Unless otherwise provided in the Contract Documents, the Contractor shall be responsible for disinfection of water lines.
 - D. Coordinate chlorination operations through the Project Manager. A minimum of forty-eight hours (48 Hrs) notice shall be given.
 - E. Chlorination procedures for new lines shall be performed in accordance with City of Friendswood Technical Specification 02455 – Disinfection of Waterlines.

3.3 SAMPLING STATIONS

- A. Provide all necessary materials for Sampling Stations.
- B. A Sampling Station shall be two inch (2 In) minimum blow-off with a half inch (1/2 In) Hose Bib.
- C. Location Requirements:
 - 1. One (1) Sampling Station is required for every One Thousand Two Hundred Feet (1,200 Ft) of waterline.
 - 2. One (1) Sampling Station is required at the end of the line.
 - 3. One (1) Sampling Station is required at every branch of the line longer than one (1) joint of pipe (20 feet).
- D. Use of Fire Hydrants and blow-offs for Sampling of Bacteriological Tests shall not be allowed.
- E. Service lead with a hose bib connection shall be allowable.

3.4 PROCEDURE FOR SAMPLE TAKING

- A. After disinfection and flushing of water lines, Bacteriological Tests shall be performed by the City at 10:00 A.M. Tuesdays and Thursdays. The Project Manager shall need to be informed of prospective testing forty-eight hours (48 Hrs.) before these times, no exceptions.
- B. Only authorized City Personnel shall operate the valves that attach the waterline being tested to the existing City Infrastructure, NO EXCEPTIONS.
- C. The following procedure shall be used when sampling waterlines for Bacteriological Testing (BAC-T):
 - 1. All water lines shall have been disinfected in accordance with City of Friendswood Specification 02455 – Disinfection of Waterlines.
 - 2. All water lines shall have been hydrostatically tested in accordance with City of Friendswood Specification 02450 – Hydrostatic Testing of Waterlines.
 - 3. Waterlines shall have been flushed fully flushing chlorinated water from the waterline until normal residual chlorine is

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obtained at the end of the waterline.

4. Project Manager and Contractor identify and label the sampling locations.
 5. If the Contractor is using another TCEQ accredited laboratory in lieu of the City's Laboratory, an authorized representative shall be onsite for chain of custody verification.
 6. Test samples shall be taken in a sterile bottle treated with sodium thiosulfate, labeled for the location, and listed as "Construction Sample."
 7. Before opening the sampling location, coat with a disinfection solution of sodium hypochlorite from a spray bottle on the inside and outside of the hose bib.
 8. Waterline is to sit for a minimum of sixteen hours (16 Hrs.) prior to samples being taken without flushing or in any way flowing the water in the line.
 9. There shall be two (2) tests taken at each location. Collect one (1) sample at the location as soon as the hose bib is opened, and collect the second sample after fifteen minutes (15 Mins.) of the hose bib running.
 10. Test results should be available within three days (3 Dys.) and shall be in written form only for acceptance. Verbal approval or disapproval is non-binding for testing purposes.
 11. Any one (1) test that fails is a fail of all tests being taken, and the waterline that the tests represent.
- D. After two (2) failed sets of tests, the line shall be re-chlorinated and flushed before any further tests can be taken. The Contractor shall be responsible for additional disinfection of water lines based upon Texas Commission on Environmental Quality (TCEQ) requirements.
- E. **Cost of multiple re-testing will be charged at \$750.00 dollars per flushing point for water usage and \$475.00 for labor costs per set for each additional set of Bacteriological Tests taken.**

3.5 COMPLETION

Upon passing test results having been received in writing, the waterline will be put in service as part of the City's Infrastructure and no one but

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an authorized City Employee shall be able to operate any valves attached to the new line.

END OF SECTION



FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/22/2020

Prepared by: Morad Kabiri, City Manager

Subject: Discussion and possible action regarding approving an inter-local cooperation contract with Texas Department of Public Safety Galveston County for Failure to Appear (FTA) Program of the Friendswood Municipal Court.

Originating Department: Administrative Services

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Since 2004, the City of Friendswood Municipal Court has participated in the Texas Department of Safety (D.P.S.) Failure to Appear program. The program allows the Courts in Texas to submit monthly reports to D.P.S. of defendants who fail to appear for set court dates or pay fines ordered by the Court. Based on the reported information, D.P.S. can deny renewal of the driver's license of persons who fail to appear in Court for a citation or fails to pay fines ordered by the Court.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Not approving the inter-local cooperation contract will result in the City's Municipal Court no longer being able to participate in the Texas Department of Public Safety Failure to Appear program. As a result of not participating, the City's Court related fines and fees could be negatively impacted.

RECOMMENDATIONS

Recommend approval of the inter-local cooperation contract

ATTACHMENTS

1. Inter-local Cooperation Contract (Failure to Appear Program)
2. Letter from TX Dept. of Public Safety

**Interlocal Cooperation Contract
Failure to Appear (FTA) Program**

State of Texas
County of Galveston

I. PARTIES AND AUTHORITY

This Interlocal Cooperation Contract (Contract) is entered into between the Department of Public Safety of the State of Texas (DPS), an agency of the State of Texas and the Municipal Court of the [City or County] of Friendswood (Court), a political subdivision of the State of Texas, referred to collectively in this Contract as the Parties, under the authority granted in Tex. Transp. Code Chapter 706 and Tex. Gov't Code Chapter 791 (the Interlocal Cooperation Act).

II. BACKGROUND

As permitted under Tex. Transp. Code § 706.008, DPS contracts with a private vendor (Vendor) to provide and establish an automated FTA system that accurately stores information regarding violators subject to the provisions of Tex. Transp. Code Chapter 706. DPS uses the FTA system to properly deny renewal of a driver license to a person who is the subject of an FTA system entry.

III. PURPOSE

This Contract applies to each FTA Report submitted by the Court to DPS or its Vendor and accepted by DPS or its Vendor.

Court will supply information to DPS, through its Vendor, that is necessary to deny renewal of the driver license of a person who fails to appear for a complaint or citation or fails to pay or satisfy a judgment ordering payment of a fine and cost in the manner ordered by the Court in a matter involving any offense that Court has jurisdiction of under Tex. Code Crim. Proc. Chapter 4.

IV. PERIOD OF PERFORMANCE

This Contract will be effective on the date of execution and will automatically renew on the anniversary date of execution for up to three additional years unless terminated earlier.

V. COURT RESPONSIBILITIES

A. Written warnings

A peace officer authorized to issue citations within the jurisdiction of the Court must issue a written warning to each person to whom the officer issues a citation for a traffic law violation. This warning must be provided in addition to any other warnings required by law. The warning must state in substance that if the person fails to appear in court for the prosecution of the offense or if the person fails to pay or satisfy a judgment ordering the payment of a fine and cost in the manner ordered by the Court, the person may be denied

renewal of the person's driver license. The written warning may be printed on the citation or on a separate instrument.

B. FTA Report

An FTA Report is a notice sent by Court requesting a person be denied renewal in accordance with this Contract. The Court may submit an FTA Report to Vendor if a person fails to appear or fails to pay or satisfy a judgment as required by law. There is no requirement that a criminal warrant be issued in response to the person's failure to appear. The Court must make reasonable efforts to ensure that all FTA Reports are accurate, complete, and non-duplicative. The FTA Report must include the following information:

1. the jurisdiction in which the alleged offense occurred;
2. the name of the court submitting the report;
3. the name, date of birth, and Texas driver license number of the person who failed to appear or failed to pay or satisfy a judgment;
4. the date of the alleged violation;
5. a brief description of the alleged violation;
6. a statement that the person failed to appear or failed to pay or satisfy a judgment as required by law;
7. the date that the person failed to appear or failed to pay or satisfy a judgment; and
8. any other information required by DPS.

C. Clearance Reports

The Court that files the FTA Report has a continuing obligation to review the FTA Report and promptly submit appropriate additional information or reports to the Vendor. The clearance report must identify the person, state whether or not a fee was required, and advise DPS to lift the denial of renewal and state the grounds for the action. All clearance reports must be submitted immediately, but no later than two business days, from the time and date that the Court receives appropriate payment or other information that satisfies the person's obligation to that Court.

To the extent that a Court uses the FTA system by submitting an FTA Report, the Court must collect the statutorily required \$10.00 reimbursement fee. If the person is acquitted of the underlying offense for which the original FTA Report was filed, the Court will not require payment of the reimbursement fee.

Court must submit a clearance report for the following circumstances:

1. the perfection of an appeal of the case for which the warrant of arrest was issued or judgment arose;
2. the dismissal of the charge for which the warrant of arrest was issued or judgment arose;
3. the posting of a bond or the giving of other security to reinstate the charge for which the warrant was issued;
4. the payment or discharge of the fine and cost owed on an outstanding judgment of the Court; or

5. other suitable arrangement to pay the fine and cost within the Court's discretion.

DPS will not continue to deny renewal of the person's driver license after receiving notice from the Court that the FTA Report was submitted in error or has been destroyed in accordance with the Court's record retention policy.

D. Quarterly Reports and Audits

Court must submit quarterly reports to DPS in a format established by DPS.

Court is subject to audit and inspection at any time during normal business hours and at a mutually agreed upon location by the state auditor, DPS, and any other department or agency, responsible for determining that the Parties have complied with the applicable laws. Court must provide all reasonable facilities and assistance for the safe and convenient performance of any audit or inspection.

Court must correct any non-conforming transactions performed by the Court, at its own cost, until acceptable to DPS.

Court must keep all records and documents regarding this Contract for the term of this Contract and for seven years after the termination of this Contract.

E. Accounting Procedures

Court must keep separate, accurate, and complete records of the funds collected and disbursed and must deposit the funds in the appropriate municipal or county treasury. Court may deposit such fees in an interest-bearing account and retain the interest earned on such accounts for the Court.

Court will allocate \$6.00 of each \$10.00 reimbursement fee received for payment to the Vendor and \$4.00 for credit to the general fund of the municipal or county treasury.

F. Non-Waiver of Fees

Court will not waive the \$10.00 reimbursement fee for any person that has been submitted on an FTA Report, unless the person is deemed to be indigent, or the person is acquitted of the charges for which the person failed to appear.

Failure to comply with this section will result in: (i) termination of this Contract for cause; and (ii) the removal of all outstanding entries of the Court in the FTA Report, resulting in the lifting of any denied driver license renewal status from DPS.

G. Litigation Notice

The Court must make a good-faith attempt to immediately notify DPS in the event that the Court becomes aware of litigation in which this Contract or Tex. Transp. Code Chapter 706 is subject to constitutional, statutory, or common-law challenge, or is struck down by judicial decision.

VI. PAYMENTS TO VENDOR

Court must pay the Vendor a fee of \$6.00 per person for each violation which has been reported to the Vendor and for which the Court has subsequently collected the statutorily required \$10.00 reimbursement fee. In the event that the person has been acquitted of the underlying charge or is indigent, no payment will be made to the Vendor or required of the Court.

Court agrees that payment will be made to the Vendor no later than the last day of the month following the close of the calendar quarter in which the payment was received by the Court.

DPS will not pay Vendor for any fees collected by Court.

VII. GENERAL TERMS AND CONDITIONS

- A. Compliance with Law.** The Court understands and agrees that it will comply with all local, state, and federal laws in the performance of this Contract, including administrative rules adopted by DPS.
- B. Contract Amendment.** DPS and Court may amend this Contract through a written amendment signed by an authorized signatory on behalf of the respective party.
- C. Notice.** The respective party will send the other party notice as noted in this section.

Court	Department of Public Safety
Attn.: <u>Pat Riffel</u>	Enforcement & Compliance Service
Address: <u>910 S. Friendswood Drive</u>	5805 North Lamar Blvd.
Address: <u>Friendswood, TX 77546</u>	Austin, Texas 78752-0001
Fax: <u>281-482-0273</u>	(512) 424-5311 [fax]
Email: <u>priffel@friendswood.com</u>	<u>Driver.Improvement@dps.texas.gov</u>
Phone: <u>281-996-3212</u>	(512) 424-7172

- D. Termination.** Either party may terminate this Contract with 30 days' written notice. DPS may also terminate this Contract for cause if Court doesn't comply with Section V.F., *Non-Waiver of Fees*. After termination, the Court has a continuing obligation to report dispositions and collect fees for all violators in the FTA system at the time of termination. Failure to comply with the continuing obligation to report will result in the removal of all

outstanding entries of the Court in the FTA Report, resulting in the lifting of any denied driver license renewal status from DPS.

VIII. CERTIFICATIONS

The Parties certify that (1) the Contract is authorized by the governing body of each party; (2) the purpose, terms, rights, and duties of the Parties are stated within the Contract; and (3) each party will make payments for the performance of governmental functions or services from current revenues available to the paying party.

The undersigned signatories have full authority to enter into this Contract on behalf of the respective Parties.

Court*

Department of Public Safety

Authorized Signature

Driver License Division Chief or Designee

Title

Date

Date

*An additional page may be attached if more than one signature is required to execute this Contract on behalf of the Court. Each signature block must contain the person's title and date.

TEXAS DEPARTMENT OF PUBLIC SAFETY

5805 N LAMAR BLVD • BOX 4087 • AUSTIN, TEXAS 78773-0001

512/424-2000

www.dps.texas.gov



STEVEN C. McCRAW
DIRECTOR
SKYLOR HEARN
FREEMAN F. MARTIN
RANDALL B. PRINCE
DEPUTY DIRECTORS



COMMISSION
STEVEN P. MACH, CHAIRMAN
A. CYNTHIA LEON

January 10, 2020

Dear Court Administrator:

Enclosed please find the revised contract offered by the Texas Department of Public Safety to accommodate Chapter 706 of the Texas Transportation Code. Please complete all of the appropriate entries on the contract and arrange for the approval and signature of the presiding official authorized to sign contractual documents in your jurisdiction (mayor, city manager, county judge, etc.).

Only one (1) original signed contract should be submitted for each political subdivision; if you require a final copy for the court, please indicate so when you return the document. Signed contracts should be returned to:

Texas Department of Public Safety
Attn: Enforcement and Compliance Service
5805 North Lamar Blvd.
Austin, Texas 78752-0001

After the contract has been returned to the Department it will be processed for the appropriate signatures.

Any questions regarding the contract should be forwarded to Enforcement and Compliance Service; Tijuana Pendergrass at (512) 424-5431.

Sincerely yours,

Frances Gomez, Manager
Enforcement and Compliance Service

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 12/23/2019

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Resolution No. R2020-01: A resolution of the City Council of the City of Friendswood, Texas, designating the Mayor as the City's representative in seeking eligible grant funds under General Victim Assistance Direct Services Program; and authorizing the submission of such grant application to the Criminal Justice Division of the Office of Governor.

Originating Department: Police Department

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Funding is available from the State of Texas, Governor's Office, Criminal Justice Division, General Victim Assistance – Direct Services Program for a 12-month grant period. An in-kind match is required. This requirement is met by utilizing volunteers and the internship program. The grant will supply 80% of the salary and employee related expenses for one current full-time liaison for two years. Cash match for the \$176,908 in requested funding is \$16,977 over the one-year period and will be included in the proposed Fiscal Year 2021 Operating Budgets for the Friendswood Police Department. This annual cash match is only a partial amount of the salary/fringe benefit amount required to fully fund this position.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Victims of crime in Friendswood receive many services through the Friendswood Police Department and the Victim Assistance program, including crisis counseling, advocacy, information and referral. This funding would allow the Friendswood Police Department to continue to provide these services and make them available to any person victimized in Friendswood. This grant funding would continue to allow the city to uphold the excellent services to victims that have been consistently provided.

RECOMMENDATIONS

This action authorizes the City to apply for and accept \$76,908 in grant funding from the State of Texas, Governor's Office for the Friendswood Police Department to provide the "Crime Victim Assistance Program." The grant funds one full-time equivalent (FTE) Crime Victim Liaison to provide service referrals and assistance to all victims of violent crime, domestic abuse and sexual assault. This is the 21st consecutive year applying for this program.

ATTACHMENTS

1. R2020-01 VOCA
2. VOCA Grant Announcement
3. 1406219 FWD VOCA Application-12mo

RESOLUTION NO. R2020-01

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS, DESIGNATING THE MAYOR AS THE CITY'S REPRESENTATIVE IN SEEKING ELIGIBLE GRANT FUNDS UNDER GENERAL VICTIM ASSISTANCE DIRECT SERVICES PROGRAM; AND AUTHORIZING THE SUBMISSION OF SUCH GRANT APPLICATION TO THE CRIMINAL JUSTICE DIVISION OF THE OFFICE OF GOVERNOR.

* * * * *

WHEREAS, the City Council of the City of Friendswood, Texas hereby finds and determines that continuation of the Friendswood Police Department Crime Victim Assistance Program is in the best interests of the citizens of Friendswood; and

WHEREAS, the City agrees to provide applicable matching funds for the said program as required by the General Victim Assistance Direct Services Program grant application; and

WHEREAS, the City agrees that in the event of loss or misuse of any Criminal Justice Division grant funds, the City assures that the funds will be returned to the Criminal Justice Division in full; and

WHEREAS, the City Council hereby further finds and determines that the person serving as Mayor of the City is the appropriate individual to act as the City's authorized official, and as such should be given the power to apply for, accept, reject, alter or terminate the grant on behalf of the City,

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS:

Section 1. The facts and matters set forth in the preamble of this Resolution are hereby found to be true and correct.

Section 2. The City Council of the City of Friendswood, Texas, hereby authorizes and approves the submission of a grant application, pursuant to the General Victim Assistance Direct Services Program, to the Office of the Governor, Criminal Justice Division.

Section 3. The City Council hereby designates and appoints the Mayor of said City as the authorized official to apply for, accept, reject, alter, or terminate the grant on behalf of the City.

PASSED, APPROVED AND RESOLVED on this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

Grant Number: 1406219



Office of the Governor, Public Safety Office

Criminal Justice Division

Funding Announcement: ***General Victim Assistance Grant Program, FY2021***

Purpose

The purpose of this program is to provide services and assistance directly to victims of crime to speed their recovery and aid them through the criminal justice process. Services may include the following:

- 1) responding to the emotional and physical needs of crime victims;
- 2) assisting victims in stabilizing their lives after a victimization;
- 3) assisting victims to understand and participate in the criminal justice system; and
- 4) providing victims with safety and security.

Available Funding

Federal funding is authorized for these projects under the Victims of Crime Act of 1984 (VOCA) as amended and codified in 34 U.S.C. §20103, and under the Violence Against Women Act of 2013 Pub. L. No. 113-4 (VAWA 2013). All awards are subject to the availability of appropriated federal funds and any modifications or additional requirements that may be imposed by law.

Eligible Organizations

Applications may be submitted by state agencies, public and private non-profit institutions of higher education, independent school districts, Native American tribes, councils of governments, non-profit corporations (including hospitals and faith-based organizations) and units of local government, which are defined as a non-statewide governmental body with the authority to establish a budget and impose taxes (includes hospital districts). Other local governmental agencies should apply through an associated unit of local government.

Additionally, per 28 CFR §94.112 (b), organizations applying to receive VOCA fund must 1) have a demonstrated record of effective direct services and 2) substantial financial support from sources other than the Crime Victims Fund.

Agencies applying for funds to support a CASA or Children's Advocacy Center program must apply through either Texas CASA, Inc. or Children's Advocacy Centers of Texas.

Organizations that have received a 24-month project in FY2020 may not apply for continuation or expansion funding.

Application Process

Applicants must access the Public Safety Office (PSO) eGrants grant management website at <https://eGrants.gov.texas.gov> to register and apply for funding. For more instructions and information, see *Developing a Good Project Narrative Guide*, available [here](#).

Key Dates

Action	Date
Funding Announcement Release	12/13/2019
Online System Opening Date	12/13/2019
Final Date to Submit and Certify an Application	2/27/2020 at 5:00pm CST
Project Start Date	10/01/2020

Project Period

Projects selected for funding must begin on or after 10/01/2020 and expire on or before 9/30/2021. Due to the availability of funding, CJD can no longer support 24 month project periods. Projects may not exceed a 12 month project period.

Funding Levels

Minimum: \$10,000

Maximum: No Maximum

Match Requirement: 20% of the total project

Note: Applicants are strongly cautioned to only apply for the amount of funding they can responsibly expend in the grant period. CJD will be tracking expenditure rates throughout the life of the grants and may take action to avoid large de-obligations at the end of grant periods.

Standards

Grantees must comply with standards applicable to this fund source cited in the State Uniform Grant Management Standards ([UGMS](#)), [Federal Uniform Grant Guidance](#), and all statutes, requirements, and guidelines applicable to this funding.

Eligible Activities and Costs

The following list of eligible activities and costs apply generally to all projects under this announcement.

Crisis Services

- Services that respond to immediate needs (other than medical care), emotional, psychological, and physical health and safety including:
 - Crisis intervention services;
 - Accompanying victims to hospitals for medical examinations;
 - Hotline counseling;
 - Safety planning;
 - Emergency food, clothing, and transportation;
 - Window, door, or lock replacement or repair, and other repairs necessary to ensure a victim's safety;
 - Costs of the following, on an emergency basis (i.e., when the State's compensation program, the victim's health insurance plan, Medicaid, or other health care funding source, is not reasonably expected to be available quickly enough to meet the emergency

needs of a victim (typically within 48 hours of the crime): Non-prescription and prescription medicine, prophylactic or other treatment to prevent HIV/AIDS infection or other infectious disease, durable medical equipment (such as wheel-chairs, crutches, hearing aids, eyeglasses), and other healthcare items; In all cases the grant must be considered the option of last resort; and

- Emergency legal assistance, such as for filing for restraining or protective orders, and obtaining emergency custody orders and visitation rights;
- Personal advocacy and emotional support including:
 - Working with a victim to assess the impact of the crime;
 - Identification of victim's needs;
 - Case management;
 - Management of practical problems created by the victimization;
 - Identification of resources available to the victim;
 - Provision of information, referrals, advocacy, and follow-up contact for continued services, as needed; and
 - Traditional, cultural, and/or alternative therapy/healing (e.g., art therapy, yoga – with appropriate training, certification, or licensure);
 - Transportation of victims to receive services and to participate in criminal justice proceedings;
 - Public awareness and education presentations (including the development of presentation materials, brochures, newspaper notices, and public service announcements) in schools, community centers, and other public forums that are designed to inform crime victims of specific rights and services and provide them with (or refer them to) services and assistance, this activity will only be funded in conjunction with programs providing direct services.

Forensic Interviews (with the following parameters):

- Results of the interview will be used not only for law enforcement and prosecution purposes, but also for identification of needs such as social services, personal advocacy, case management, substance abuse treatment, and mental health services;
- Interviews are conducted in the context of a multi-disciplinary investigation and diagnostic team, or in a specialized setting such as a child advocacy center; and
- The interviewer is trained to conduct forensic interviews appropriate to the developmental age and abilities of children, or the developmental, cognitive, and physical or communication disabilities presented by adults.

Legal Advocacy

- Facilitating participation in criminal justice and other public proceedings arising from the crime, including:
 - Advocacy on behalf of a victim;
 - Accompanying a victim to offices and court;

- Transportation, meals, and lodging to allow a victim who is not a witness to participate in a proceeding;
- Interpreting for a non-witness victim who is deaf or hard of hearing, or with limited English proficiency;
- Providing child care and respite care to enable a victim who is a caregiver to attend activities related to the proceeding;
- Notification to victims regarding key proceeding dates (e.g., trial dates, case disposition, incarceration, and parole hearings);
- Assistance with Victim Impact Statements;
- Assistance in recovering property that was retained as evidence; and
- Assistance with restitution advocacy on behalf of crime victims.
- Legal assistance services (including those provided on an emergency basis), where reasonable and where the need for such services arises as a direct result of the victimization, including:
 - Those (other than criminal defense) that help victims assert their rights as victims in a criminal proceeding directly related to the victimization, or otherwise protect their safety, privacy, or other interests as victims in such a proceeding;
 - Those actions (other than tort actions) that, in the civil context, are reasonably necessary as a direct result of the victimization;

Multi-Disciplinary Teams and Case Coordination

- Representatives of several agencies meet regularly to discuss common cases and share information to enhance investigation, prosecution, and victim restoration. Cases are followed through in this manner to closure. Participating agencies may include Child Protective Service, law enforcement, prosecutors' offices, Sexual Assault Nurse Examiners or other medical personnel, mental health professionals, etc.

Peer Support Groups

- Peer-support, including activities that provide opportunities for victims to meet other victims, share experiences, and provide self-help, information, and emotional support;

Professional Therapy and Counseling

- Mental health counseling and care, including, but not limited to, out-patient therapy/counseling provided by a person who meets professional standards to provide these services in the jurisdiction in which the care is administered;

Program Evaluation and Assessment:

- Evaluation of victim services programs and/or assessment of organizational or system effectiveness, needs, and/or appropriate responses.

Protective Order Assistance:

- Legal representation provided by program staff and/or staff attorneys to obtain protective orders and assistance
- May be provided by law enforcement personnel, prosecution staff or other service providers.

- Services may be available at non-traditional locations and times.

Shelter Programs

- Providing a safe place for victims/survivors and their children;
- Short-term (up to 45 days) in-home care and supervision services for children and adults who remain in their own homes when the offender/caregiver is removed;
- Short-term (up to 45 days) nursing-home, adult foster care, or group-home placement for adults for whom no other safe, short-term residence is available;

Victim-Offender Meetings

- Meetings between the survivor and the offender who perpetrated the crime against the survivor. At a minimum grantees must consider:
 - The safety and security of the survivor;
 - The benefit of therapeutic value to the survivor;
 - The procedures for ensuring that participation of the survivor and offender are voluntary and that everyone understands the nature of any meeting or other activity;
 - The provision of appropriate support and accompaniment for the survivor;
 - Appropriate debriefing opportunities for the survivor after a meeting;
 - The credentials of the facilitators; and
 - The opportunity for a survivor to withdraw from the process at any time.

Program-Specific Requirements

All projects under this funding announcement must meet these requirements:

Cultural competency: Applicants must be culturally competent when providing services to victims. Victim service providers must have the ability to blend cultural knowledge and sensitivity with victim restoration skills for a more effective and culturally appropriate recovery process. Cultural competency occurs when: (1) cultural knowledge, awareness and sensitivity are integrated into action and policy; (2) the service is relevant to the needs of the community and provided by trained staff, board members, and management; and (3) an advocate or organization recognizes each client is different with different needs, feelings, ideas and barriers.

Victim services assessment survey: All recipients of funding under this announcement may be required to participate in a victim services assessment during their grant period, as directed by CJD.

Special requirements for vehicle purchases:

Only non-profits will be eligible to purchase vehicles under this funding announcement. The vehicles must be for the purpose of transporting victims to receive various services. Applicants must explain in their eGrants application how the vehicles will be utilized and how that strengthens their delivery of victim services.

Eligibility Requirements

1. Projects must demonstrate a record of effective services to victims of crime and support from sources other than the Crime Victims Fund.
 - A program has demonstrated a record of effective direct services and support when, for example, it demonstrates the support and approval of its direct services by the community, its history of providing direct services in a cost-effective manner, and the breadth or depth of its financial support from sources other than the Crime Victims Fund.
 - A program has substantial financial support from sources other than the Crime Victims Fund when at least twenty-five percent of the program's funding in the year of, or the year preceding the award comes from such sources.
2. Entities receiving funds from CJD must be located in a county that has an average of 90% or above on both adult and juvenile dispositions entered into the computerized criminal history database maintained by the Texas Department of Public Safety (DPS) as directed in the Texas Code of Criminal Procedure, Chapter 66. The disposition completeness percentage is defined as the percentage of arrest charges a county reports to DPS for which a disposition has been subsequently reported and entered into the computerized criminal history system.
3. Beginning January 1, 2020, counties applying for grant awards from the Office of the Governor must commit that the county will report at least 90 percent of convictions within seven business days to the Criminal Justice Information System at the Department of Public Safety. By January 1, 2021, such reporting must take place within five business days.
4. Eligible applicants operating a law enforcement agency must be current on reporting Part I violent crime data to the Texas Department of Public Safety (DPS) for inclusion in the annual Uniform Crime Report (UCR). To be considered eligible for funding, applicants must have submitted a full twelve months of accurate data to DPS for the most recent calendar year.
5. The Texas Department of Public Safety (DPS) has established a goal set by the Texas Legislature for all local law enforcement agencies to implement and report crime statistics data by using the requirements of the National Incident-Based Reporting System (NIBRS). . Additionally, the Federal Bureau of Investigations (FBI) will collect required crime statistics solely through the NIBRS starting January 1, 2021. Due to the upcoming federal deadline, grantees are advised that eligibility for future grant funding may be tied to compliance with NIBRS. Financial grant assistance for transitioning to NIBRS may be available for your jurisdiction from the Public Safety Office.
6. Local units of government, including cities, counties and other general purpose political subdivisions, as appropriate, and institutions of higher education that operate a law enforcement agency, must comply with all aspects of the programs and procedures utilized by the U.S. Department of Homeland Security ("DHS") to: (1) notify DHS of all information requested by DHS related to illegal aliens in Agency's custody; and (2) detain such illegal aliens in accordance with requests by DHS. Additionally, counties and municipalities may NOT have in effect, purport to have in effect, or make themselves subject to or bound by, any law, rule, policy, or practice (written or unwritten) that would: (1) require or authorize the public disclosure of federal law enforcement information in order to conceal, harbor, or shield from detection fugitives from justice or aliens illegally in the United States; or (2) impede federal officers from exercising authority under 8 U.S.C. § 1226(a), § 1226(c), § 1231(a), § 1357(a), § 1366(1), or § 1366(3). Lastly, eligible applicants must comply with all

provisions, policies, and penalties found in Chapter 752, Subchapter C of the Texas Government Code.

Each local unit of government, and institution of higher education that operates a law enforcement agency, must download, complete and then upload into eGrants the [CEO/Law Enforcement Certifications and Assurances Form](#) certifying compliance with federal and state immigration enforcement requirements. This Form is required for each application submitted to OOG and is active until August 31, 2021 or the end of the grant period, whichever is later.

7. Eligible applicants must have a DUNS (Data Universal Numbering System) number assigned to its agency (to request a DUNS number, go to <https://fedgov.dnb.com/webform>).
8. Eligible applicants must be registered in the federal System for Award Management (SAM) database located at <https://www.sam.gov/>.

Failure to comply with program eligibility requirements may cause funds to be withheld and/or suspension or termination of grant funds.

Prohibitions

Grant funds may not be used to support the unallowable costs listed in the [Guide to Grants](#) or any of the following unallowable costs:

1. Lobbying or advocacy activities with respect to legislation or to administrative changes to regulations or administrative policy (cf. 18 U.S.C. 1913), whether conducted directly or indirectly;
2. The active investigation and prosecution of criminal activity, except for the provision of victim assistance services (e.g., emotional support, advocacy, and legal services) to crime victims, under 28 CFR § 94.119, during such investigation and prosecution;
3. Any activities related to fundraising;
4. Capital improvements; property losses and expenses; real estate purchases; mortgage payments; remodeling; and construction;
5. Reimbursement of crime victims for expenses incurred as a result of a crime;
6. Salaries, benefits, fees, furniture, equipment, and other expenses of executive directors, board members, and other administrators (except as specifically allowed);
7. Counseling or treatment for substance abuse (general counseling that includes a component addressing substance abuse is eligible);
8. Victim-offender meetings that serve to replace (or as a part of) criminal justice proceedings;
9. Services to incarcerated individuals;
10. Medical training;
11. Medical care or expenses (except as specifically allowed);
12. Forensic medical evidence collection to include the salary or overtime cost of SANE Nurses;
13. Cash payments to victims, gift cards, or fuel vouchers;

14. Creation of a voucher program where victims are directly given vouchers for such services as housing or counseling;
15. Transportation, lodging, per diem or any related costs for third-party participants to attend a training, when grant funds are used to develop and conduct training;
16. Leasing of vehicles;
17. Transitional housing - Travel, rental assistance, security deposits, utilities, and other costs incidental to the relocation to such housing, as well as voluntary support services such as childcare and counseling;
18. Research and studies, except for project evaluations under 28 CFR § 94.121(j);
19. Activities that may compromise victim safety;
20. Entertainment, including amusement, diversion, social activities, and any associated costs (i.e. tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities) unless there is a clear programmatic purpose and the costs are approved in advance by CJD; and
21. Any other prohibition imposed by federal, state or local law or regulation.

Selection Process

1. For eligible local and regional projects:
 - a. Applications will be forwarded by CJD to the appropriate regional council of governments (COG).
 - b. The COG's criminal justice advisory committee will prioritize all eligible applications based on State priorities, identified community priorities, cost and program effectiveness.
 - c. CJD will accept priority listings that are approved by the COG's executive committee.
 - d. CJD will make all final funding decisions based upon eligibility, approved COG priorities, reasonableness of the project, availability of funding, and cost-effectiveness.
2. For state discretionary projects, applications will be reviewed by CJD staff members or a review group selected by the executive director. CJD will make all final funding decisions based on eligibility, reasonableness, availability of funding, and cost-effectiveness.

Contact Information

For more information, contact the eGrants help desk at eGrants@gov.texas.gov or (512) 463-1919.

Agency Name: Friendswood, City of
Grant/App: 1406219 **Start Date:** 10/1/2020 **End Date:** 9/30/2021

Project Title: Crime Victim Assistance Program
Status: Application Pending Submission

Eligibility Information

Your organization's Texas Payee /Taxpayer ID Number:
17414932024003

Application Eligibility Certify:
Created on:12/18/2019 3:38:33 PM By: Lisa Price

Profile Information

Applicant Agency Name: Friendswood, City of
Project Title: Crime Victim Assistance Program
Division or Unit to Administer the Project: Friendswood Police Department
Address Line 1: 1600 Whitaker Drive
Address Line 2:
City/State/Zip: Friendswood Texas 77546-4177
Start Date: 10/1/2020
End Date: 9/30/2021

Regional Council of Governments(COG) within the Project's Impact Area: Houston-Galveston Area Council
Headquarter County: Galveston
Counties within Project's Impact Area: Galveston,Harris

Grant Officials:
Authorized Official
Name: Mike Foreman
Email: mforeman@friendswood.com
Address 1: 910 S. Friendswood Dr.
City: Friendswood, Texas 77546
Phone: 281-996-3200 Other Phone: 281-996-3270
Fax: 281-482-1634
Title: Mr.
Salutation: Mayor
Position: Mayor

Financial Official
Name: Katina Hampton
Email: asocentral@friendswood.com
Address 1: 910 S. Friendswood Drive
City: Friendswood, Texas 77546
Phone: 281-996-3221 Other Phone:
Title: Ms.
Salutation: General
Position: Director of Administrative Services

Project Director

Name: Robert Wieners
Address 1: 1600 Whitaker Drive
City: Friendswood, Texas 77546
Phone: 281-996-3310 Other Phone: 281-996-3300
Fax: 281-482-9318
Title: Mr.
Salutation: Chief
Position: Chief of Police

Grant Writer

Name: Lisa Price
Email: lprice@ci.friendswood.tx.us
Address 1: Friendswood Public Safety Building
Address 1: 1600 Whitaker
City: Friendswood, Texas 77546
Phone: 281-996-3313 Other Phone: 281-996-3300
Fax: 281-482-9318
Title: Ms.
Salutation: Officer
Position: Administrative Assistant to the Chief

Grant Vendor Information

Organization Type: Unit of Local Government (City, Town, or Village)
Organization Option: applying to provide direct services to victims only
Applicant Agency's State Payee Identification Number (e.g., Federal Employer's Identification (FEI) Number or Vendor ID): 17414932024003
Data Universal Numbering System (DUNS): 053838314

Narrative Information**Introduction**

The purpose of this program is to provide services and assistance directly to victims of crime to speed their recovery and aid them through the criminal justice process. Services may include the following:

- responding to the emotional and physical needs of crime victims;
- assisting victims in stabilizing their lives after a victimization;
- assisting victims to understand and participate in the criminal justice system; and
- providing victims with safety and security.

Please read the funding announcement for program rules and application guides, available on the [eGrants Calendar](#) page. Additionally, you should review the *Guide to Grants* available on the [PSO Resource for Applicants and Grantees webpage](#) for information and guidance related to the management and use of grant funds.

Use the space provided below to describe your project. For help with your narrative, see PSO's Developing a Good Project Narrative [Guide](#).

Note: Do not upload attachments with further information unless specifically instructed to do so.

Program-Specific Questions

Culturally Competent Victim Restoration

Victim service providers must have the ability to blend cultural knowledge and sensitivity with victim restoration skills for a more effective and culturally appropriate recovery process. Cultural competency occurs when: (1) cultural knowledge, awareness and sensitivity are integrated into action and policy; (2) the service is relevant to the needs of the community and provided by trained staff, board members, and management; and (3) an advocate or organization recognizes each client is different with different needs, feelings, ideas and barriers.

Provide information in this section regarding how your organization is culturally competent when providing services to victims.

The Friendswood Police Department Crime Victim Assistance Program is a multi-cultural program. The Department conducts mandatory awareness training for all police officers regarding cultural differences. With our cooperative working agreements, current staff, and access to translator services through local colleges and other social service programs, we are able to overcome any difficulties in providing appropriate services to survivors of crime. We recognize all of our similarities and fundamental differences among people from different nationalities, ethnicity, and cultures, as well as from different family backgrounds and individual experiences. We are able to cater our victim services to Hispanic, Muslim, and other resettled immigrant communities, providing professional culturally competent services. The CVL is bilingual - English/Spanish - fluent in Spanish and assists and provides direct victim services to our Hispanic community.

Culturally Specific and Underserved Populations

Following are relevant definitions needed to answer this question.

- Underserved populations means populations who face barriers in accessing and using victim services, and includes populations underserved because of geographic location, religion, sexual orientation, gender identity, underserved racial and ethnic populations, populations underserved because of special needs (such as language barriers, disabilities, alienage status, or age), and any other population determined to be underserved by the Attorney General or by the Secretary of Health and Human Services, as appropriate.
- Culturally specific means the program is primarily directed toward racial and ethnic minority groups (as defined in section 1707(g) of the Public Health Service Act (42 U.S.C. 300u-6(g)).
- Racial and ethnic minority group means American Indians (including Alaska Natives, Eskimos, and Aleuts); Asian Americans; Native Hawaiians and other Pacific Islanders; Blacks; and Hispanics.
- Hispanic means individuals whose origin is Mexican, Puerto Rican, Cuban, Central or South American, or any other Spanish-speaking country.

Does your program have a primary focus on serving a culturally specific population? (The organization must do more than merely provide services to an underserved population or culturally specific group; rather, the organization's primary focus must be on providing culturally competent services designed to meet the specific needs of the target population in order to justify a YES response in the section below.)

☐ Yes
☒ No

If you answered 'YES' above, you must explain in the box below how your organization's program is specifically designed to focus on and meet the needs of culturally specific populations. If this item does not apply enter 'N/A'.

N/A

Certifications

In addition to the requirements found in existing statute, regulation, and the funding announcement, this program requires applicant organizations to certify compliance with the following:

Forensic Medical Examination Payments

Health care facilities shall conduct a forensic medical examination of a victim of an alleged sexual assault if the victim arrived at the facility within 96 hours after the assault occurred and the victim consents to the examination. The victim is not required to participate in the investigation or prosecution of an offense as a condition of receiving a forensic medical examination, nor pay for the forensic examination or the evidence collection kit. The evidence collection portion of the exam is to be paid by law enforcement per state law. Crime Victim Compensation funds may be used to pay for the medical portion of the exam unless the victim of sexual assault is required to seek reimbursement for the examination from their insurance carrier. If a health care facility does not provide diagnosis or treatment services for sexual assault victims, the facility is required to refer the victim to a facility that provides those services.

Confidentiality and Privacy

Applicant agrees to maintain the confidentiality of client-counselor information and research data, as required by state and federal law. Personally identifying information or individual information collected in connection with services requested, utilized, or denied may not be disclosed; or, reveal individual client information without informed, written, reasonably time-limited consent of the person about whom information is sought. If release of information is compelled by statutory or court mandate, reasonable attempts to provide notice to victims affected by the disclosure of information will be made and steps necessary to protect the privacy and safety of the persons affected by the release of information will be taken.

Activities that Compromise Victim Safety and Recovery

Applicant agrees to not engage in activities that jeopardize victim safety, deter or prevent physical or emotional healing for victims, or allow offenders to escape responsibility for their actions.

Polygraph Testing Prohibition

A peace officer or attorney representing the state may not require an adult or child victim of an alleged sex offense to submit to a polygraph examination or other truth telling device as a condition for proceeding with the investigation of such an offense. In addition, the refusal of a victim to submit to a polygraph or other truth telling examination will not prevent the investigation, charging, or prosecution of an alleged sex offense or on the basis of the results of a polygraph examination.

Protection Orders

Victims applying for a protective order or their attorney may not bear the costs associated

with the filing of an order of protections.

Offender Firearm Prohibition

The applicant certifies that its judicial administrative policies and practices include notification to domestic violence offenders of the requirements delineated in section 18 USC § 992(g)(8) and (g)(9).

Criminal Charges

In connection with the prosecution of any misdemeanor or felony domestic violence offense, the victim may not bear the costs associated with the filing of criminal charges against a domestic violence offender, issuance or service of a warrant, or witness subpoena.

Criminal History Reporting

Entities receiving funds from PSO must be located in a county that has an average of 90% or above on both adult and juvenile dispositions entered into the computerized criminal history database maintained by the Texas Department of Public Safety (DPS) as directed in the *Texas Code of Criminal Procedure, Chapter 66*. The disposition completeness percentage is defined as the percentage of arrest charges a county reports to DPS for which a disposition has been subsequently reported and entered into the computerized criminal history system.

Beginning January 1, 2020, counties applying for grant awards from the Office of the Governor must commit that the county will report at least 90 percent of convictions within seven business days to the Criminal Justice Information System at the Department of Public Safety. By January 1, 2021, such reporting must take place within five business days. Click [here](#) for additional information from DPS on this new reporting requirement.

Uniform Crime Reporting (UCR)

Eligible applicants operating a law enforcement agency must be current on reporting Part I violent crime data to the Texas Department of Public Safety (DPS) for inclusion in the annual Uniform Crime Report (UCR). To be considered eligible for funding, applicants must have submitted a full twelve months of accurate data to DPS for the most recent calendar year.

Conversion to National Incident-Based Reporting System (NIBRS)

The Texas Department of Public Safety (DPS) has established a goal set by the Texas Legislature for all local law enforcement agencies to implement and report crime statistics data by using the requirements of the National Incident-Based Reporting System (NIBRS). Additionally, the Federal Bureau of Investigations (FBI) will collect required crime statistics solely through the NIBRS starting January 1, 2021. Due to this federal deadline, grantees are advised that eligibility for future grant funding may be tied to compliance with NIBRS. Financial grant assistance for transitioning to NIBRS may be available for your jurisdiction from the Public Safety Office.

Immigration Legal Services

CJD prioritizes funding of projects that provide a full spectrum of counseling, crisis services, and other direct victim services. CJD will not fund projects that focus primarily on immigration legal services and do not provide a significant level of other types of victim services.

Discrimination

Applicant agrees not to discriminate against victims because they disagree with the State's prosecution of the criminal case.

Records

Applicant agrees to maintain daily time and attendance records specifying the time devoted to allowable victim services.

Volunteers

If awarded VOCA funds, applicant agrees to use volunteers to support either the project or other agency-wide services/activities, unless CJD determines that a compelling reason exists to waive this requirement.

Crime Victims' Compensation

Applicant agrees to assist crime victims in applying for crime victims' compensation benefits.

Community Efforts

Applicant agrees to promote community efforts to aid crime victims. Applicants should promote, within the community, coordinated public and private efforts to aid crime victims. Coordination efforts qualify an organization to receive these funds, but are not activities that can be supported with these funds.

Civil Rights Information

Applicant agrees to maintain statutorily required civil rights statistics on victims served by race, national origin, sex, age, and disability of victims served, within the timeframe established by CJD. This requirement is waived when providing services, such as telephone counseling, where soliciting the information may be inappropriate or offensive to the crime victim.

Victims of Federal Crime

Applicant agrees to provide equal services to victims of federal crime. (Note: Victim of federal crime is a victim of an offense that violates a federal criminal statute or regulation; federal crimes also include crimes that occur in an area where the federal government has jurisdiction, such as Indian reservations, some national parks, some federal buildings, and military installations.)

No Charge

Applicant agrees to provide grant-funded services at no charge to victims of crime. Applicants are also prohibited from billing Crime Victims Compensation, private insurance, Medicaid, or Medicare for services provided using VOCA funds.

Effective Services

Applicants applying for funds to provide victim services must demonstrate a record of providing effective services to crime victims. (See "Eligible Organizations" in the Funding Announcement.)

Compliance with State and Federal Laws, Programs and Procedures

Local units of government, including cities, counties and other general purpose political subdivisions, as appropriate, and institutions of higher education that operate a law enforcement agency, must comply with all aspects of the programs and procedures utilized by the U.S. Department of Homeland Security ("DHS") to: (1) notify DHS of all information requested by DHS related to illegal aliens in Agency's custody; and (2) detain such illegal aliens in accordance with requests by DHS. Additionally, counties and municipalities may NOT have in effect, purport to have in effect, or make themselves subject to or bound by, any law, rule, policy, or practice (written or unwritten) that would: (1) require or authorize

the public disclosure of federal law enforcement information in order to conceal, harbor, or shield from detection fugitives from justice or aliens illegally in the United States; or (2) impede federal officers from exercising authority under 8 U.S.C. § 1226(a), § 1226(c), § 1231(a), § 1357(a), § 1366(1), or § 1366(3). Lastly, eligible applicants must comply with all provisions, policies, and penalties found in Chapter 752, Subchapter C of the Texas Government Code.

Each local unit of government, and institution of higher education that operates a law enforcement agency, must download, complete and then upload into eGrants the [CEO/Law Enforcement Certifications and Assurances Form](#) certifying compliance with federal and state immigration enforcement requirements. This Form is required for each application submitted to OOG and is active until August 31, 2021 or the end of the grant period, whichever is later.

Legal Assistance for Victims (LAV) Certification

The applicant certifies that it meets the following federal statutory requirements in regards to the provision of legal advocacy:

(1) Any person providing legal assistance through a program funded under this VAWA Program

(a) has demonstrated expertise in providing legal assistance to victims of domestic violence, dating violence, sexual assault or stalking in the targeted population; or

(b) is partnered with an entity or person that has demonstrated expertise described in subparagraph (A) and has completed or will complete training in connection with domestic violence, dating violence, sexual assault or stalking and related legal issues, including training on evidence-based risk factors for domestic and dating violence homicide.

(2) Any training program conducted in satisfaction of the requirement of paragraph (1) has been or will be developed with input from and in collaboration with a state, local, territorial, or tribal domestic violence, dating violence, sexual assault, or stalking victim service provider or coalition, as well as appropriate tribal, State, territorial, and local law enforcement officials.

(3) Any person or organization providing legal assistance through a program funded under this Program has informed and will continue to inform state, local, or tribal domestic violence, dating violence or sexual assault programs and coalitions, as well as appropriate State and local law enforcement officials of their work.

(4) The grantee's organizational policies do not require mediation or counseling involving offenders and victims physically together, in cases where sexual assault, domestic violence, dating violence, or child sexual abuse is an issue.

Does the applicant meet the criteria outlined above?

☐ Yes

☒ No

Civil Rights Liaison

A civil rights liaison who will serve as the grantee's civil rights point of contact and who will be responsible for ensuring that the grantee meets all applicable civil rights requirements must be designated. The designee will act as the grantee's liaison in civil rights matters with CJD and with the federal Office of Justice Programs.

Enter the Name of the Civil Rights Liaison: William Bender

Enter the Address for the Civil Rights Liaison: 910 S. Friendswood Drive Friendswood, TX 77546

Enter the Phone Number for the Civil Rights Liaison [(999) 999-9999 x9999]: (281)996-3226

Each applicant agency must certify to the specific requirements detailed above as well as to comply with all requirements within the PSO Funding Announcement, the *Guide to Grants*, the *Grantee Conditions and Responsibilities*, any authorizing or applicable state and federal statutes and regulations to be eligible for this program.

X I certify to all of the application content & requirements.

Project Abstract :

Friendswood's Victim Assistance Program is among a small number of victim assistance services working within law enforcement. How law enforcement responds to victims is crucial in determining how victims cope with the immediate crisis and later with recovery from the crime. As part of a police agency, there is a quick response to victim needs at the crime scene. Victims receive immediate crisis counseling resources and practical advice. Our primary purpose is to extend and enhance services to victims of crime. Funding is used to support the direct provision of services to victims so they receive early intervention, dramatically decreasing the need for long-term treatment. Referrals are accepted from police, social services and criminal justice personnel. Police reports are screened and victims are contacted to offer program services. It is a comprehensive program providing services to all victims of crime with support and approval by the community, a history of providing services in a cost effective manner with financial support from the City's general fund. It provides first response to crime scenes and after hours call out, provides assistance in filing victim compensation claims and uses volunteers and interns. The program strongly influences a victims' subsequent participation in the investigation and prosecution of the crime. Although the program is specifically charged with providing services to victims, it is committed to treating victims with dignity and compassion.

Problem Statement :

Domestic violence accounts for 84% of the total victims serviced by the Friendswood Crime Victim Assistance Program. The demand for domestic violence services in the Friendswood community remains steady and necessitates a coordinated response to calls for assistance, protection, education and emergency services. The Galveston County Community Plan identifies domestic violence as one of the most pressing priorities in our community. There is a continued need to provide additional information on available services, service accessibility, safety planning, and legal options; including filing protective orders. For the other 16% of Friendswood crime victims, the consequences for failing to coordinate service provision can be detrimental. Victims may decide that getting help is not worth the effort. Duplication of services may occur, leading to unnecessary and inefficient use of limited resources. Victims need accurate information and referral services, where they are not passed from one agency to another.

Supporting Data :

In FY 2019, the Friendswood Crime Victim Assistance program serviced 181 primary victims of domestic violence. This number comprises 54% of the total number of victims served.

There were 28 survivors of sexual assault served in FY 2019; 20 were children under the age of 17. In total, 28 child victims were served by the program. There were 14 victims of violent crime aged 60 and older and does not include those who were victims of financial exploitation. The number of elderly victims is expected to increase given the high number of retirement homes and assisted living facilities in the City. Robbery cases are on the rise with 15 primary victims of robbery served in FY 2019.

Project Approach & Activities:

The Friendswood Crime Victim Assistance program provides a victim-centered approach to services that are accessible and appropriate for every crime victim seeking assistance. With services that are victim-centered, they are specific, appropriate, culturally and physically accessible, and driven by the needs of individuals impacted by crime and violence. The model used by the Friendswood Victim Assistance Program was developed by the International Association of Chiefs of Police (IACP). In the policy it identifies the seven critical needs of crime victims: safety, support, information, access, continuity, voice and justice and emphasizes law enforcement as an integral part of the effective response to the needs of crime victims. It highlights efforts that have both an immediate and a long-term impact on the victim's emotional recovery by developing a sense of security and stability and potentially mitigating the traumatic effects of the crime. We use this model because it recognizes and addresses the needs of crime victims. It supports and assists the victims as they continue to interact with the criminal justice system and acts as a liaison to appropriate victim assistance and service agencies. This approach address' victims' needs by establishing a continuum of support as they progress through the various phases of the criminal justice process, providing protection from perpetrators and assistance in avoiding re-victimization, and assistance to enable participation in the criminal justice system processes and repair of harm. It provides concise and useful information about victims' rights, criminal justice system processes and available victim services, the ability to participate in the justice system process and have ready availability to support services and consistency in approaches and methods across agencies through all of the stages. Victims are given an opportunity to speak out and be heard on specific case processing issues and receive the support necessary to heal and see that perpetrators are held accountable.

Capacity & Capabilities:

With 21 years of providing victim services and experience in managing local, state and federal grant funding, the Friendswood Victim Assistance Program maintains high integrity regarding having the capacity and capability to effectively manage this project's award. Additionally, the services provided by this program are supported by an experienced and trained victim advocate and have the support of city council and the city administration.

Performance Management :

The program's goal is to expand and enhance the quality of victim services using a comprehensive and coordinated approach to services that result in the empowerment, education and ultimate restoration of victims to whole mental and physical health. Our objectives are: To provide appropriate, individualized support to 300 victims of crime seeking and requesting services during the grant cycle. The program will increase the physical and/or emotional safety among 150 victims by developing safety plans and making referrals to other community social service agencies during the grant cycle. To measure the success of our program, we will maintain a database that captures victim/client services provided to reduce recidivism and alter the trajectory of families destined for criminal

justice involvement.

Target Group :

The project focuses on victims of crime, witnesses and secondary victims who are victimized within the corporate city limit of Friendswood, located in Galveston County and Harris County. This includes victims and family members of victims of domestic violence, dating violence, sexual assault, stalking, and survivors of homicide. The target group includes all victims of crime, which in prior grant period (ending 9/30/2019) was 337 victims. The program is estimating an increase to 350 victims. The majority of the victims serviced are adult females (64% based on prior grant year statistics). Based on Friendswood's demographic make-up, it is estimated that applicants would be 77.5% white, 12.5% Hispanic, 4.8% Asian and 3.4% black. During the last grant cycle, the population breakdown was 76% white, 10% Hispanic, 5% Asian and 8% black. The Friendswood program places special emphasis on developing and enhancing resources that impact victims of domestic violence and assault, which collectively makes up 84% of offenses addressed by this program. Of special note, in 2017, the City of Friendswood estimated 14% of the population is 65 years of age and over. This is a group that is under-represented among the victims of crime in general. The consequences of criminal victimization are harsher for the elderly because so many are living on fixed incomes and are more likely to be physically hurt. They are more fearful and isolated from others, so the psychological consequences of crime may be more severe.

Evidence-Based Practices:

The Friendswood Crime Victim Assistance Program complies with the IACP model policy for the Response to Victims of Crime (<http://www.iacp.org/Portals/0/documents/pdfs/MembersOnly/VictimsPolicy.pdf>) and follows the IACP's Strategy Package for "Enhancing Law Enforcement Response to Victims" which can be found at <http://www.iacp.org/Victim-Response>. In fact, the Friendswood Police Department's former crime victim liaison, Lisa Voyles, served as a consultant for "Enhancing Law Enforcement Response to Victims: Implementation Guide, Volume 2" using her experience and knowledge to formulate a model program for other law enforcement agencies to follow.

Project Activities Information

Introduction

This section contains questions about your project. It is very important for applicants to review their funding announcement for guidance on how to fill out this section. Unless otherwise specified, answers should be about the EXPECTED activities to occur during the project period.

Program Evaluation and Assessment Activity

Special Instructions for Projects Selecting the Program Evaluation and Assessment Activity

Programs selecting "Program Evaluation and Assessment" as a project activity must indicate within the Detailed Project Activity Section whether the proposed evaluation is a **Tier-One** or **Tier-Two** evaluation. For Tier-One evaluations, describe the best practice/model to be used in a fidelity and performance evaluation, the goal(s) of the evaluation, and why it is needed. For Tier-Two evaluations, describe why this new program model is needed and the goal(s) of the evaluation. See definitions below:

Tier-One Evaluations

Evaluations of programs that have been implemented and the evaluations will test the fidelity of the program based on proven models or best-practices. The evaluation will also review available program output and outcome information.

Tier-Two Evaluations

Evaluations directed at measuring the effectiveness of proposed new program models or significant changes in present program models. The goal of tier-two evaluations is both to measure the program's effectiveness and to produce data and evidence necessary for others to replicate the program model and to develop best practices that can be use in supporting similar efforts.

Selected Project Activities:

ACTIVITY	PERCENTAGE:	DESCRIPTION
Legal Advocacy	100.00	Personal advocacy and emotional support such as working with the victim to assess the impact of the crime, identification of victim's needs, case management, management of practical problems created by the victimization, identification of resources available to the victim, provide information, referrals, advocacy, and follow-up contact for continued services,as needed. Staff meets with victims to help them through the criminal justice process; comfort and provide support during interviews and court proceedings; assist in completion of necessary paperwork for protective orders, crime victims compensation and other victims services; acts as a liaison between the victim, the detective, the court and social service agencies; provides resources for community outreach to victims; keeps in contact with the victim throughout the case.

CJD Purpose Areas

PERCENT DEDICATED	PURPOSE AREA	PURPOSE AREA DESCRIPTION
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Measures Information

Objective Output Measures

OUTPUT MEASURE	TARGET LEVEL
Number of survivors assisted through the legal process.	300
Number of times survivors are accompanied to court.	3
Number of victims / survivors seeking services who were served.	220
Number of victims seeking services who were not served.	0

Objective Outcome Measures

OUTCOME MEASURE	TARGET LEVEL
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Custom Output Measures

CUSTOM OUTPUT MEASURE	TARGET LEVEL
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Custom Outcome Measures

CUSTOM OUTCOME MEASURE	TARGET LEVEL
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Resolution from Governing Body

Applications from nonprofit corporations, local units of governments, and other political subdivisions must include a [resolution](#) that contains the following:

1. Authorization by your governing body for the submission of the application to the Public Safety Office (PSO) that clearly identifies the name of the project for which funding is requested;
2. A commitment to provide all applicable matching funds;
3. A designation of the name and/or title of an authorized official who is given the authority to apply for, accept, reject, alter, or terminate a grant (Note: If a name is provided, you must update the PSO should the official change during the grant period.); and
4. A written assurance that, in the event of loss or misuse of grant funds, the governing body will return all funds to PSO.

Upon approval from your agency's governing body, upload the [approved](#) resolution to eGrants by clicking on the **Upload Files** sub-tab located in the **Summary** tab.

Contract Compliance

Will PSO grant funds be used to support any contracts for professional services?

Select the appropriate response:

☐ Yes
☒ No

For applicant agencies that selected **Yes** above, describe how you will monitor the activities of the sub-contractor(s) for compliance with the contract provisions (including equipment purchases), deliverables, and all applicable statutes, rules, regulations, and guidelines governing this project.

Enter a description for monitoring contract compliance:N/A

Lobbying

For applicant agencies requesting grant funds in excess of \$100,000, have any federally appropriated funds been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant loan, or cooperative agreement?

Select the appropriate response:

☐ Yes
☒ No
☐ N/A

For applicant agencies that selected either **No** or **N/A** above, have any non-federal funds been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress in connection with this federal contract, loan, or cooperative agreement?

Select the appropriate response:

☐ Yes
☒ No
☐ N/A

Fiscal Year

Provide the begin and end date for the applicant agency's fiscal year (e.g., 09/01/20xx to 08/31/20xx).

Enter the Begin Date [mm/dd/yyyy]:10/1/2020

Enter the End Date [mm/dd/yyyy]:9/30/2021

Sources of Financial Support

Each applicant must provide the amount of grant funds expended during the most recently completed fiscal year for the following sources:

Enter the amount (in Whole Dollars \$) of Federal Grant Funds expended:3612515

Enter the amount (in Whole Dollars \$) of State Grant Funds expended:5142

Single Audit

Applicants who expend less than \$750,000 in federal grant funding or less than \$750,000 in state grant funding are exempt from the Single Audit Act and cannot charge audit costs to a PSO grant. However, PSO may require a limited scope audit as defined in 2 CFR Part 200, Subpart F - Audit Requirements.

Has the applicant agency expended federal grant funding of \$750,000 or more, or state grant funding of \$750,000 or more during the most recently completed fiscal year?

Select the appropriate response:

☒ Yes
☐ No

Applicant agencies that selected **Yes** above, provide the date of your organization's last annual single audit, performed by an independent auditor in accordance with the State of Texas Single Audit Circular; or CFR Part 200, Subpart F - Audit Requirements.

Enter the date of your last annual single audit: 3/23/2019

Equal Employment Opportunity Plan Compliance

Review the information below to determine which section of the federal [EEOP Certification Form](#) applies to your organization. The EEOP certification information must be submitted to the Office of Civil Rights, Office of Justice Programs through their on-line [EEOP Reporting Tool](#). For more information and guidance on how to complete and submit the federal EEOP certification information, please visit the US Department of Justice, Office of Justice Programs website at <https://ojp.gov/about/ocr/eeop.htm>.

Type I Entity

Defined as an applicant that meets one or more of the following criteria:

- the applicant has less than 50 employees;
- the applicant is a non-profit organization;
- the applicant is a medical institution;
- the applicant is an Indian tribe;
- the applicant is an educational institution, or
- the applicant is receiving a single award of less than \$25,000.

Requirements

- The applicant is exempt from the EEOP requirements required to prepare an EEOP because it is a Type I Entity as defined above, pursuant to 28 CFR 42, subpart E;
- the applicant will comply with applicable federal civil rights laws that prohibit discrimination in employment and in the delivery of services; and
- the applicant must complete **Section A** of the EEOP Certification Form and send it to the Office for Civil Rights (OCR) to claim the exemption from developing an EEOP.

Type II Entity

Defined as an applicant that meets the following criteria:

- the applicant has 50 or more employees, and
- the applicant is receiving a single award of \$25,000 or more, but less than \$500,000.

Requirements

- The applicant agency is required to formulate an EEOP in accordance with 28 CFR 42.301, subpart E;
- the EEOP is required to be formulated and signed into effect within the past two years by the proper authority;
- the EEOP is available for review by the public and employees or for review or audit by officials of OOG, OOG's designee, or the Office of Civil Rights, Office of Justice Programs, U.S. Department of Justice, as required by relevant laws and regulations;
- the applicant will comply with applicable federal civil rights laws that prohibit discrimination in employment and in the delivery of services;
- the applicant must complete **Section B** of the EEOP Certification Form and send it to the

Office for Civil Rights (OCR) to claim the exemption from submitting an EEOP to OCR; and

- the EEOP is required to be on file with the applicant agency.

Enter the name of the person responsible for the EEOP and the address of the office where the EEOP is filed: William Bender, Deputy Director Human Resources/Risk Management
Friendswood City Hall 910 S. Friendswood Drive Friendswood, TX 77546

Type III Entity

Defined as an applicant that is NOT a Type I or Type II Entity.

Requirements

- The EEOP is required to be formulated and signed into effect within the past two years by the proper authority;
- the EEOP has been submitted to the Office of Civil Rights (OCR), Office of Justice Programs, U.S. Department of Justice and has been approved by the OCR, or it will be submitted to the OCR for approval upon award of the grant, as required by relevant laws and regulations; and
- the applicant will comply with applicable federal civil rights laws that prohibit discrimination in employment and in the delivery of services; and
- the applicant must complete **Section C** of the EEOP Certification Form and send it to the Office for Civil Rights (OCR).

Certification

Based on the definitions and requirements above, the applicant agency certifies to the following entity type:

- ☐ Type I Entity
☒ Type II Entity
☐ Type III Entity

Debarment

Each applicant agency will certify that it and its principals (as defined in 2 CFR Part 180.995):

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal Court, or voluntarily excluded from participation in this transaction by any federal department or agency;
- Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; or
- Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in the above bullet; and have not within a three-year period preceding this application had one or more public transactions (federal, state, or local) terminated for cause or default.

Select the appropriate response:

- ☒ I Certify
☐ Unable to Certify

If you selected **Unable to Certify** above, please provide an explanation as to why the applicant agency cannot certify the statements.

FFATA Certification

Certification of Recipient Highly Compensated Officers

The Federal Funding Accountability and Transparency Act (FFATA) requires Prime Recipients (CJD) to report the names and total compensation of each of the five most highly compensated officers (a.k.a. positions) of each sub recipient organization for the most recently completed fiscal year preceding the year in which the grant is awarded if the subrecipient answers **YES** to the **FIRST** statement but **NO** to the **SECOND** statement listed below.

In the sub recipient's preceding completed fiscal year, did the sub recipient receive: (1) 80 percent or more of its annual gross revenue from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; AND (2) \$25,000,000 or more in annual gross revenue from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements?

☐ Yes

☒ No

Does the public have access to information about the compensation of the senior executives through periodic reports filed under Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or Section 6104 of the Internal Revenue Code of 1986?

☐ Yes

☒ No

If you answered **YES** to the **FIRST** statement and **NO** to the **SECOND** statement, please provide the name and total compensation amount of each of the five most highly compensated officers (a.k.a. positions) within your agency for the current calendar year. If you answered NO to the first statement you are NOT required to provide the name and compensation amounts. NOTE: "Total compensation" means the complete pay package of each of the sub recipient's compensated officers, including all forms of money, benefits, services, and in-kind payments (see SEC Regulations: 17 CCR 229.402).

Position 1 - Name:

Position 1 - Total Compensation (\$):0

Position 2 - Name:

Position 2 - Total Compensation (\$):0

Position 3 - Name:

Position 3 - Total Compensation (\$):0

Position 4 - Name:

Position 4 - Total Compensation (\$):0

Position 5 - Name:

Position 5 - Total Compensation (\$):0

Victim Services Information

Agency Type

Implementing Agency Type - Government

Which designation best describes your agency

- Law enforcement

Purpose of Award

- Continue an OOG-funded victim project funded in a previous year

Type of Crime Funding Distribution

Identify the percent of funding dedicated to each type of victimization. The percentages provided below should not include matching funds. Cumulative total for all types of victimization must equal 100%.

Type of Crime	Percent of Funds Dedicated to Crime Enter whole percentages only	Funds Dedicated to Crime Current Award x Percent Entered
Child Physical Abuse	5	\$3,845.40
Child Sexual Abuse	0	\$0.00
Domestic and Family Violence	46	\$35,377.68
Child Sexual Assault	0	\$0.00
Adult Sexual Assault	8	\$6,152.64
DUI/DWI Crashes	5	\$3,845.40
DUI/DWI Crashes	5	\$3,845.40
Assault	26	\$19,996.08
Adults Molested As Children	0	\$0.00
Elder Abuse	0	\$0.00
Robbery	5	\$3,845.40
Survivors of Homicide	0	\$0.00

Adult Human Trafficking	0	\$0.00	
Child Human Trafficking	0	\$0.00	
Other Violent Crimes	0	\$0.00	
Description:			
Other Non-Violent Crimes	5	\$3,845.40	
Description:	stalking, harassment, threats, other vehicular crime		
SUM of %'s Sum of % MUST = 100%	100	SUM of Funds Sum of Funds MUST = OOG Current Budget	\$76,908.00

Use of Funds

Does this project provide DIRECT SERVICES to victims:

☒ Yes

☐ No

Information and Referral

- Information about the criminal justice process
- Information about victim rights, how to obtain notifications, etc.
- Referral to other victim service programs
- Referral to other services, supports, and resources (includes legal, medical, faith-based organizations, address-confidentiality programs, etc.

Personal Advocacy/Accompaniment

- Victim advocacy/accompaniment to emergency medical care
- Victim advocacy/accompaniment to medical forensic exam
- Law enforcement interview advocacy/accompaniment
- Individual advocacy (e.g., assistance in applying for public benefits, return of personal property or effects)

Emotional Support or Safety Services

- Crisis Intervention (in-person, includes safety planning, etc.)
- On-scene crisis response (e.g., community crisis response)

Shelter/Housing Services

Criminal/Civil Justice System Assistance

- Notification of criminal justice events (case status, arrest, court proceedings, case disposition, release, etc.)
- Civil legal assistance in obtaining protection or restraining order
- Other emergency justice-related assistance
- Law enforcement interview advocacy/accompaniment
- Criminal advocacy/accompaniment

Assistance in Filing Compensation Claims

- Assists potential recipients in seeking crime victim compensation benefits

All VOCA-funded direct service projects **MUST** assist victims with seeking crime victim compensation benefits. Please explain why your agency is not assisting victims with crime victim compensation benefits:

Types of Victimizations

Check the types of victimization that best describe the victims the grant-funded project will serve. "Other" refers to a type that Is Not associated with any of the types provided in the list. Check all that apply:

Types of Victimizations

- Adult physical assault (includes aggravated and simple assault)
- Adult sexual assault

- Adults sexually abused/assaulted as children
- Arson
- Bullying (verbal, cyber, or physical)
- Burglary
- Child physical abuse or neglect
- Child pornography
- Child physical abuse or neglect
- Domestic and/or family violence
- DUI/DWI incidents
- Elder abuse or neglect
- Hate crime: racial/religious/gender/sexual orientation/other

If Hate Crime is TRUE provide explanation:
any crime committed that is motivated by bias or based on the victim's perceived membership in a specific group, such as race, national origin, sexual orientation, gender, or religious belief.

- Human trafficking: labor
- Human trafficking: sex
- Identity theft/fraud/financial crime
- Kidnapping (noncustodial)
- Kidnapping (custodial)
- Mass violence (domestic/international)
- Other vehicular victimization (e.g., hit and run)
- Robbery
- Stalking/harassment
- Survivors of homicide victims

- Teen dating victimization
- Terrorism (domestic/international)

Budget and Staffing

Answer the questions below based on your current fiscal year. Report the total budget available to the victim services program by source of funding. Do not report the entire agency budget, unless the entire budget is devoted to victim services program.

Annual funding amounts allocated to all victimization programs and/or services for the current fiscal year:

Identify by source the amount of funds allocated to the victimization program/services budget for your agency. DO NOT COUNT FUNDS IN MORE THAN ONE CATEGORY. OTHER FEDERAL includes all federal funding except the award amount for this grant.

OOG Current Budget:\$76,908.00

Other State Funds:\$0.00

Other Local Funds:\$19,227.00

Other Federal Funds:\$0.00

Other Non-Federal Funds:\$0.00

Total Victimization Program Budget:\$96,135.00

Total number of paid staff for all grantee victimization program and/or services: COUNT each staff member once. Both full and part time staff should be counted as one staff member. DO NOT prorate based on FTE.

Total number of staff:1

Number of staff hours funded through THIS grant award (plus match) for grantee's victimization programs and/or services:
Total COUNT of hours to work by all staff supporting the work of this award, including match.

Total number of hours:2000

Number of volunteer staff supporting the work of this award (plus match) for grantee's victimization programs and/or services:
COUNT each volunteer staff once. DO NOT prorate based on FTE.

Total number of volunteer staff:5

Number of volunteer hours supporting the work of this award (plus match) for grantee's victimization programs:

Total COUNT of hours to work by all volunteers supporting the work of the award, including match

Total hours to work by all volunteers:150

Explain how your organization uses volunteers to support its victimization programs or if your organization does not use volunteers explain any circumstances that prohibit the use of volunteers.

Research, coordinating efforts with staff, and assisting with the logistics of supporting victims are key elements of the volunteer/intern activities.

Budget Details Information

Budget Information by Budget Line Item:

CATEGORY	SUB CATEGORY		OOG	CASH MATCH	IN-KIND MATCH	GPI	TOTAL	UNIT/%
Personnel	Liaison		\$76,908.00	\$16,977.00	\$0.00	\$0.00	\$93,885.00	97
CRIME VICTIM LIAISON, NORA MENDEZ: JOB DESCRIPTION: provides case management, crisis support, follow up contact, personal advocacy, telephone contact, information, referrals, and volunteer coordination. TOTAL SALARY including FRINGE: \$96,885 per year.								
Personnel	Intern, Mentor, Service Provider, Student Worker, and/or Support Staff		\$0.00	\$0.00	\$2,250.00	\$0.00	\$2,250.00	100
Volunteers and Interns - program volunteers and interns are responsible for providing direct services, such as death notification, and clerical support, maintaining brochures and resource information. They are available to assist 24 hours a day in response to crisis scenes, hospital accompaniment and filing emergency applications for crime victim compensation. Anticipated number of hours = 150 at the City's clerical hourly rate of \$15 per hour. Volunteers and interns will maintain time and activity reports to document grant-related activity.								

Source of Match Information

Detail Source of Match / GPI:

DESCRIPTION	MATCH TYPE	AMOUNT
General Fund	Cash Match	\$16,977.00
Volunteer, intern hours, 15 hr x 150 hours providing direct services and clerical support to program	In Kind Match	\$2,250.00

Summary Source of Match / GPI:

Total Report	Cash Match	In Kind	GPI Federal Share	GPI State Share
\$19,227.00	\$16,977.00	\$2,250.00	\$0.00	\$0.00

Budget Summary Information

Budget Summary Information by Budget Category:

CATEGORY	OOG	CASH MATCH	IN-KIND MATCH	GPI	TOTAL
Personnel	\$76,908.00	\$16,977.00	\$2,250.00	\$0.00	\$96,135.00

Budget Grand Total Information:

OOG	CASH MATCH	IN-KIND MATCH	GPI	TOTAL
\$76,908.00	\$16,977.00	\$2,250.00	\$0.00	\$96,135.00

Condition Of Fundings Information

Condition of Funding / Project Requirement	Date Created	Date Met	Hold Funds	Hold Line Item Funds
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FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/21/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Resolution No. R2020-02: A resolution of the City of Friendswood, Texas, authorizing aerial spraying over Friendswood by the Galveston County Mosquito Control District for the County-Wide Mosquito Control Program.

Originating Department: City Secretary

Degree of importance: Critical

SUMMARY / ORIGINATING CAUSE

This annual request is to approve a resolution authorizing aerial spraying over Friendswood by the Galveston County Mosquito Control District for the County-Wide Mosquito Control Program.

Mosquito Control is provided by Galveston County within Friendswood. Harris County does not provide this service unless mosquitoes with the West Nile virus are identified. The City provides ground spraying in the rights-of-way in Harris County.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

Approve Resolution R2020-02

ATTACHMENTS

1. R2020-02 Aerial Spraying - Galv Co Mosquito Control
2. Galveston County Mosquito Control District Letter

RESOLUTION NO. R2020-02

**A RESOLUTION OF THE CITY OF FRIENDSWOOD,
TEXAS, AUTHORIZING AERIAL SPRAYING OVER
FRIENDSWOOD BY THE GALVESTON COUNTY
MOSQUITO CONTROL DISTRICT FOR THE COUNTY-
WIDE MOSQUITO CONTROL PROGRAM.**

* * * * *

WHEREAS, the Galveston County Mosquito Control District is responsible for the operation of the county-wide Mosquito Control Program, and

WHEREAS, the Federal Aviation Administration has indicated that governmental approval is necessary to provide aerial spraying services over the territories of general-purpose governments,

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS:

Section 1. That the City Council hereby approves the aerial spraying over its territory for the abatement of mosquitoes, providing such spraying is conducted within the regulations and constraints of the Federal Aviation Administration, the Environmental Protection Agency, and other authoritative federal and state agencies.

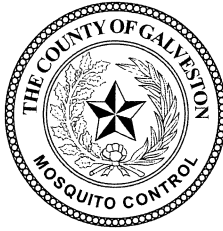
Section 2. That this Resolution shall be in full force and effect from and after its passage and adoption.

PASSED, APPROVED AND RESOLVED on this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary



GALVESTON COUNTY MOSQUITO CONTROL DISTRICT

5115 HWY 3
DICKINSON, TEXAS 77539



JOHN G. MARSHALL, JR
DIRECTOR
281-337-4289

ADVISORY BOARD
Jerry Valentine, Chairman
James Frederickson, Vice Chairman
Barbara Hutchinson, Secretary
Leo Bookman
Keith A. Dill

January 13, 2020

Melinda Welsh, City Secretary
City of Friendswood
910 South Friendswood Drive
Friendswood, TX 77546-4856

Dear Ms. Welsh:

As providers of the county funded Mosquito Control Program, we are requesting your approval of the enclosed resolution authorizing the aerial spraying for mosquitoes. The Federal Aviation Administration requires us to make a request on a yearly basis. This request does not imply any change in our operations.

I would appreciate it if you would send us a copy of the resolution after it has been approved. You may mail it to 5115 Hwy. 3, Dickinson, TX 77539 or fax it to (409)-621-7973 and you can also e-mail it to gerrie.elmore@co.galveston.tx.us.

If you have any questions or concerns please do not hesitate to contact my office at (281) 337-4289.

Sincerely,



Gerrie Elmore, Administrative Assistant
Galveston County Mosquito Control

Enclosure

R E S O L U T I O N

STATE OF TEXAS)

COUNTY OF GALVESTON)

WHEREAS, The Galveston County Mosquito Control District is responsible for the operation of the county-wide Mosquito Control Program, and

WHEREAS, The Federal Aviation Administration has indicated that governmental approval is necessary to provide aerial spraying services over the territories of general purpose governments,

NOW, THEREFORE BE IT RESOLVED, that this body approves the aerial spraying over its territory for the abatement of mosquitoes providing such spraying is conducted within the regulations and constraints of The Federal Aviation Administration, The Environmental Protection Agency, and other authoritative federal and state agencies.

Signed at _____, Texas,

this the _____ day of _____, 20 _____
A.D.

ATTEST:

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/8/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Resolution No. R2020-03: A resolution of the City Council of the City of Friendswood, Texas, amending and replacing Resolution No. R2019-24 with this resolution; authorizing and approving the 2018 Community Development Block Grant – Disaster Recovery (CDBG-DR); designating authorized officials and approving and implementing a citizen participation plan.

Originating Department: Fire Marshal

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

HGAC (excluding Harris County) has developed a Method of Distribution (MOD) to distribute more than \$240,000,000 in Community Development Block Grant – Disaster Recovery (CDBG-DR) funds to the HGAC region which includes Galveston County jurisdictions devastated by Harvey. Friendswood was allocated \$2,762,650 for buyouts and acquisitions and \$2,691,517 for infrastructure projects.

On August 5, 2019, City Council adopted a resolution to amend Resolution R2019-01 and adopt a Citizen Participation plan. With resolution R2019-24, Council supported the submission of acquisition and infrastructure projects to the GLO for CDBG-DR funds. These projects were for the acquisition of structures along Deepwood Drive, Acquisition of townhomes at Frenchman's Creek, Combination of lift stations 1 & 17, and a flood control project along Deepwood Drive.

Since the applications were submitted, the combination of lift stations 1 & 17 project was further evaluated by engineering and Public Works staff and found not to be feasible. Flow issues with the sanitary sewer system along with changes in the flood maps showed the project not to work.

The GLO was contacted and the City asked to submit a different infrastructure project for consideration. The GLO granted permission for the City to submit an updated project which requires a new public comment period and an updated resolution.

The burial of the utility lines crossing Clear Creek via an elevated pipe rack (titled: "Utility Relocate at Clear Creek Utility Bridge Project") was chosen as the alternate project. The pipe rack has been washed out at the base and is subject to debris strikes during flood events. Burial of the two sewer lines and one potable water line permanently mitigates the risk of washout or break from debris strike. Additionally, burial of the lines will allow for future flood mitigation projects along Clear Creek at this location. The lines would be buried via directional drilling.

To utilize the entire allocation, additional funds were added to the Deepwood Flood Control project. The budgets entirely consist of funds from CDBG-DR with no City contribution required.

The scope of work for the acquisition projects remain unchanged. The citizen participation plan adopted through R2019-24 remains unchanged.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The City of Friendswood received substantial impact from Hurricane Harvey. These identified projects will reduce the future impacts to the City from natural disasters.

RECOMMENDATIONS

Recommendation is made for City Council to adopt this resolution which updates and replaces resolution 2019-24. The burial of utility lines, Deepwood flood control, Deepwood acquisitions, and Frenchman's Creek acquisitions projects would be supported and the Citizen Participation plan would be adopted.

ATTACHMENTS

1. R2020-03 CBDG
2. R2020-03 Exhibit A

RESOLUTION NO. R2020-03

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS, AMENDING AND REPLACING RESOLUTION NO. R2019-24 WITH THIS RESOLUTION; AUTHORIZING AND APPROVING THE 2018 COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY (CDBG-DR); DESIGNATING AUTHORIZED OFFICIALS AND APPROVING AND IMPLEMENTING A CITIZEN PARTICIPATION PLAN.

* * * * *

WHEREAS, on August 5, 2019, the City Council of the City of Friendswood, Texas, adopted Resolution No. R2019-24, approving the CDBG-DR, and this Resolution amends and replaces that Resolution; and

WHEREAS, the City of Friendswood City Council finds it in the best interest of the citizens of Friendswood, that the City of Friendswood, submit project applications for the Community Development Block Grant – Disaster Recovery (CDBG-DR) funds allocated to the Galveston County portions of Friendswood; and

WHEREAS, the City of Friendswood agrees that in the event of loss or misuse of CDBG-DR funds, the City of Friendswood assures that the funds will be returned in full.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, STATE OF TEXAS:

Section 1. That the facts and matters set forth in the Preamble of this Resolution are hereby found to be true and correct.

Section 2. That the City Council of the City of Friendswood, Texas, hereby approves submission of the following grant application for the City of Friendswood:

Infrastructure Applications include the Utility Relocate at Clear Creek Utility Bridge and Deepwood Flood Control Project and Acquisitions include Deepwood Properties and Frenchman's Creek.

Section 3. That the City Council of the City of Friendswood, Texas, hereby designates the Mayor, City Manager, Assistant City Manager and Administrative Services Director as the Grantees' authorized officials to submit and sign contractual and financial documents related to this grant, and gives the authorized officials the power to apply for or alter the grant on behalf of the applicant agency.

Section 4. That the City Council of the City of Friendswood, Texas, hereby approves and implements a Citizen Participation Plan (CPP) in accordance with General Land Office (GLO) guidance, attached hereto as Exhibit "A" and made a part hereof for all purposes.

PASSED, APPROVED, AND ADOPTED this the 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

CITY OF FRIENDSWOOS CITIZEN PARTICIPATION PLAN COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

Introduction

Community Development Block Grant – Disaster Recovery (CDBG-DR) applicants and funded entities are required to carry out citizen participation procedures in accordance with the Citizen Participation Plan as required by the Housing and Urban Development agency (HUD) and the Texas General Land Office (GLO).

The City maintains the activities described in this Citizen Participation Plan to include outreach efforts to invite open and public participation in the submission of the City's application for CDBG-DR funding, public information upon award of funds, any technical assistance the public may require, assistance for Limited English Proficiency (LEP) citizens, and program procedures for addressing citizen complaints.

Participation during Application

The City will provide for reasonable public notice, appraisal, examination, and comment on the activities proposed for the use of CDBG-DR funds. These outreach efforts shall:

1. Provide for and encourage citizen participation, particularly by low- and moderate-income persons who reside in slum or blighted areas, and areas in which CDBG-DR funds are proposed to be used;
2. Ensure that citizens will be notified of public meetings, information, and records relating to the City's proposed and actual use of CDBG-DR funds no less than seventy-two (72) hours in advance;
3. Furnish citizens information including, but not limited to:
 - a. the amount of CDBG-DR funds expected to be made available;
 - b. the range of activities that may be undertaken with the CDBG-DR funds;
 - c. the estimated amount of the CDBG-DR funds proposed to be used for activities that will meet the national objective of benefit to low- and moderate-income persons; and
 - d. if applicable, the proposed CDBG-DR activities likely to result in displacement and the entity's anti-displacement and relocation plan.
4. Provide citizens with no less than a fourteen (14)-day opportunity to comment on proposed activities in an application to the state. For grants already made, the City will provide a reasonable comment period to be determined in collaboration with the GLO for activities which are proposed to be added, deleted, or substantially changed from the City's application to the state. "Substantially changed" means changes made in terms of purpose, scope, location, or beneficiaries as defined by criteria established by the state; and
5. Be accomplished through one or more of the following methods:
 - a. Posting of notice on the City's website (if available);
 - b. Notices prominently posted on public buildings and sent to interested community groups (where practicable);
 - c. Publication of notice in a local newspaper—a published newspaper article may also be used so long as it provides sufficient information regarding program activities and relevant dates;
 - d. Public Hearing; or
 - e. Individual notice to eligible individuals, cities, and other entities as applicable using one or more of the following methods:

CITY OF FRIENDSWOOS CITIZEN PARTICIPATION PLAN

COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

- i. Certified mail
- ii. Electronic mail or fax
- iii. First-class (regular) mail
- iv. Personal delivery (e.g., home-based outreach, or at a Council of Governments meeting)
- f. Postings made to the City's social media accounts such as Facebook
- g. Notices sent electronically to residents, such as mass emails.

Along with the application, the City will submit any notices of public participation that relate to the administration of CDBG-DR funds.

Technical Assistance

When requested, the City shall provide technical assistance to groups' representative of persons of low- and moderate-income in developing proposals for CDBG-DR funds. The level and type of assistance shall be determined by the City based upon the specific needs of the community's resident

Public Hearing Provisions

For any public hearing scheduled and conducted by a CDBG-DR applicant or recipient, the following public hearing provisions shall be observed:

1. Citizens shall be furnished with information including but not limited to:
 - a. The amount of CDBG-DR funds available per application for the CDBG-DR monies;
 - b. The range of activities that may be undertaken with the CDBG-DR funds;
 - c. The estimated amount of the CDBG-DR funds proposed to be used for activities that will meet the national objective of benefit to low- and moderate-income persons; and
 - d. The proposed CDBG-DR activities likely to result in displacement and the unit of general local government's anti-displacement and relocation plans required under 24 CFR 570.488.
2. Public notice of any hearing must be published at least seventy-two (72) hours prior to the scheduled hearing. The public notice must be published in such a way that community members will have access to it. Each public notice will include the DATE, TIME, LOCATION, and TOPICS to be considered at the hearing. A published article may also be used to meet this requirement so long as it satisfies all content and timing requirements. Notices will also be prominently posted in public buildings and distributed other interested community groups, where practicable.
3. Each public hearing shall be held at a time and location convenient to potential or actual beneficiaries and will include accommodation for persons with disabilities. Persons with disabilities must be able to attend the hearings, and the City will make arrangements for individuals who require auxiliary aids or services if contacted at least two (2) days prior to each hearing.
4. When a considerable number of non-English speaking residents can be reasonably expected to participate in a public hearing, an interpreter will be present to accommodate the needs of the non-English speaking residents.

The City may conduct a public hearing via webinar if they adhere to the provisions of this section.

CITY OF FRIENDSWOODS CITIZEN PARTICIPATION PLAN

COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

If the webinar is used to conduct a public hearing, a physical location with associated reasonable accommodations must be made available, to ensure that those individuals without the necessary technology are able to participate.

Citizen Participation Once Awarded

The following citizen participation requirements may be met, when necessary, in the event that the City receives funding from the CDBG-DR program:

- The City reserves the option to hold a public hearing any time a substantial change in use of CDBG- DR funds from one eligible activity to another is proposed. The City will consult GLO-CDR in determining when a change is substantial.
- Upon completion of the community development program activities, the City reserves the option to hold a public hearing and review its program performance, including the actual use of CDBG- DR funds.
- The City will retain documentation of the hearing notice(s), attendance lists, minutes of the hearing(s), and any other records concerning the actual use of funds. The City follows HUD regulations which generally require a community to retain all its grant-related documentation for 3 years from the date HUD closes its related disaster grant to the state of Texas. Such records will be made available to the public in accordance with Chapter 552, Government Code.

Equal Access for Limited English Proficiency Citizens

The City complies with Title VI of the Civil Rights Act of 1964 which protects individuals from discrimination on the basis of their race, color, or national origin in programs that receive federal financial assistance. In certain situations, failure to ensure that persons who are LEP can effectively participate in, or benefit from, federally assisted programs may violate Title VI's prohibition against national origin discrimination.

In the instance that 5% or more of the resident population is known to speak a common foreign language, the City will provide written translation of vital program documents that are critical for ensuring meaningful access to major activities and program benefits.

When providing assistance to LEP citizens, the City will identify the language and communication needs of persons with LEP as needed to ensure effective communication. If necessary, staff may use a language identification card (or “I speak” cards – which are available at www.lep.gov) or posters to determine the preferred language of the applicant and provide translation services as soon as possible, no more than three business days after a request.

Citizen Complaint Procedures

Citizens with complaints concerning the program or suspected instances of discrimination are encouraged to inform the City of their complaint(s) directly in writing. The City of Friendswood takes all citizen complaints seriously and will respond to written citizen complaints within thirty (30) working days of receiving the complaint.

CITY OF FRIENDSWOODS CITIZEN PARTICIPATION PLAN

COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY

Citizens may submit complaints in writing to:

ATTN: CDBG-DR Grant Program
City of Friendswood
910 S Friendswood Drive
Friendswood, TX 77546

The City shall implement the following steps to receive and resolve all complaints:

- All complaints should include a description of the matter causing the grievance along with the submitting citizen's contact information including name, phone number and mailing address.
- The City will respond with a letter acknowledging receipt of the complaint to the person submitting it at the address provided and will include a timeline for the City's response.
- Upon receipt of a written complaint, the City will review the matter and bring it to the City Council for resolution, only when necessary. The City will review the circumstances, conduct an investigation, and prepare a written report within thirty (30) working days of receipt. The report shall include:
 - a) A summary of the issues/list of relevant facts
 - b) All documents provided by the aggrieved person
 - c) Any summary response from the program/project staff
 - d) Any documents available supporting relevant facts
 - e) All other pertinent file documents as required
- A determination, to include any findings and response, completed by the City will be rendered within thirty (30) working days of receipt of the complaint. A copy of the City's determination shall be provided to the citizen submitting the complaint at the address provided.
- If the citizen(s) filing the complaint are not satisfied with the determination, a written appeal may be filed within fifteen (15) days after the date of the mailing of the determination to aggrieved citizen(s).
- The written decision of the City will be made within thirty (30) days.
- Person(s) who believe they are victims of discrimination in housing or other services may also contact the U.S. Department of Housing and Urban Development (HUD) to file a complaint, without first filing a grievance under this procedure, by filing a form here online:
<https://portalapps.hud.gov/FHEO903/Form903/Form903Start.action>.

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/6/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-01: Second and Final reading of an ordinance repealing Ordinance No. 97-20, Ordinance No. 2000-06, Ordinance No. 2003-17, that adopted and amended the Municipal Court Building Security Fund and the Municipal Court Building Technology Fund.

Originating Department: Administrative Services

Degree of importance: Critical

SUMMARY / ORIGINATING CAUSE

Senate Bill 346, adopted in the 86th Texas legislative session, updates and consolidates municipal court costs, fines and fees; changing the manner in which municipal court building security and building technology fees are assessed and collected.

As a result, City of Friendswood ordinances 97-20 (established the Court Technology and Building Security fees), 2000-06 and 2003-17 (amended the fees to current amounts of \$4.00 and \$3.00, respectively), related to the previous fee amounts should be repealed.

The municipal court fees established with Senate Bill 346 are court technology fee - \$4.00, court building security fee - \$4.90, court truancy prevention fee - \$5.00 and court jury services fee - \$0.10 per case filed in the Friendswood Municipal Court.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Repealing the ordinances will make the City compliant with Texas Senate Bill 346.

RECOMMENDATIONS

Staff recommends repealing the City's existing ordinances related to Court Technology and Building Security fees.

ATTACHMENTS

1. Ord 2020-01 Repealing Sections 42-1 and 42-2 Court Security and Technology Fees

ORDINANCE NO. T2020-01

**AN ORDINANCE REPEALING ORDINANCE NO. 97-20,
ORDINANCE NO. 2000-06, ORDINANCE NO. 2003-17,
THAT ADOPTED AND AMENDED THE MUNICIPAL
COURT BUILDING SECURITY FUND AND THE
MUNICIPAL COURT BUILDING TECHNOLOGY FUND.**

* * * * *

WHEREAS, in Senate Bill 346, the Texas Legislature completely updated and consolidated municipal court costs, fines and fees, changing the manner in which the Municipal Court Building Security Fund and the Municipal Court Building Technology Funds are assessed and collected; and,

WHEREAS, due to the change in state law, it is necessary to repeal these Ordinances relating to Code Sections 42-1 and 42-2;

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

Section 1. That Ordinance No. 97-20 is repealed in its entirety.

Section 2. That Ordinance No. 2000-06 is repealed in its entirety.

Section 3. That Ordinance No. 2003-17 is repealed in its entirety.

Section 4. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Friendswood, Texas, declares that it would

have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

PASSED and APPROVED on first reading this 6th day of January, 2020.

PASSED, APPROVED, and ADOPTED on second and final reading this the 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/6/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-03: Second and Final reading of an ordinance amending Appendix B, "Subdivision Ordinance," "Section III.k.3 – Sidewalks" to add exceptions to sidewalk requirements for existing residential subdivisions; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.

Originating Department: Community Development

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Several scenarios have surfaced recently regarding the requirement of sidewalks on residential lots in established neighborhoods. The scenarios include older houses that have been torn down and rebuilt, in-fill lots that were never developed now having homes constructed on them, and houses torn down due to flooding and being rebuilt. In each scenario, the current ordinance requires a four-foot sidewalk to be installed, regardless of the existing conditions of surrounding lots or neighborhoods. Most of these noted scenarios were located in established neighborhoods where no other sidewalks existed on the adjacent lots or same side of the street. In some cases sidewalks may have been existing on the opposite side of the street. Sidewalk requirements for new development of residential curb and gutter streets would remain.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The benefit to the community is to not change the overall appearance and aesthetics of established neighborhoods that have never had sidewalks. Additionally, the benefit to individual homeowners is to not be overly burdensome. Typically, developers of subdivisions install sidewalks, not individual property owners. When streets are redesigned or rebuilt by the City would be the time to account for new sidewalks in established neighborhoods.

RECOMMENDATIONS

The Planning and Zoning Commission voted unanimously, 5 to 0 (Matranga and Banfield were absent), in favor of the proposed ordinance changes to provide additional exceptions to the sidewalk requirements for existing residential areas.

ATTACHMENTS

1. Ord 2020-03 Subdivision Ord Sidewalk Amendments

ORDINANCE NO. T2020-03

AN ORDINANCE AMENDING APPENDIX B, “SUBDIVISION ORDINANCE,” “SECTION III.K.3 – SIDEWALKS” TO ADD EXCEPTIONS TO SIDEWALK REQUIREMENTS FOR EXISTING RESIDENTIAL SUBDIVISIONS; PROVIDING A PENALTY FOR VIOLATION IN AN AMOUNT NOT TO EXCEED \$2000, OR AS OTHERWISE PROVIDED BY LAW; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES INCONSISTENT OR IN CONFLICT HERewith; AND PROVIDING FOR SEVERABILITY.

* * * * *

WHEREAS, the City Council of the City of Friendswood is continually reviewing the provisions of the City Code of Ordinances, specifically including Appendix B of the Friendswood City Code, (“Subdivision Ordinance”) relating to the subdivision of land and other circumstances, and;

WHEREAS, the City Council wishes to add exceptions to sidewalk requirements in existing residential subdivisions; and

WHEREAS, the Planning and Zoning Commission and the City Council have conducted, in the time and manner required by law and the City Code of Ordinances, public hearings on such request, allowing all persons attending to be heard on the question of whether the changes of the uses being requested would affect the public health, safety, or general welfare of the citizens of Friendswood; and

WHEREAS, the Planning and Zoning Commission has filed its written report with City Council, which recommends approval of the amendment; and

WHEREAS, City Council has determined that all public notices have been posted and published, all required hearings on this matter have been held, and that this Ordinance complies with the applicable provisions of the City Charter, City Code and all other applicable laws;

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

Section 1. That the facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. That the City of Friendswood Code of Ordinances, Appendix B, “Subdivisions”, “Section III.k.3.Sidewalks” is hereby amended to read as follows:

3. *Sidewalks*. Sidewalks are required along all streets.

(a) Exception: Sidewalks shall not be required in single-family residential (SFR) and single-family residential estate (SFR-E) districts where:

(1) open ditch streets are approved; or

(2) the subdivision was accepted prior to sidewalks being a required improvement; or

(3) the property is an in-fill tract without an abutting sidewalk.

(b) Sidewalks may not be required when, in the judgment of the planning and zoning commission, the safety of the pedestrians does not require such sidewalks.

(c) If a plat is required, the developer, prior to the city's final acceptance of the infrastructure, must install sidewalks along reserves and rights-of-way prior to the city's final acceptance of the infrastructure.

(d) If no platting or infrastructure construction is required, sidewalks must be installed prior to issuance of the final certificate of occupancy of the structure.

(e) If sidewalks are required by the city design criteria manual, subdivision ordinance, or zoning ordinance, and the installation at the required time is not feasible, the city may require, or the property owner may petition the planning and zoning commission to allow,

the property owner to satisfy the sidewalk requirement by payment of a fee to the city's sidewalk installation fund in lieu of installing the approved sidewalk per section V.i.3.

(f) When sidewalks are required, they shall be built in accordance with the city design criteria manual and standard construction details.

(g) Corner lots are required to install sidewalks along each frontage that has an abutting sidewalk.

(h) Should an existing sidewalk be removed, the sidewalk must be replaced and built in accordance with the city design criteria manual and standard construction details.

Section 3. That this Ordinance is hereby incorporated and made a part of the Friendswood City Code of Ordinances. Violation of this Ordinance is subject to the penalty provisions contained in such Code under Section 1-14 “General penalty for violations of Code; continuing violations”, and as otherwise provided by law. Any person who shall willfully, intentionally, or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount not to exceed \$2,000.00. Each day of violation shall constitute a separate offense.

Section 4. That all ordinances or parts of ordinances in conflict or inconsistent with this Ordinance are hereby expressly repealed.

Section 5. That in the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Friendswood, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 6. That after final passage, the City Secretary shall give notice of the enactment of this Ordinance by promptly publishing the information required by the City Charter in the official newspaper of the City; the Ordinance to take effect upon publication.

PASSED AND APPROVED on first reading this 6th day of January, 2020.

PASSED, APPROVED, AND ADOPTED on second and final reading this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/6/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-04: Second and Final reading of an ordinance amending Appendix C "Zoning Ordinance," "Sections 7. Schedule of District Regulations," "Section 7.5. Community Overlay District," and "Section 8. N. Downtown District Supplemental Requirements" to change building material requirements per House Bill 2439; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.

Originating Department: Community Development

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

The State of Texas adopted House Bill 2439, which became effective September 1, 2019, and prohibits governmental entities from regulating building products, materials or methods used in the construction or renovation of residential or commercial buildings. The current Zoning Ordinance prohibits metal, wood, or cement fiber boards in the various commercial districts, as well as, provides for fenestration requirements in the Downtown District. The proposed changes amend the ordinance to state which materials the City of Friendswood prefers for commercial structures located in the various zoning districts, but does not prohibit materials permitted by the applicable national model codes.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Amending the Zoning Ordinance will bring city code into compliance with state law.

RECOMMENDATIONS

The Planning and Zoning Commission voted unanimously, 5 to 0 (Matranga and Banfield were absent), on December 12, 2019, in favor of the proposed amendments. The recommendation memo is attached.

ATTACHMENTS

1. Ord 2020-04 Zoning Ord Building Materials Amendments

ORDINANCE NO. T2020-04

AN ORDINANCE AMENDING APPENDIX C “ZONING ORDINANCE,” “SECTIONS 7. SCHEDULE OF DISTRICT REGULATIONS,” “SECTION 7.5. COMMUNITY OVERLAY DISTRICT,” AND “SECTION 8. N. DOWNTOWN DISTRICT SUPPLEMENTAL REQUIREMENTS” TO CHANGE BUILDING MATERIAL REQUIREMENTS PER HOUSE BILL 2439; PROVIDING A PENALTY FOR VIOLATION IN AN AMOUNT NOT TO EXCEED \$2000, OR AS OTHERWISE PROVIDED BY LAW; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES INCONSISTENT OR IN CONFLICT HERewith; AND PROVIDING FOR SEVERABILITY.

* * * * *

WHEREAS, the City Council of the City of Friendswood is continually monitoring changes enacted by the Texas State Legislature; and

WHEREAS, the Texas State Legislature adopted House Bill 2439, that nullifies any city regulation which prohibits or limits, directly or indirectly, the use or installation of a building product or material in the construction, renovation, maintenance, or other alteration of a residential or commercial building, if the building product or material is approved for use by a national model code published within the last three code cycles that applies to the construction, renovation, maintenance, or other alteration of the building, except in the case of limited circumstances listed in the law; and

WHEREAS, House Bill 2439 states that a rule, charter provision, ordinance, order, building code, or other regulation adopted by a governmental entity that conflicts with this new law is void; and

WHEREAS, House Bill 2439 went into effect September 1, 2019;

WHEREAS, the Planning and Zoning Commission and the City Council have conducted, in the time and manner required by law and the City Code of Ordinances, public hearings on the proposed ordinance changes, allowing all persons attending to be heard on the question of whether the changes being requested would affect the public health, safety, or general welfare of the citizens of Friendswood; and

WHEREAS, the Planning and Zoning Commission has filed its written report with City Council, which recommends approval of the amendments; and

WHEREAS, City Council has determined that all public notices have been posted and published, all required hearings on this matter have been held, and that this Ordinance complies with the applicable provisions of the City Charter, City Code and all other applicable laws;

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

Section 1. That the facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. That the City of Friendswood Code of Ordinances, Appendix C, “Zoning”, “Section 7. Schedule of District Regulations” is hereby amended to read as follows:

Section 7. - Schedule of district regulations.

...

F. (C-1) CSC, Community Shopping Center District, general purpose and description. The CSC, Community Shopping Center District, is intended for a unified grouping, in one or more buildings, of several, typically between five and 20, retail and service shops or stores that provide for the regular needs and are for the convenience of the people residing in adjacent residential neighborhoods. Gross floor area in a community shopping center typically ranges from 30,000 to 100,000 square feet, and land area consists of two to ten

acres in size. It is intended that the community shopping center be developed as a unit, with adequate off-street parking for customers and employees, and with appropriate landscaping and screening to ensure compatibility with surrounding residential environment. This district is ideally located at the intersection of two or more arterial or major streets with a service area of up to 1½ miles. Development of a community shopping center requires approval of a development site plan by the planning and zoning commission.

1. Area and height regulations. Area and height regulations in a CSC district are set forth in subsection Q.2 of this section, regulation matrix.

2. See section 8 for supplementary district regulations.

3. See section 9 for temporary certificate of zoning compliance that may be granted by the administrative official and specific use permits that may be recommended by the planning and zoning commission within the CSC district under certain circumstances and conditions.

4. Permitted uses. Uses permitted in a CSC district are set forth in subsection P of this section, permitted use table. A specific use permit for a shopping center as a particular use is required before any building permit or certificate of occupancy may be issued in this district.

5. No CSC district shall be created which includes less than two acres.

6. Buildings in the CSC zoning district ~~shall~~ **are encouraged to** have exterior cladding of brick, masonry, stone, stucco or glass. Fiber cement boards/siding are ~~prohibited~~ **discouraged**, except as trim for eaves and overhangs, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000.** ~~The planning and zoning commission may approve alternative exterior facade materials.~~

G. NC, Neighborhood Commercial District, general purpose and description. The NC, Neighborhood Commercial District, is primarily intended for retail sales, services and office activities in a mixed grouping. This designation is intended for use along major thoroughfares and collector streets where larger tracts of land can be utilized as coordinated

commercial centers. This designation is intended for use of land areas between one-quarter acre and two acres. Structure size is typically between 4,000 and 20,000 square feet. Development of a neighborhood commercial district requires approval of a development site plan by the planning and zoning commission. Office uses permitted in this district shall not exceed 60 percent of the gross building and structure floor area.

1. Area and height regulations. Area and height regulations in an NC district are set forth in subsection Q.2 of this section, regulation matrix.

2. See section 8 for supplementary district regulations.

3. See section 9 for temporary certificate of zoning compliance that may be granted by the administrative official and specific use permits that may be recommended by the planning and zoning commission within the NC district under certain circumstances and conditions.

4. Permitted uses. Uses permitted in an NC district are set forth in subsection P of this section, permitted use table.

5. Building site coverage consisting of all buildings and structures and all paved surfaces shall not exceed 90 percent of the total lot area.

6. Buildings in the NC zoning district shall **are encouraged to** have exterior cladding of brick, masonry, stone, stucco or glass. Fiber cement boards/siding are ~~prohibited~~ **discouraged**, except as trim for eaves and overhangs, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000.** ~~The Planning and Zoning Commission may approve alternative exterior facade materials~~

G-1. LNC, Local Neighborhood Commercial District, general purpose and description. The LNC, Local Neighborhood Commercial District, is primarily intended for retail sale of convenience goods or services for persons residing in adjacent residential areas. Other uses are permitted in the LNC when they are of similar land use intensity and physical impact as those uses to be integrated into the surrounding residential area. Because the retail and personal service uses permitted may be an integral part of the neighborhood,

closely associated with the residential, religious, recreational, and educational uses in the neighborhood, more restrictive requirements are placed on development relative to other commercial zoning categories. The local neighborhood district is intended for use at the entrance to residential areas and in some situations within the confines of a residential district. This designation is intended for use of land areas of up to one acre. Development of a local neighborhood commercial district requires approval of a development site plan by the planning and zoning commission.

1. Area and height regulations. Area and height regulations in an LNC district are set forth in subsection Q.2 of this section, regulation matrix.
2. See section 8 for supplementary district regulations.
3. See section 9 for temporary certificate of zoning, compliance that may be granted by the administrative official and specific use permits that may be recommended by the planning and zoning commission within the LNC district under certain circumstances and conditions.
4. Permitted uses. Uses permitted in an LNC district are set forth in subsection P of this section, permitted use table.
5. The gross building and structure floor space shall not exceed 4,000 square feet.
6. Building site coverage consisting of all buildings and structures and all paved surfaces shall not exceed 80 percent of the total lot area.
7. Buildings in the LNC zoning district ~~shall~~ **are encouraged to** have exterior cladding of brick, masonry, stone, stucco or glass. Fiber cement boards/siding are ~~prohibited~~ **discouraged**, except as trim for eaves and overhangs, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000.** ~~The Planning and Zoning Commission may approve alternative exterior facade materials.~~
- H. OPD, Office Park District, general purpose and description. The OPD, Office Park District, is intended to encourage and permit general professional and business office

development in a fashion consistent with surrounding development. This district is ideally suited as a buffer between commercial and residential areas. As such, it shall be considered for entrances and land adjacent to residential developments. The ultimate development is to provide land use intensity and landscaping consistent with surrounding areas. Development of an office park district requires approval of a development site plan by the Planning and Zoning Commission.

1. Area and height regulations. Area and height regulations in an OPD are set forth in subsection Q.2 of this section, regulation matrix.
2. See section 8 for supplementary district regulations.
3. See section 9 for temporary certificate of zoning compliance that may be granted by the administrative official and specific use permits that may be recommended by the Planning and Zoning Commission within the OPD under certain circumstances and conditions.
4. Permitted uses. Uses permitted in an OPD are set forth in subsection P of this section, permitted use table.
5. Show window or display window effects shall not be permitted and there shall be no display from windows or doors and no storage of merchandise in the building or on the premises except in quantities customarily found in professional or business offices.
6. Retail operations that are primarily for selling to office park occupants are permitted. Examples of these retail operations would be restaurants, coffee shops, office supply, barbershops, gift shops, health spas, specialty stores.
7. One caretaker's quarters unit may be provided for each office park complex.
8. Building site coverage consisting of all buildings and structures and all paved surfaces shall not exceed 90 percent of the total lot area.
9. Buildings in the OPD shall **are encouraged to** have exterior cladding of brick, masonry, stone, stucco or glass. Fiber cement boards/siding are ~~prohibited~~ **discouraged**, except as trim for eaves and overhangs, **while all building products and materials**

approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000. ~~The Planning and Zoning Commission may approve alternative exterior facade materials.~~

I. Downtown District (DD), general purpose and description. The DD, downtown district, is designed to accommodate and promote the city's original business and downtown areas. It is intended to achieve a balance of retail, commercial, office, and residential and public activities. Development within the DD should be pedestrian friendly with an emphasis on shared parking and shared access between developments. Development within the DD requires the approval of a development site plan by the Planning and Zoning Commission.

1. Area and height regulations. Structures within the DD are intended to be between one to four stories. The maximum height allowed is 70 feet as measured in accordance with the method prescribed in section 20. Additional regulations are set forth under subsection Q.2 of this section, regulation matrix.

a. No residential use shall be allowed on the first floor.

2. See section 8 for supplementary district regulations.

3. Permitted uses. Uses permitted in the DD are set forth in subsection P of this section, permitted use table.

4. Buildings in the DD shall are encouraged to have exterior cladding of brick, masonry, stone, stucco, glass or lap sided cement fiberboard. Sheet cement fiberboards are ~~prohibited~~ discouraged, except as trim for eaves and overhangs, while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000. ~~The Planning and Zoning Commission may approve alternative exterior facade materials.~~

...

O. BP, Business Park District. The BP, Business Park District, is intended to encourage and permit light manufacturing and/or service operations and auxiliary retail and wholesale sales. The business may be individually owned or leased by a common owner. The types of uses, and the design and exterior appearance shall be so controlled as to maintain the integrity and be generally compatible with adjacent surrounding residential and commercial development. All services, manufacturing and storage are to be indoors. This district shall access or abut major thoroughfare and/or collector streets. It is intended that the business park be developed as a unit. Development of a business park district shall be developed on a minimum of 10,000 square feet and shall be subject to site plan approval by the planning and zoning commission.

1. Area and height regulations. Minimum size business park 10,000 square feet, no structure within a BP shall be located within 25 feet of an exterior BP boundary (an exterior BP boundary is one that abuts a zone other than BP).
2. See section 9 for temporary certificates of zoning compliance that may be granted by the administrative official and specific use permit that may be recommended by the planning and zoning commission within the BP district under certain circumstances and conditions.
3. See section 8 for supplementary district regulations.
4. Permitted uses. Uses permitted in a BP district are set forth in subsection P of this section, permitted use table.
5. Light manufacturing is permitted only if limited to final machining, assembly, testing, processing and packaging into finished goods from raw materials produced elsewhere, such as electronic parts assembly, medical products processing, mechanical parts assembly and aerospace equipment processing.
6. Truck docking facilities are permitted, provided they are located in the rear or side yard and screened from view of adjacent street right-of-way.
7. Screening devices for refuse containers are required.

8. Parking shall be designated on the parking group section of the permitted use table. However, a minimum of four parking spaces per business or four spaces per 1,000 square feet of gross building floor space for each structure, whichever is greater, is required.

9. Performance standards shall conform to section 8.J as shown in the CSC zoning district.

10. Exterior requirements. All buildings **are encouraged** to be constructed ~~must have~~ **with** at least 65 percent of their exterior walls, excluding doors and windows, constructed of masonry materials, or concrete construction or a combination of masonry, concrete, aluminum or glass materials, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000** ~~as may be approved by the planning and zoning commission.~~

Section 3. That the City of Friendswood Code of Ordinances, Appendix C, “Zoning”, “Section 7.5 Community Overlay District” is hereby amended to read as follows:

...

6. Architectural elements. Garage bays or other similar large openings designed for automotive or industrial work, or designed for vehicles to drive into, shall not front a COD thoroughfare unless screened with architectural or landscaping materials as outlined under subsection 3 of this section. This prohibition shall not include drive-throughs such as are typically found at banks or fast-food establishments. In the event that COD requirements overlap at intersections, architectural requirements regarding garage bays shall apply only to the frontage on one street as designated on the site plan.

a. Commercial.

(1) Commercial developments ~~shall~~ **are encouraged to** have exterior cladding of brick, masonry, stone, stucco or glass on all sides of the building. Fiber cement boards/siding are

~~prohibited~~ **discouraged**, except as trim for eaves and overhangs, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code Chapter 3000.** These exterior facades, as well as the roof, shall be limited to earth tone colors. Color samples shall be submitted and approved as a part of the commercial site plan. ~~The planning and zoning commission may approve alternative exterior facade materials.~~

(2) The design of walls and other structures located on the same site, including those used to screen outdoor storage areas, dumpsters, vehicles, etc., shall be encouraged to be constructed of the same materials as the main building on the lot. Cyclone fences are prohibited, except under limited circumstances, the commission may approve a vinyl coated cyclone fence.

~~(3) Notwithstanding subsections 6.a(1) and (2) of this section, an applicant may present to the planning and zoning commission, on the site plan, specifications which include elevation drawings of proposed alternative materials. The planning and zoning commission may approve such alternative materials if they meet or exceed the appearance and durability requirements above.~~

b. Residential.

(1) Residential developments not facing a COD thoroughfare shall be required to install a visual barrier to a minimum mature height of six feet as measured from the finished grade. The barrier shall be set back from the street right-of-way line by a minimum of ten feet. Various materials may be utilized, including landscaped earth berms, provided the

materials are durable and require low maintenance. All barriers shall be maintained by the owner of the property on which such barrier is located, or by a homeowners' association. If a homeowners' association is to provide such maintenance, the obligations therefor shall be set forth in writing, and filed of record in the same manner that other restrictive covenants are filed. Subdivision plats submitted for residential property along a COD corridor shall include detailed information and visual representations of the proposed barrier, and such other information as deemed necessary by the planning and zoning commission to establish compliance with this subsection.

(2) Trees shall be planted adjacent to the barrier, on the COD thoroughfare side, at intervals of 25 feet, with one-half having a minimum caliper of four inches and one-half having a minimum caliper of two inches. Existing qualified trees may be counted toward fulfillment of this requirement, provided that the size, species, and guaranteed duration shall meet the criteria of the landscaping section of this appendix. (Clustering of trees shall be permitted, provided, however, clustering shall not reduce the number of required trees, and trees shall not be clustered so as to lessen the survival rate of other trees.)

Section 4. That the City of Friendswood Code of Ordinances, Appendix C, “Zoning”, “Section 8.N. Downtown District” is hereby amended to read as follows:

...

4. Architectural standards.

a. Buildings in the DD shall **are encouraged to** have exterior cladding of brick, masonry, stone, stucco, glass, or lap sided cement fiberboard. Sheet cement fiberboards are prohibited **discouraged**, except as trim for eaves and overhangs, **while all building products and materials approved for use by a national model code published within the last 3 code cycles (2018, 2015 and 2012) are allowed by Texas Government Code**

Chapter 3000. ~~The Planning and Zoning Commission may approve alternative exterior facade materials.~~

b. Exterior facades, including the roof, shall be limited to earth tone colors. Color samples shall be submitted as part of the commercial site plan. Earth tone colors depict the colors in nature; they include flat and muted shades of brown, green, blue, orange, and some reds and tans.

c. Fenestration shall mean the openings in a wall, such as doors and windows, to include faux windows whether transparent or not. Such windows may be inoperative but must be framed as a window and otherwise appear to be a window. Painted openings would not be counted in fenestration calculations. Fenestration along front or other facades visible to the public shall **are encouraged to** be as follows:

(1) Walls visible to the public shall have windows and or doors (i.e., no blank walls allowed).

(2) Not less than 40 percent fenestration shall be provided for all ground floor primary facades (front or side) that face a public right-of-way.

(3) Not less than 25 percent fenestration shall be provided for all upper floor facades.

d. Awnings and canopies are allowed upon approval of the Planning and Zoning Commission.

e. Fenestration calculations. **Preferred fenestration minimum:**

(1) Area of ground floor primary wall facing ROW x 40 percent = minimum fenestration.

(2) Area of upper floor x 25 percent = minimum fenestration.

f. Garage bays or other similar large openings designed for automotive or industrial work, or designed for vehicles to drive into, shall not front FM 518 or FM 2351 within the Downtown District boundary. This prohibition shall not include drive-thrus such as are typically found at banks for fast-food establishments. In the event that this requirement

overlaps at an intersection, the architectural requirement regarding garage bays shall apply only to the frontage on one street as designated on the site plan.

5. Screening.

a. Mechanical equipment, such as roof top equipment, compressors, refrigeration units and trash enclosures, outside storage, and other nonpublic service areas that are visible from a public area, shall be screened to a height sufficient to completely screen the use from view at ground level. The term "view at ground level" shall mean the view from public walkways situated in the adjoining rights-of-way or from vehicular traffic in the first two traffic lanes in the bordering street or streets.

b. The design of walls and other structures located on the same site, including those used to screen outdoor storage areas, dumpsters, vehicles, etc. shall **are encouraged to** be constructed of the same materials as the building on the lot. Cyclone fences are prohibited. Under limited circumstances, the Planning and Zoning Commission may approve a vinyl coated cyclone fence.

c. See Section 8.L. for additional dumpster screening requirements.

6. Sidewalks.

a. Each development along FM 2351 and FM 518 shall provide a minimum 15-foot-wide parkway adjacent to the street right-of-way. The 15-foot parkway must contain an unobstructed brick-paved sidewalk, as described in Appendix E of the Design Criteria Manual, at least eight feet wide and a seven-foot wide landscape area.

b. Each development along all other streets within the downtown district shall provide a concrete sidewalk built in accordance with city standard specifications and shall be a minimum of six feet in width. Concrete sidewalks shall be built within the street right-of-way and adjacent to the right-of-way lines.

c. If sidewalks cannot be placed wholly within the right-of-way and must be placed on private property, easements of the appropriate width shall be required.

...

Section 5. That this Ordinance is hereby incorporated and made a part of the Friendswood City Code of Ordinances. Violation of this Ordinance is subject to the penalty provisions contained in such Code under Section 1-14 “General penalty for violations of Code; continuing violations”, and as otherwise provided by law. Any person who shall willfully, intentionally, or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount not to exceed \$2,000.00. Each day of violation shall constitute a separate offense.

Section 6. That all ordinances or parts of ordinances in conflict or inconsistent with this Ordinance are hereby expressly repealed.

Section 7. That in the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Friendswood, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 8. That after final passage, the City Secretary shall give notice of the enactment of this Ordinance by promptly publishing the information required by the City Charter in the official newspaper of the City; the Ordinance to take effect upon publication.

PASSED AND APPROVED on first reading this 6th day of January, 2020.

PASSED, APPROVED, AND ADOPTED on second and final reading this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC

City Secretary

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/7/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-05: Second and Final reading of an ordinance amending Appendix C, "Zoning," Section 3. "Provision for Official Zoning Map," to update and adopt the Official Zoning Map of the city, incorporating approved changes in district boundaries and other matters portrayed on the Official Zoning Map; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances in conflict herewith; and providing for severability.

Originating Department: Community Development

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Appendix C, Zoning Ordinance, Section 3. requires zoning district boundary changes be incorporated into the official zoning map and adopted by City Council. The last official zoning map was updated in January 2015 and adopted by ordinance March 2, 2015. The proposed map includes all zone changes and corrections through November 25, 2019.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Adopting an updated zoning map will provide the most current information to the public.

RECOMMENDATIONS

The Planning and Zoning Commission voted on December 12, 2019, unanimously in favor of the proposed map. The vote was 5 to 0 (Matranga and Banfield were absent).

ATTACHMENTS

1. Ord 2020-05 Adopt Official Zoning Map
2. Ord 2020-05 Exhibit A
3. Ord 2020-05 Exhibit B

ORDINANCE NO. T2020-05

AN ORDINANCE AMENDING APPENDIX C, "ZONING," SECTION 3. "PROVISION FOR OFFICIAL ZONING MAP," TO UPDATE AND ADOPT THE OFFICIAL ZONING MAP OF THE CITY, INCORPORATING APPROVED CHANGES IN DISTRICT BOUNDARIES AND OTHER MATTERS PORTRAYED ON THE OFFICIAL ZONING MAP; PROVIDING A PENALTY FOR VIOLATION IN AN AMOUNT NOT TO EXCEED \$2,000, OR AS OTHERWISE PROVIDED BY LAW; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HERewith; AND PROVIDING FOR SEVERABILITY.

* * * * *

WHEREAS, Appendix C of the Code of Ordinances of the City of Friendswood contains provisions for the City's "Zoning Ordinance" which, pursuant to Section 3, "Provisions for Official Zoning Map," Subsection A, "Official Zoning Map," requires adoption of an official zoning map, with required amendments to such zoning map as approved changes are made in zoning districts; and

WHEREAS, in accordance with the Zoning Ordinance, no changes of any nature shall be made in the official zoning map or matter shown thereon except in conformity with the procedures set forth therein; and

WHEREAS, the official zoning map has been prepared to incorporate all zone updates, changes, corrections, amendments, and/or other matters portrayed on the official zoning map for required approval in accordance with the Zoning Ordinance, which is attached hereto and made a part hereof as Exhibit "A" ("Official Zoning Map"), to specifically supersede the prior official zoning map approved by Ordinance No. 2015-06, finally adopted on March 2, 2015, said map which is attached hereto as Exhibit "B" and made a part hereof ("Prior Zoning Map"); and

WHEREAS, the Planning and Zoning Commission and the City Council have conducted,

in the time and manner required by law and the Zoning Ordinance of the City, public hearings on such request; and

WHEREAS, the Planning and Zoning Commission has filed its written report with City Council, that recommends approval of the new official zoning map; and

WHEREAS, the City Council deems it appropriate to approve the new Official Zoning Map, attached hereto as Exhibit "A", to supersede the prior official zoning map approved by Ordinance No. 2015-06 attached hereto as Exhibit "B";

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

Section 1. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. AMENDMENT TO THE FRIENDSWOOD CITY CODE, APPENDIX C, "ZONING", SECTION 3, "PROVISION FOR OFFICIAL ZONING MAP," TO UPDATE AND ADOPT THE OFFICIAL ZONING MAP OF THE CITY.

The official zoning map is hereby amended by adopting a new Official Zoning Map, attached hereto and made a part hereof as Exhibit "A", to specifically supersede prior zoning maps, specifically including the Prior Official Zoning Map approved by Ordinance No. 2015-16, finally adopted on March 2, 2015, said map which is attached hereto as Exhibit "B" and made a part hereof.

Section 3. This Ordinance shall in no manner amend, change, supplement, or revise any provision of any ordinance of the City of Friendswood, save and except the adoption of the New Official Zoning Map, attached hereto as Exhibit "A", said map to contain the statement: *"This is to certify that this is the Official Zoning Map referred to in Section 3 of Ordinance No. 84-15, the City of Friendswood Zoning Ordinance"* together with the date of the adoption of this ordinance. The New Official Zoning Map shall be identified by the signature of the mayor attested by the city secretary, and bearing the seal of the city under the following words: *"This is to certify that this Official Zoning Map supersedes and replaces the Prior Official Zoning Map adopted on*

by Ordinance No. 2015-06, finally adopted on March 2, 2015, as part of Ordinance No. 84-15, the City of Friendswood Zoning Ordinance.”

Section 4. In the event any clause phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Friendswood, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 5. Any person who shall willfully, intentionally, or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount not to exceed \$2,000.00. Each day of violation shall constitute a separate offense.

PASSED AND APPROVED on first reading this 6th day of January, 2020.

PASSED, APPROVED, and ADOPTED on second and final reading this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

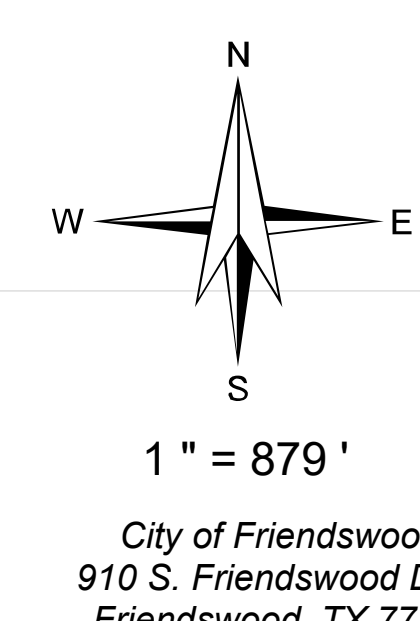
Melinda Welsh, TRMC
City Secretary

Exhibit “A”

1. Proposed Official Zoning Map
2. Subsequent Zoning Changes Since Last Official Map Adoption by City Council (March 2015)

Exhibit “B”

1. Previous Official Zoning Map (2015)



**CITY OF FRIENDSWOOD
ZONING DISTRICTS**

Updated: October 17, 2019

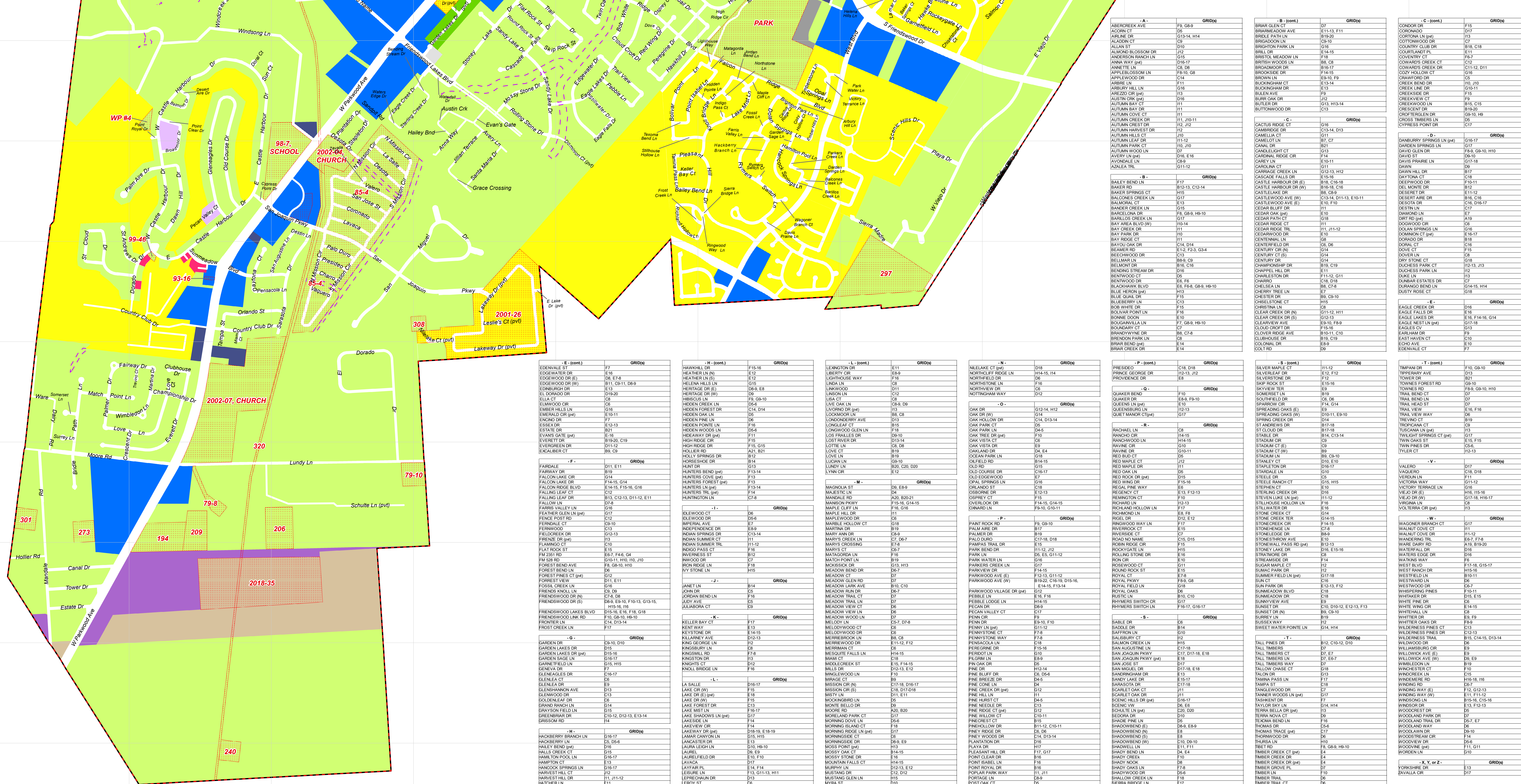
This is to certify that this Official Zoning Map supersedes and replaces the Prior Official Zoning Map adopted by Ordinance No. 2015-16, finally adopted on March 2, 2015, as part of Ordinance No. 84-15, the City of Friendswood Zoning Ordinance.

Date Adopted: February 3, 2020

Major Mike Foreman

Melinda Welsh, City Secretary

Subsequent Donating Changes/Corrections Since Last Official Map Adopted by City Council - January 8, 2018								
On the dates indicated below, the following changes were made to the Official Zoning Map:								
2015-08	2/22/2015	CSC	CZC/SP	New Hope Church 108 W. Washington New Hope for Interdenational Town Center	Religious Organizations	7/24/2015	Asbury	Remove SUP 99-11 - building was demolished
	7/31/2015	PUD		2000 MM358	n/a	7/24/2015	Asbury	Previous PUD 2004-13 and 2005-34
2015-08	7/31/2015	PUD/O/S	PUD/O/S	Begonia Spa Retreat 301.105.3574	n/a	7/24/2015	Asbury	Previous PUD/O/S 2011-12, Egrewood - PUD - 13, SUP 95-14, SUP 96-11, SUP 96-12, SUP 96-13, SUP 96-14, SUP 96-15, SUP 96-16, SUP 96-17, SUP 96-18, SUP 96-19, SUP 96-20, SUP 96-21, SUP 96-22, SUP 96-23, SUP 96-24, SUP 96-25, SUP 96-26, SUP 96-27, SUP 96-28, SUP 96-29, SUP 96-30, SUP 96-31, SUP 96-32, SUP 96-33, SUP 96-34, SUP 96-35, SUP 96-36, SUP 96-37, SUP 96-38, SUP 96-39, SUP 96-40, SUP 96-41, SUP 96-42, SUP 96-43, SUP 96-44, SUP 96-45, SUP 96-46, SUP 96-47, SUP 96-48, SUP 96-49, SUP 96-50, SUP 96-51, SUP 96-52, SUP 96-53, SUP 96-54, SUP 96-55, SUP 96-56, SUP 96-57, SUP 96-58, SUP 96-59, SUP 96-60, SUP 96-61, SUP 96-62, SUP 96-63, SUP 96-64, SUP 96-65, SUP 96-66, SUP 96-67, SUP 96-68, SUP 96-69, SUP 96-70, SUP 96-71, SUP 96-72, SUP 96-73, SUP 96-74, SUP 96-75, SUP 96-76, SUP 96-77, SUP 96-78, SUP 96-79, SUP 96-80, SUP 96-81, SUP 96-82, SUP 96-83, SUP 96-84, SUP 96-85, SUP 96-86, SUP 96-87, SUP 96-88, SUP 96-89, SUP 96-90, SUP 96-91, SUP 96-92, SUP 96-93, SUP 96-94, SUP 96-95, SUP 96-96, SUP 96-97, SUP 96-98, SUP 96-99, SUP 97-1, SUP 97-2, SUP 97-3, SUP 97-4, SUP 97-5, SUP 97-6, SUP 97-7, SUP 97-8, SUP 97-9, SUP 97-10, SUP 97-11, SUP 97-12, SUP 97-13, SUP 97-14, SUP 97-15, SUP 97-16, SUP 97-17, SUP 97-18, SUP 97-19, SUP 97-20, SUP 97-21, SUP 97-22, SUP 97-23, SUP 97-24, SUP 97-25, SUP 97-26, SUP 97-27, SUP 97-28, SUP 97-29, SUP 97-30, SUP 97-31, SUP 97-32, SUP 97-33, SUP 97-34, SUP 97-35, SUP 97-36, SUP 97-37, SUP 97-38, SUP 97-39, SUP 97-40, SUP 97-41, SUP 97-42, SUP 97-43, SUP 97-44, SUP 97-45, SUP 97-46, SUP 97-47, SUP 97-48, SUP 97-49, SUP 97-50, SUP 97-51, SUP 97-52, SUP 97-53, SUP 97-54, SUP 97-55, SUP 97-56, SUP 97-57, SUP 97-58, SUP 97-59, SUP 97-60, SUP 97-61, SUP 97-62, SUP 97-63, SUP 97-64, SUP 97-65, SUP 97-66, SUP 97-67, SUP 97-68, SUP 97-69, SUP 97-70, SUP 97-71, SUP 97-72, SUP 97-73, SUP 97-74, SUP 97-75, SUP 97-76, SUP 97-77, SUP 97-78, SUP 97-79, SUP 97-80, 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2015-08	8/2/2015	I	VSUP	Exxon Filling Station 16500 Begonia Rd 104 E 21st Street and Begonaland South Center	NACS US 4086, Energy Transportation	8/24/2015	Asbury	SUP is for 4,000 sq ft of building
2015-08	8/2/2015	DO	DO	104 E 21st Street and Begonaland South Center	NACS US 4086, Energy Transportation	8/24/2015	Asbury	SUP amendments
2015-08	8/2/2015	PUD/O/S	PUD/O/S	4001 E Greewood	Add NACS US 446, 446, and 448	11/27/2015	Asbury	SUP amendments
2015-08	10/1/2015	PUD/O/S	PUD/O/S	104 E 21st Street and Begonaland South Center	Add NACS US 446, 446, and 448	11/27/2015	Asbury	SUP amendments
2016-01	7/1/2016	PUD/O/S	PUD/O/S	301.105.3574	n/a	7/1/2016	Asbury	
2016-01	10/7/2016	LI	ORD	121 Megawatt Solar 1 E 21st Street and Begonaland South Center	n/a	10/1/2016	Asbury	
2016-01	10/27/2016	DO	DO	104 E 21st Street and Begonaland South Center	n/a	8/19/2016	Asbury	
2016-01	8/1/2016	PUD/O/S	PUD/O/S	1000-1105 E 21st Street and Begonaland South Center	n/a	8/19/2016	Asbury	
2016-01	10/27/2016	DO	DO	104 E 21st Street and Begonaland South Center	n/a	8/19/2016	Asbury	
2016-01	10/27/2016	DO	DO	104 E 21st Street and Begonaland South Center	n/a	8/19/2016	Asbury	
	7/1/2016	N/A	N/A	Boundary Change on 2nd St.	n/a	7/1/2016	Asbury	Land used with larger City
	7/1/2016	VSUP	VSUP	104 E 21st Street and Begonaland South Center	n/a	7/1/2016	Asbury	
	n/a	n/a	n/a	104 E 21st Street and Begonaland South Center	n/a	7/1/2016	Asbury	
2016-03	11/20/2017	SFR	CSC	2907 W. Parkwood Ave.	n/a	11/23/2017	Asbury	
2016-03	10/27/2017	SFR	CSC	104 E 21st Street and Begonaland South Center	n/a	11/23/2017	Asbury	
2016-07	2/6/2017	CZC/SP	CSC	3700 Begonia Road and NACS US 4086, Energy Transportation	NACS US 4086, Energy Transportation	2/28/2017	Asbury	
2016-07	2/6/2017	CZC/SP	CSC	3700 Begonia Road and NACS US 4086, Energy Transportation	NACS US 4086, Energy Transportation	2/28/2017	Asbury	Remove old SUP 99-11, new SUP 99-12, new SUP 99-13, new SUP 99-14, new SUP 99-15, new SUP 99-16, new SUP 99-17, new SUP 99-18, new SUP 99-19, new SUP 99-20, new SUP 99-21, new SUP 99-22, new SUP 99-23, new SUP 99-24, new SUP 99-25, new SUP 99-26, new SUP 99-27, new SUP 99-28, new SUP 99-29, new SUP 99-30, new SUP 99-31, new SUP 99-32, new SUP 99-33, new SUP 99-34, new SUP 99-35, new SUP 99-36, new SUP 99-37, new SUP 99-38, new SUP 99-39, new SUP 99-40, new SUP 99-41, new SUP 99-42, new SUP 99-43, new SUP 99-44, new SUP 99-45, new SUP 99-46, new SUP 99-47, new SUP 99-48, new SUP 99-49, new SUP 99-50, new SUP 99-51, new SUP 99-52, new SUP 99-53, new SUP 99-54, new SUP 99-55, new SUP 99-56, new SUP 99-57, new SUP 99-58, new SUP 99-59, new SUP 99-60, new SUP 99-61, new SUP 99-62, new SUP 99-63, new SUP 99-64, new SUP 99-65, new SUP 99-66, new SUP 99-67, new SUP 99-68, new SUP 99-69, new SUP 99-70, new SUP 99-71, new SUP 99-72, new SUP 99-73, new SUP 99-74, new SUP 99-75, new SUP 99-76, new SUP 99-77, new SUP 99-78, new SUP 99-79, new SUP 99-80, new SUP 99-81, new SUP 99-82, new SUP 99-83, new SUP 99-84, new SUP 99-85, new SUP 99-86, new SUP 99-87, new SUP 99-88, new SUP 99-89, new SUP 99-90, new SUP 99-91, new SUP 99-92, new SUP 99-93, new SUP 99-94, new SUP 99-95, new SUP 99-96, new SUP 99-97, new SUP 99-98, new SUP 99-99, new SUP 2000-1, new SUP 2000-2, new SUP 2000-3, new SUP 2000-4, new SUP 2000-5, new SUP 2000-6, new SUP 2000-7, new SUP 2000-8, new SUP 2000-9, new SUP 2000-10, new SUP 2000-11, new SUP 2000-12, new SUP 2000-13, new SUP 2000-14, new SUP 2000-15, new SUP 2000-16, new SUP 2000-17, new SUP 2000-18, new SUP 2000-19, new SUP 2000-20, new SUP 2000-21, new SUP 2000-22, new SUP 2000-23, new SUP 2000-24, new SUP 2000-25, new SUP 2000-26, new SUP 2000-27, new SUP 2000-28, new SUP 2000-29, new SUP 2000-30, new SUP 2000-31, new SUP 2000-32, new SUP 2000-33, new SUP 2000-34, new SUP 2000-35, new SUP 2000-36, new SUP 2000-37, new SUP 2000-38, new SUP 2000-39, new SUP 2000-40, new SUP 2000-41, new SUP 2000-42, new SUP 2000-43, new SUP 2000-44, new SUP 2000-45, new SUP 2000-46, new SUP 2000-47, new SUP 2000-48, new SUP 2000-49, new SUP 2000-50, new SUP 2000-51, new SUP 2000-52, new SUP 2000-53, new SUP 2000-54, new SUP 2000-55, new SUP 2000-56, new SUP 2000-57, new SUP 2000-58, new SUP 2000-59, new SUP 2000-60, new SUP 2000-61, new SUP 2000-62, new SUP 2000-63, new SUP 2000-64, new SUP 2000-65, new SUP 2000-66, new SUP 2000-67, new SUP 2000-68, new SUP 2000-69, new SUP 2000-70, new SUP 2000-71, new SUP 2000-72, new SUP 2000-73, new SUP 2000-74, new SUP 2000-75, new SUP 2000-76, new SUP 2000-77, new SUP 2000-78, new SUP 2000-79, new SUP 2000-80, new SUP 2000-81, new SUP 2000-82, new SUP 2000-83, new SUP 2000-84, new SUP 2000-85, new SUP 2000-86, new SUP 2000-87, new SUP 2000-88, new SUP 2000-89, new SUP 2000-90, new SUP 2000-91, new SUP 2000-92, new SUP 2000-93, new SUP 2000-94, new SUP 2000-95, new SUP 2000-96, new SUP 2000-97, new SUP 2000-98, new SUP 2000-99
2017-02	4/26/2017	PP/SHR	CSC	The Ford Street (and 401 W. Washington)	n/a	4/26/2017	Asbury	Refer to the SUP 99-11, but was not referenced on the zoning map.
2017-02	4/26/2017	CSC	CZC/SP	3010 N 1st Street	n/a	4/26/2017	Asbury	
2017-02	4/26/2017	CSC	CZC/SP	3010 N 1st Street	n/a	4/26/2017	Asbury	
2017-03	3/22/2017	ORD	CSC	2117 E Parkwood Ave.	NACS 5271, Recreation	3/24/2017	Asbury	
2017-03	3/22/2017	ORD	CSC	2117 E Parkwood Ave.	NACS 5271, Recreation	3/24/2017	Asbury	
	n/a	n/a	n/a	41600 E 21st Street, 100-101, and 103-104 Begonia Road, 201-203, 205-207, 209-211, and 213-215 Begonia Road, 201-203, 20				

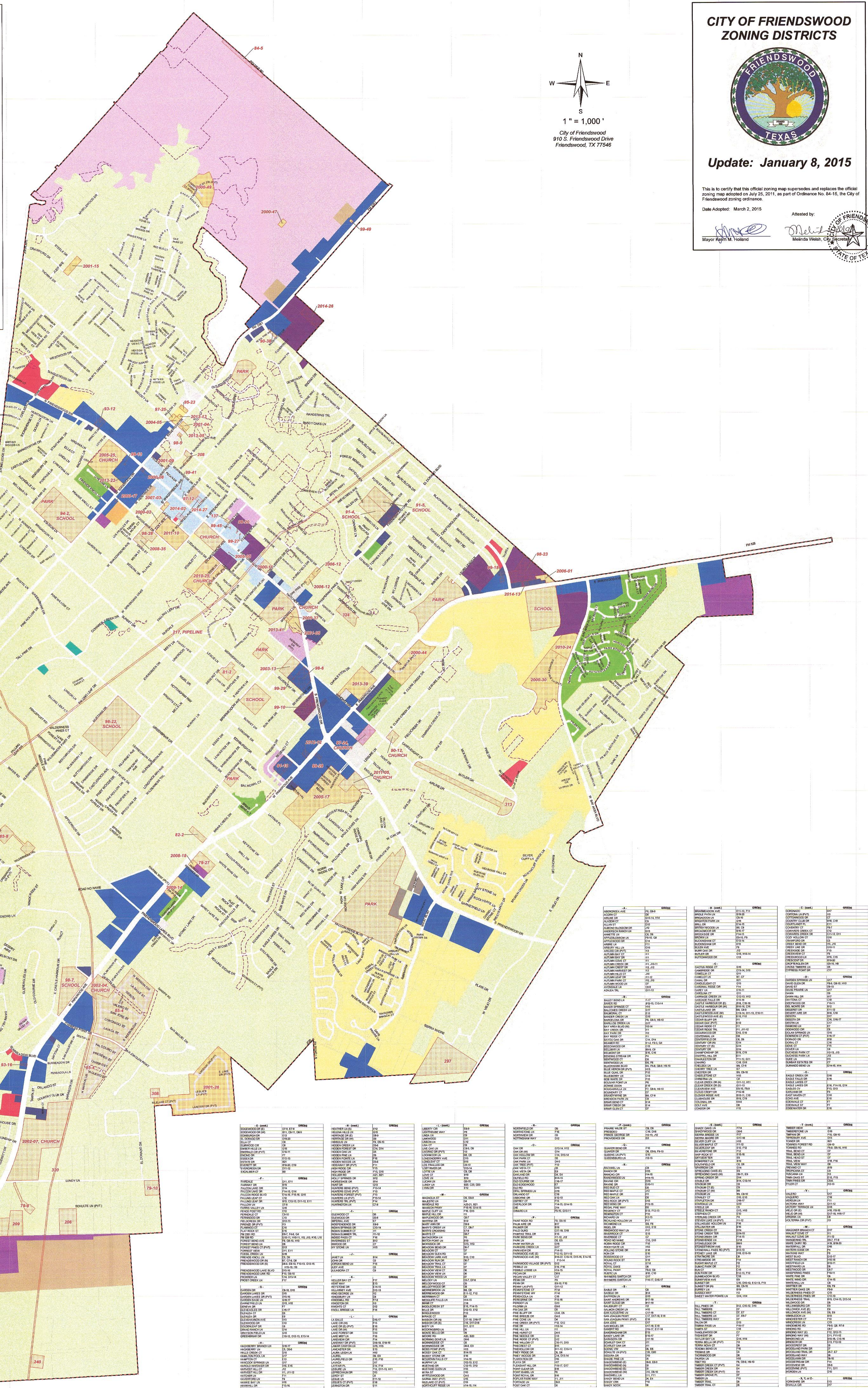


Subsequent Zoning Changes/Corrections Since Last Official Map Adoption by City Council - January 8, 2015

On the dates indicated below, by official action of the city council, the following changes were made in the Official Zoning Map:

Ord No	Date	From	To	Description	Specific Use	Email Date	From	Notes
2015-03	2/2/2015	CSC	CSC/SUP	New Hope Church 108 W Edgewood Dr.	Religious Organizations	7/24/2015	Aubrey	Remove SUP 99-13 - building was demolished
2015-18	7/13/2015	PUD 2004-13 and 2005-34	PUD	New PUD for Friendswood Town Center 3700 FM 528	n/a	7/24/2015	Aubrey	Previous PUDs: 2004-13 and 2005-34
2015-19	7/13/2015	PUD/SUP	PUD	Bergamos Spa Retreat 307 E Edgewood Dr.	n/a	7/24/2015	Aubrey	Previous PUDs/SUPs: 307 E. Edgewood Dr. – PUD 95-1; SUP 95-9; SUP 2011-18; and SUP 2013-05 313 E. Edgewood Dr. – PUD 95-8; SUP 2001-04
2015-21	8/3/2015	I	I/SUP	Ergon Pipeline 14550 Beamer Rd.	NAICS Use #486, Pipeline Transportation	8/24/2015	Aubrey	
2015-23	9/14/15	DD	DD/SUP	810 S. Friendswood D.	Use #713940 Fitness and Recreational Sports	10/6/2015	Aubrey	SUP is only for 4200 sqft of the building
2015-26	10/5/2015	PUD/SUP	PUD/SUP	402 E. Edgewood Dr.	Add NAICS Uses #442, 446, and 448	12/22/2015	Aubrey	SUP amendment
2015-30	11/2/2015	PUD/SUP	PUD/SUP	1100-1110 S. Friendswood Dr.	Add NAICS Uses #8121, 8129, and 8139	12/22/2015	Aubrey	SUP amendment
2016-01	2/1/2016	PUD/SUP	PUD	103, 105, 107 Shadwell Ln.	n/a	3/1/2016	Aubrey	
2016-11	3/7/2016	LI	OPD	121 Magnolia St. and 312 Morningside Dr.	n/a	3/15/2016	Aubrey	
2016-23	5/2/2016	LI	DD	311 S. Friendswood Dr.	n/a	6/10/2016	Aubrey	
2016-31	8/1/2016	PUD/SUP	DD	1100 - 1110 S. Friendswood Dr.	n/a	8/9/2016	Aubrey	
2016-39	12/13/2016	n/a	n/a	Boundary Change on Nile Lake Ct.	n/a	12/19/2016	Becky	land swap with League City
2016-19	7/11/2016	SFR/MFR-M	PUD and NC	Friendswood Trails	n/a	12/19/2016	Aubrey	
n/a	n/a	A1	SFR	Old Rd. - 2 lots	n/a	11/17/2016	Aubrey	Unknown reason as to why A1 zoning was assigned to the two tracts adjacent to Old Rd. Requested that they be changed back to SFR.
2016-43	1/9/2017	SFR	CSC	2907 W. Parkwood Ave.	n/a	1/31/2017	Aubrey	
2016-45	1/9/2017	SFR	NC	FM 518 and Old Rd.	n/a	1/31/2017	Aubrey	
2017-01	2/6/2017	CSC/SUP	CSC/SUP	3700 and 3702 FM 528	NAICS Use #8131 Religious Organizations	2/28/2017	Aubrey	Remove old SUP 99-18; new SUP covers entire tract of 3700 and 3702
2004-19		SFR	CSC	West Ranch PUD	n/a	3/3/2017	Aubrey	correction to Tract 3 of the WR PUD; additional tract was included which should still be zoned SFR
2017-12	6/5/2017	BP/SFR	PUD	The Pond Senior Living 401 W. Edgewood Dr.	n/a		Becky	
1994-02	4/18/1994	CSC	CSC/SUP	3535 FM 528	School	1/4/2018	Aubrey	correction to include the SUP for school that was not referenced on the zoning map
2017-29	10/2/2017	CSC	CSC/SUP	212 E Parkwood Ave	NAICS 517 Telecommunications	1/4/2018	Aubrey	
2017-30	10/2/2017	OPD	CSC	1757 S Friendswood Dr	n/a	1/4/2018	Aubrey	
n/a	n/a	SFR	MFR-L	All 6 lots on Shady Nook; 207, 209, 211 and 303 Morningside Dr.; 201-205, 208, 211, and 213 E. Shadowbend; Lots 1, 2, and 3 Collins Subdivision; 202-214 (even side) Magnolia St; 212 Quaker Dr; 201-213 (odd side of ROW) E. Heritage Dr.	n/a	1/11/2018	Becky	Unknown reason as to why SFR zoning was assigned to the two blocks. Requested that they be changed back to MFR-L with the exception of 206 & 209 E Shadowbend.
n/a	n/a	SFR/SUP	SFR	104 Whispering Pines Dr.	n/a	8/7/2018	Aubrey	SUP for church use could not be verified
2018-08	5/7/2018	CSC	CSC/SUP	2245 and 2275 Thomas Trace	NAICS Uses 6231, 623311 and 323312	9/26/2018	Aubrey	
2018-21	9/10/2018	LI	DD	315 S. Friendswood Dr.	n/a	9/26/2018	Aubrey	
2018-22	9/10/2018	NC	NC/SUP	4203 Friendswood Link Rd.	NAICS Use 713940	9/26/2018	Aubrey	
2018-35	12/3/2018	LI	LI/SUP	3099 W. Parkwood Ave. PSC Shooting Club	NAICS Use 7139 Other Amusement & Recreation Industries	5/8/2019	Becky	
2019-08	3/4/2019	SFR	DD	104 Whispering Pines Dr.	n/a	5/6/2019	Becky	
2019-10	4/1/2019	CSC	DD	1 Hatcher Ln	n/a	5/6/2019	Becky	
2019-11	5/6/2019	SFR	PUD	Avalon at Friendswood	n/a	5/8/2019	Becky	
2019-24	8/5/2019	SFR	DD	108 Whispering Pines Ave.	n/a	9/23/2019	Aubrey	Ordinance 2019-24
2019-25	8/5/2019	SFR	DD	110 Whispering Pines Ave.	n/a	9/23/2019	Aubrey	Ordinance 2019-25
2019-26	8/5/2019	NC	NC/SUP	17158 Blackhawk Blvd.	NAICS Use 8131 Religious Organizations	9/23/2019	Aubrey	Ordinance 2019-26
2019-30	9/9/2019	PUD/SUP	PUD/SUP	402 E. Edgewood Dr.	NAICS Use 8121 Personal Care Services	10/16/2019	Becky	Amend 2015-26 to allow nail salon.

2019-31	9/9/2019	PUD	PUD	103, 105, 107 Shadwell Ln.		10/16/2019	Becky	Amend 2016-01 for demo and new building.
2019-37	11/4/2019	SFR/PUD 2019-11	PUD 2019-37	Avalon at Friendswood	n/a	11/25/2019	Aubrey	



FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 12/27/2019

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-06: First and Final reading of an ordinance of the City Council of the City of Friendswood, Texas, calling for the holding of a General Election on May 02, 2020, for the purpose of electing two (2) Councilmembers (Position Numbers 2 and 5); ordering a Runoff Election on June 13, 2020, if necessary; and making other provisions related to the subject.

Originating Department: City Secretary

Degree of importance: Critical

SUMMARY / ORIGINATING CAUSE

This request is for City Council to approve Ordinance No. 2020-06, which calls for a General Election to be held on May 02, 2020, for the purpose of electing a Councilmember to Position No. 2 and a Councilmember to Position No. 5.

Galveston County has agreed to conduct the election for the entire City, which includes Galveston County and Harris County voters that live in the city limits of Friendswood. Galveston County will offer county-wide vote centers so all the City's registered voters may vote at any one of their polling locations in Galveston County.

City Hall will not be a polling location for Galveston County 2020 Elections.

Galveston County provided a proposed list of early voting and election day polling locations and expect more changes once all entity contracts have been received and more polling locations have been confirmed. Galveston County has confirmed a Friendswood location for early voting.

Early Voting hours will be Monday, April 20, 2020, through Friday, April 24, 2020, from 8:00 AM – 5:00 PM. Early Voting is required to have two – twelve hour days during the Early Voting period. The proposed ordinance designates Monday, April 27, 2020, and Tuesday, April 28, 2020, as the two – twelve hour days, with hours of 7:00 AM – 7:00 PM. Saturday Early Voting will no longer be held as in previous years. Election Day voting hours are 7:00 AM – 7:00 PM on May 02, 2020.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The registered voters of the City will participate in the electoral process.

RECOMMENDATIONS

Approve the ordinance calling the General Election.

ATTACHMENTS

1. Ord 2020-06 Ordering General Election
2. Ord 2020-06 Exhibit A
3. Ord 2020-06 Exhibit B

ORDINANCE NO. T2020-06

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS, CALLING FOR THE HOLDING OF A GENERAL ELECTION ON MAY 02, 2020, FOR THE PURPOSE OF ELECTING TWO (2) COUNCILMEMBERS (POSITION NUMBERS 2 AND 5); ORDERING A RUNOFF ELECTION ON JUNE 13, 2020, IF NECESSARY; AND MAKING OTHER PROVISIONS RELATED TO THE SUBJECT.

* * * * *

WHEREAS, the Friendswood City Council deems that in accordance with the laws of the State of Texas, a General Election should occur on May 02, 2020, for the purpose of electing two (2) Councilmembers (Position Numbers 2 and 5); and

WHEREAS, the Friendswood City Council wishes to proceed with the ordering of such election and the City Council has determined that holding such election is in the public interest; and

WHEREAS, the laws of the State of Texas further provide that the Texas Election Code (“Code”) is applicable to all municipal elections and in order to comply with said Code, an ordinance should be passed establishing the procedures to be followed for the May 02, 2020, election;

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

Section 1. General Election; Officers. In accordance with the general laws and the Constitution of the State of Texas, a General Municipal Election is hereby ordered to be held in and throughout the City of Friendswood on May 02, 2020, between the hours of 7:00 o'clock a.m. and 7:00 o'clock p.m. at which General Election all resident, qualified voters of the City of Friendswood, Texas (the “City”) may vote for the purpose of electing the following officials of the City:

Councilmember, Position No. 2

Councilmember, Position No. 5

Section 2. Placement on Official Ballot. No person's name shall be placed upon the official ballot as a candidate for any of the above-mentioned Council positions unless such persons shall have filed his or her sworn application, as provided by Section 141.031 of the Texas Election Code, with the City Secretary of the City at City Hall, located at 910 S. Friendswood Drive, Friendswood, Texas 77546, not later than five o'clock (5:00) p.m. on February 14, 2020.

Section 3. Determination of Ballots. The candidates receiving a majority of votes for the position to be filled at such election shall be declared elected.

Section 4. Persons Qualified to Vote. All resident, qualified electors of the City shall be eligible to vote at the Election.

Section 5. Joint Election. The City, pursuant to the applicable provisions of the Code, will conduct a joint election with other political subdivisions within Galveston County and contract with Galveston County for election services. This joint election shall be conducted pursuant to the terms of the Contract for Election Services (the "Election Contract") between Galveston County, Texas, and the City.

Section 6. Election Locations and Voting Hours on Election Day. The voting locations for voting on Election Day shall be the Galveston County county-wide vote center polling locations as set forth in Exhibit A, or at such other locations as hereafter may be designated by the Galveston County Clerk (the "County Clerk") in accordance with the Contract for Election Services. The City Secretary is hereby authorized to update Exhibit A to reflect the final locations designated by the County Clerk, which locations are hereby adopted and approved. Each polling place shall be open from 7:00 a.m. to 7:00 p.m. on Election Day.

Section 7. Early Voting. Dwight D. Sullivan, the Galveston County Clerk is appointed as the Early Voting Clerk for the Election. Applications for ballot by mail shall be submitted as follows: Dwight D. Sullivan; Early Voting Clerk; County of Galveston; P.O. Box 17253; Galveston, TX 77552-7253. If mailing by common contract carrier, applications for ballot by mail should be submitted to: Dwight D. Sullivan, Galveston County Clerk; 600 59th Street, Suite 2001; Galveston, Texas 77551-4180. Applications for ballot by mail must be received no later than the close of business on April 20, 2020.

The early voting polling places shall be as designated in Exhibit B, which is attached hereto and incorporated herein for all purposes. Early voting by personal appearance for all election precincts shall be held at the locations, at the times and on the days set forth in Exhibit B, or at such other locations as hereafter may be designated by the County Clerk as provided in the Contract for Election Services. The City Secretary or designee is hereby authorized to update Exhibit B to reflect the final locations designated by the County Clerk, and such locations are hereby approved.

Section 8. Appointment of Election Officials; Establishment of Central Counting Station. The election judges, alternate judges, clerks, members of the early voting ballot board, the central counting station officials, and other personnel necessary for conducting the Election shall be appointed, election judges and alternate judges may be changed, polling places may be combined for some precincts, and the central counting station shall be established and staffed by Galveston County as provided in the Election Services Agreement and such actions are hereby approved. Further, the City Council hereby authorizes the City Secretary to appoint any such other officials not designated herein or appointed pursuant to the Contract for Election Services as are necessary and appropriate to conduct the Election in accordance with the Code. The central counting stations to receive and tabulate votes shall be at the locations designated by Galveston County.

Section 9. Runoff Election. If no candidate for any office shall receive a majority of all votes cast for such office at such election as required by the City's Home Rule Charter, a runoff election between the two (2) highest vote-getters for such office shall be held on Saturday, June 13, 2020, (the "Runoff Election"), as permitted by the Texas Election Code.

Section 10. **Notice.** Notice of the election ordered herein shall be given in accordance with the provisions of the Texas Election Code and returns of such notice shall be made as provided for in said Code.

Section 11. **Canvass.** City Council, as the canvassing authority of this election, shall canvass the returns at its scheduled meeting to be held on May 11, 2020, at 6:30 p.m. At the completion of the canvass, the Mayor shall deliver the returns and tally lists used in the canvass to the City Secretary; and the City Secretary shall preserve them for a period in accordance with law.

Section 12. It is hereby further found and determined that the City Secretary posted written notice of the date, place and subject of the meeting at which this ordinance was introduced and passed on the bulletin board located at City Hall, a place convenient and readily accessible to the general public, and such notice having been so posted and remaining posted continuously for at least seventy-two (72) hours preceding the scheduled time of such meeting.

**PASSED, APPROVED, AND ADOPTED ON FIRST AND FINAL READING AS
PROVIDED FOR BY SECTION 3.11(B) OF THE CITY CHARTER OF FRIENDSWOOD
this 3rd day of February, 2020.**

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

ENTITY VOTE CENTER ELECTION MAY 2, 2020
Proposed-to be amended

Dates & Times:

Saturday, May 2, 2020.....7:00 a.m. – 7:00 p.m.

ELECTION DAY VOTING LOCATIONS

Galveston County Courthouse
722 Moody St.
Galveston, Texas 77550

Moody Methodist Church
2803 53rd St
Galveston, TX 77551

Seaside Baptist Church
16534 Termini-San Luis Pass Rd.
Jamaica Beach, TX 77554

Hitchcock ISD Admin Building
7801 Neville, Building B
Hitchcock, Texas 77563

Carver Park Community Center
6415 Park Ave.
Texas City, TX 77590

Nessler Center
2010 5th Ave. North
Texas City, TX 77591

Santa Fe City Hall
12002 Highway 6
Santa Fe, TX 77510

Joe Faggard Building
1750 Hwy 87
Crystal Beach, Tx 77650

Bacliff Community Center
4503 11th Street
Bacliff, Tx. 77518

MUD 12 Building
2929 Hwy 6
Bayou Vista, Tx 77563

La Marque Community Room
1109-B Bayou
La Marque, Tx 77568

Clear Lake Shores Club House
931 Cedar
Clear Lake Shores, Tx 77565

Kemah Fire Station
905 Hwy 146
Kemah, Tx 77565

Rebecca Sealy Hospital
404 8th St., Classroom 1st Floor
Galveston, Tx 77555

GISD Admin Building
3904 Ave. T
Galveston, Tx 77551

ENTITY VOTE CENTER ELECTION MAY 2, 2020
Proposed-to be amended

Dates & Times:

Monday, April 20, – Friday, April 24, 2020.....8:00 a.m. – 5:00 p.m.

Monday, April 27, - Tuesday, April 28, 202.....7:00 a.m. – 7:00 p.m.

MAIN EARLY VOTING POLLING PLACE

Galveston County Justice Center
600 – 59th Street
2nd Floor Conference Room
Galveston, Texas

EARLY VOTING BRANCH LOCATIONS

Galveston County Courthouse
722 Moody St.
Galveston, Texas 77550

Moody Methodist Church
2803 53rd St
Galveston, TX 77551

Seaside Baptist Church
16534 Termini-San Luis Pass Rd.
Jamaica Beach, TX 77554

Hitchcock City Hall
7423 Highway 6
Hitchcock, Texas 77563

Carver Park Community Center
6415 Park Ave.
Texas City, TX 77590

Nessler Center
2010 5th Ave. North
Texas City, TX 77591

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Bayou Vista, Tx 77563

La Marque Community Room
1109-B Bayou
La Marque, Tx 77568

Clear Lake Shores
1006 South Shore Dr.
Clear Lake Shores, Tx 77565

Kemah Fire Station
905 Hwy 146
Kemah, Tx 77565

Old Friendswood Jr. High
402 Laurel
Friendswood, Tx. 77546

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 12/27/2019

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-07: First and Final reading an ordinance of the City Council of the City of Friendswood, Texas, calling for the holding of a Special Election on May 02, 2020, for the purpose of reauthorizing the local sales and use tax at the rate of three-eighths (3/8) of one percent (1%) to continue providing revenue for maintenance and repair of municipal streets; and making other provisions related to the subject.

Originating Department: City Secretary

Degree of importance: Critical

SUMMARY / ORIGINATING CAUSE

This agenda item is to approve Ordinance 2020-07 which calls a Special Sales Tax Election for the purpose of reauthorizing the local sales and use tax at the rate of three-eighths (3/8) of one percent (1%) to continue providing revenue for maintenance and repair of municipal streets.

Galveston County provided a proposed list of early voting and election day polling locations and expect more changes once all entity contracts have been received and more polling locations have been confirmed. Galveston County has confirmed a Friendswood location for early voting.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The registered voters will participate in the electoral process.

RECOMMENDATIONS

Consider the ordinance calling the Special Sales Tax Election.

ATTACHMENTS

1. Ord 2020-07 Ordering Special Election to Reauthorize Street Maintenance Sales and Use Tax
2. Ord 2020-07 Exhibit A
3. Ord 2020-07 Exhibit B

ORDINANCE NO. T2020-07

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FRIENDSWOOD, TEXAS, CALLING FOR THE HOLDING OF A SPECIAL ELECTION ON MAY 02, 2020, FOR THE PURPOSE OF REAUTHORIZING THE LOCAL SALES AND USE TAX AT THE RATE OF THREE-EIGHTHS (3/8) OF ONE PERCENT (1%) TO CONTINUE PROVIDING REVENUE FOR MAINTENANCE AND REPAIR OF MUNICIPAL STREETS; AND MAKING OTHER PROVISIONS RELATED TO THE SUBJECT.

* * * * *

WHEREAS, pursuant to Section 327.007 of the Texas Tax Code, the City Council of the City of Friendswood is authorized and hereby finds and determines that it is appropriate, advisable and in the best interest of the citizens of the City to hold a special election in the City for the purpose of submitting a proposition pertaining to the reauthorization of the local sales and use tax at the rate of three-eighths (3/8) of one percent (1%) to continue providing revenue for maintenance and repair of municipal streets; and

WHEREAS, the Friendswood City Council deems that in accordance with the laws of the State of Texas, a Special Election should occur on May 02, 2020; and

WHEREAS, the laws of the State of Texas further provide that the Texas Election Code (“Code”) is applicable to all municipal elections and in order to comply with said Code, an ordinance should be passed establishing the procedures to be followed for the May 02, 2020, special election;

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

Section 1. Special Election. In accordance with the general laws and the Constitution of the State of Texas, a Special Municipal Election is hereby called and ordered to be

held in and throughout the City of Friendswood on May 02, 2020, between the hours of 7:00 o'clock a.m. and 7:00 o'clock p.m. at which Special Election, all resident, qualified voters of the City of Friendswood, Texas (the "City") may vote on a proposition to reauthorize the local sales and use tax at the rate of three-eighths (3/8) of one percent (1%) to continue providing revenue for maintenance and repair of municipal streets;

Section 2. Ballot Proposition. The official ballots for said election shall be prepared in accordance with the Texas Election Code so as to permit the electors to vote "FOR" or "AGAINST" the proposition, with the ballots to contain such provisions and language required by Texas Tax Code Section 327.007, and with such proposition to be expressed as follows:

FOR	()	The reauthorization of the local sales and use tax in the City of
AGAINST	()	Friendswood, Texas at the rate of three-eighths (3/8) of one percent (1%)
		to continue providing revenue for maintenance and repair of municipal
		streets. The tax expires on the fourth anniversary of the date of this election
		unless the imposition of the tax is reauthorized.

Section 3. Determination of Ballots. If the greater number of votes are "FOR", the tax is reauthorized, and if the greater number of votes are "AGAINST", the tax is not reauthorized.

Section 4. Persons Qualified to Vote. All resident, qualified electors of the City shall be eligible to vote at the Special Election.

Section 5. Joint Election. The City, pursuant to the applicable provisions of the Code, will conduct a joint election with other political subdivisions within Galveston County and contract with Galveston County for election services. This joint election shall be conducted pursuant to the terms of the Contract for Election Services (the "Election Contract") between Galveston County, Texas, and the City.

Section 6. Election Locations and Voting Hours on Election Day. The voting locations for voting on Election Day shall be the Galveston County county-wide vote center

polling locations as set forth in Exhibit A, or at such other locations as hereafter may be designated by the Galveston County Clerk (the “County Clerk”) in accordance with the Contract for Election Services. The City Secretary is hereby authorized to update Exhibit A to reflect the final locations designated by the County Clerk, which locations are hereby adopted and approved. Each polling place shall be open from 7:00 a.m. to 7:00 p.m. on Election Day.

Section. 7. Early Voting. Dwight D. Sullivan, the Galveston County Clerk is appointed as the Early Voting Clerk for the Election. Applications for ballot by mail shall be submitted as follows: Dwight D. Sullivan; Early Voting Clerk; County of Galveston; P.O. Box 17253; Galveston, TX 77552-7253. If mailing by common contract carrier, applications for ballot by mail should be submitted to: Dwight D. Sullivan, Galveston County Clerk; 600 59th Street, Suite 2001; Galveston, Texas 77551-4180. Applications for ballot by mail must be received no later than the close of business on April 20, 2020.

The early voting polling places shall be as designated in Exhibit B, which is attached hereto and incorporated herein for all purposes. Early voting by personal appearance for all election precincts shall be held at the locations, at the times and on the days set forth in Exhibit B, or at such other locations as hereafter may be designated by the County Clerk as provided in the Contract for Election Services. The City Secretary or designee is hereby authorized to update Exhibit B to reflect the final locations designated by the County Clerk, and such locations are hereby approved.

Section 8. Appointment of Election Officials; Establishment of Central Counting Station. The election judges, alternate judges, clerks, members of the early voting ballot board, the central counting station officials, and other personnel necessary for conducting the Election shall be appointed, election judges and alternate judges may be changed, polling places may be combined for some precincts, and the central counting station shall be established and staffed by Galveston County as provided in the Election Services Agreement and such actions are hereby approved. Further, the City Council hereby authorizes the City Secretary to appoint any such other officials not designated herein or appointed pursuant to the Contract for Election Services as are necessary and appropriate to conduct the Election in accordance with the Code. The central

counting stations to receive and tabulate votes shall be at the locations designated by Galveston County.

Section 9. **Notice.** Notice of the election ordered herein shall be given in accordance with the provisions of the Texas Election Code and returns of such notice shall be made as provided for in said Code.

Section 10. **Canvass.** City Council, as the canvassing authority of this election, shall canvass the returns at its scheduled meeting to be held on May 11, 2020, at 6:30 p.m. At the completion of the canvass, the Mayor shall deliver the returns and tally lists used in the canvass to the City Secretary; and the City Secretary shall preserve them for a period in accordance with law.

Section 11. It is hereby further found and determined that the City Secretary posted written notice of the date, place and subject of the meeting at which this ordinance was introduced and passed on the bulletin board located at City Hall, a place convenient and readily accessible to the general public, and such notice having been so posted and remaining posted continuously for at least seventy-two (72) hours preceding the scheduled time of such meeting.

PASSED, APPROVED, AND ADOPTED ON FIRST AND FINAL READING AS PROVIDED IN SECTION 3.11(b) OF THE CITY CHARTER OF FRIENDSWOOD this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

ENTITY VOTE CENTER ELECTION MAY 2, 2020
Proposed-to be amended

Dates & Times:

Saturday, May 2, 2020.....7:00 a.m. – 7:00 p.m.

ELECTION DAY VOTING LOCATIONS

Galveston County Courthouse
722 Moody St.
Galveston, Texas 77550

Moody Methodist Church
2803 53rd St
Galveston, TX 77551

Seaside Baptist Church
16534 Termini-San Luis Pass Rd.
Jamaica Beach, TX 77554

Hitchcock ISD Admin Building
7801 Neville, Building B
Hitchcock, Texas 77563

Carver Park Community Center
6415 Park Ave.
Texas City, TX 77590

Nessler Center
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Texas City, TX 77591

Santa Fe City Hall
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Santa Fe, TX 77510

Joe Faggard Building
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Bacliff Community Center
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Bacliff, Tx. 77518

MUD 12 Building
2929 Hwy 6
Bayou Vista, Tx 77563

La Marque Community Room
1109-B Bayou
La Marque, Tx 77568

Clear Lake Shores Club House
931 Cedar
Clear Lake Shores, Tx 77565

Kemah Fire Station
905 Hwy 146
Kemah, Tx 77565

Rebecca Sealy Hospital
404 8th St., Classroom 1st Floor
Galveston, Tx 77555

GISD Admin Building
3904 Ave. T
Galveston, Tx 77551

ENTITY VOTE CENTER ELECTION MAY 2, 2020

Proposed-to be amended

Dates & Times:

Monday, April 20, – Friday, April 24, 2020.....8:00 a.m. – 5:00 p.m.

Monday, April 27, - Tuesday, April 28, 202.....7:00 a.m. – 7:00 p.m.

MAIN EARLY VOTING POLLING PLACE

Galveston County Justice Center
600 – 59th Street
2nd Floor Conference Room
Galveston, Texas

EARLY VOTING BRANCH LOCATIONS

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1109-B Bayou
La Marque, Tx 77568

Clear Lake Shores
1006 South Shore Dr.
Clear Lake Shores, Tx 77565

Kemah Fire Station
905 Hwy 146
Kemah, Tx 77565

Old Friendswood Jr. High
402 Laurel
Friendswood, Tx. 77546

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/9/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-08: First reading of an ordinance granting to CenterPoint Energy Resources Corp., DBA CenterPoint Energy Texas Gas Operations, the right, privilege and franchise to construct, install, extend, remove, replace, abandon, operate and maintain its facilities within the public rights-of-way of the City of Friendswood, Texas, for the transportation, delivery, sale and distribution of natural gas; providing for a term of 30 years; containing other provisions relating to the foregoing subject; providing for severability and providing an effective date.

Originating Department: City Attorney

Degree of importance: Choose an Option

SUMMARY / ORIGINATING CAUSE

The last Gas Franchise expired in 2011 and CenterPoint Energy Resources Corp., dba CenterPoint Energy Texas Gas Operations has continued to pay the City a sum equal to two percent (2%) of the Company's gross receipts for the preceding calendar quarter received by the Company from the sale of gas within the corporate limits of the City plus seven cents per Mcf for natural gas transported by the Company for its Transport Customers during such quarter.

This Ordinance continues to allow the Company to operate and maintain its facilities within the public rights-of-way of the City for a 30 year period, in consideration of payment to the City a sum equal to four percent (4%) of the Company's gross receipts for the preceding calendar quarter received by the Company from the sale of gas within the corporate limits of the City plus seven cents per Mcf for natural gas transported by the Company for its Transport Customers during such quarter.

If this Ordinance is adopted, the annual payment from the Company to the City will change from \$116,080.71 to \$232,843.58, amounting to a total increase of \$116,762.87 a year. The first payment is anticipated to be on or about May 1, 2020.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Adopting this Ordinance will provide for an updated and current Gas Franchise within the City with an increased revenue of four percent (4%) of the Company's gross receipts for the preceding quarter received by the Company for the sale of gas within the City.

For the first year of this new franchise, the City will receive \$232,843.58, which is \$116,762.87 a year

greater than the old franchise.

RECOMMENDATIONS

Approval of this Ordinance authorizing a 30 year gas franchise.

ATTACHMENTS

1. Ord 2020-08 CenterPoint Energy Gas

ORDINANCE NO. T2020-08

AN ORDINANCE GRANTING TO CENTERPOINT ENERGY RESOURCES CORP., DBA CENTERPOINT ENERGY TEXAS GAS OPERATIONS, THE RIGHT, PRIVILEGE AND FRANCHISE TO CONSTRUCT, INSTALL, EXTEND, REMOVE, REPLACE, ABANDON, OPERATE AND MAINTAIN ITS FACILITIES WITHIN THE PUBLIC RIGHTS-OF-WAY OF THE CITY OF FRIENDSWOOD, TEXAS, FOR THE TRANSPORTATION, DELIVERY, SALE AND DISTRIBUTION OF NATURAL GAS; PROVIDING FOR A TERM OF 30 YEARS; CONTAINING OTHER PROVISIONS RELATING TO THE FOREGOING SUBJECT; PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE.

* * * * *

WHEREAS, the City Council of the City of Friendswood, Texas, finds it is in the best interest of the City of Friendswood (the "City") to enter into a new franchise agreement with CenterPoint Energy Resources Corp., dba CenterPoint Energy Texas Gas Operations ("Company") Company to furnish and supply natural gas to the general public in the City of Friendswood;

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

Section 1. *Grant of Authority.* Subject to the terms, conditions and provisions of this ordinance, the right, privilege and franchise is hereby granted to CenterPoint Energy Resources Corp., dba CenterPoint Energy Texas Gas Operations, hereinafter called "Company", to construct, install, extend, remove, replace, abandon, operate and maintain its facilities within the Public Rights-of-Way of the City of Friendswood, Texas, for the transportation, delivery, sale and distribution of natural gas within the corporate limits of the City of Friendswood, as the same are now and as the same may from time to time be extended. The right, privilege and franchise granted hereunder is granted subject to the existing City of Friendswood Charter and Ordinances.

Section 2. *Definitions.* The following words, terms and phrases, when used in this ordinance, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

- A. "City" shall mean the City of Friendswood, Texas, a home-rule municipal corporation.
- B. "Company" shall mean CenterPoint Energy Resources Corp., dba CenterPoint Energy Texas Gas Operations, a Delaware Corporation, and shall not mean any of its affiliates and subsidiaries who shall have no right, privilege or franchise granted hereunder.

- C. "Facilities" shall mean pipes, pipelines, natural gas mains, laterals, feeders, regulators, meters, fixtures, connections and attachments and other instrumentalities and appurtenances, used in or incident to providing transportation, distribution, supply and sales of natural gas for heating, lighting, power and any other purposes for which natural gas may now or hereafter be used.
- D. "Public Rights-of-Way" shall mean the areas in, under, upon, over, across, and along any and all of the present and future Streets or streams now or hereafter owned or controlled by City.
- E. "Street" shall mean the surface and the space above and below any public street, road, highway, alley, bridge, sidewalk, or other public place or way.

Section 3. *Term of Franchise.* Upon the filing with the City by the Company of the acceptance required hereunder, this franchise shall be in full force and effect for a term and period of thirty (30) years, unless terminated in accordance with the terms hereof.

Section 4. *Construction and Maintenance of Natural Gas Distribution System.* All Facilities installed by Company shall be of sound material and good quality, and shall be laid so that they will not interfere with the artificial drainage of the City or its underground fixtures, or with navigation in or the natural drainage of any stream. All Facilities shall be installed in accordance with Section 23 and applicable federal and state regulations and, in the absence of such regulations, in accordance with accepted industry practice. Within the Public Rights-of- Way, the location and route of the Facilities by the Company shall be subject to the reasonable and proper regulation, direction and control of the City or the City official to whom such duties have been delegated. Such regulation shall include, but not be limited to, the right to require in writing to the extent provided in Section 14 the relocation of Company's Facilities at Company's cost within the Public Rights-of-Way whenever such relocation shall be reasonably necessary to accommodate public works improvement projects within the Public Rights-of-Way that are being made by or for the benefit of the City, provided such benefit is evidenced by an executed agreement by the City and the entity responsible for the project. Upon request of the City, the Company shall make available at no cost to the City during working hours, maps showing the location of Company's Facilities within the corporate limits of the City.

Section 5. *Streets to be Restored to Good Condition.* The Company and its contractors shall give the City reasonable notice of the dates, location and nature of all work to be performed on its Facilities within the Public Rights-of-Way. Following completion of work in the Public Rights-of-Way, Company shall repair the affected Public Rights-of-Way as soon as possible, but in all cases, Company shall comply with all City ordinances governing time periods and standards relating to excavating in the

Public Rights-of-Way. No street, alley, highway or public place shall be encumbered for a longer period than shall be necessary to execute the work.

Section 6. *Permits.* Company and its contractors shall obtain a permit in accordance with Friendswood City Code Section 26-292, Permits, as it currently exists or as hereinafter amended. Company expressly agrees that the City may rely on the information Company provides regarding its own Facilities in its permit application and Company shall hold the City harmless and indemnify the City in accordance with Section 13 of this Agreement. All work shall be preceded by an 811 call and be subject to the Texas One-Call Statute (Texas Utilities Code, Chapter 251, and any successor statutes). Company shall give the City telephone notice of the initiation of emergency repairs involving breaks in the paved surface of the Public Rights-of- Way, including sidewalks and curbs, as soon as practicable under the circumstances and shall submit a permit promptly following completion of the work. Company and contractors performing work for the Company shall not be required to obtain any permits for relocations of Facilities requested by the City, provided that the relocated Facilities are placed in the location designated by the City and relocation is otherwise in accordance with the City's request to relocate. This Franchise shall constitute a permit to park vehicles in the Streets and other Public Rights-of-Way when necessary for the installation, replacement, abandonment, operation or maintenance of Company's Facilities; provided that such parking does not impair or impede traffic and Company pays for all damages to the Public Rights-of-Way. Company and contractors performing work for Company shall not be required to pay any fee in addition to the franchise fee in order to obtain a permit to perform work on Company's Facilities, or park within the Streets and other Public Rights-of-Way.

Section 7. *Quality of Service.* The service furnished hereunder to the City and its inhabitants shall be in accordance with the quality of service rules of the Railroad Commission of Texas, state and federal regulations. Company shall furnish the grade of service to its customers as provided by its rate schedules and shall maintain its system in reasonable operating condition during the continuance of this Franchise. An exception to this requirement is automatically in effect, but only for so long as is necessary, when caused by a shortage in materials, supplies and equipment beyond the control of the Company as a result of fires, strikes, riots, storms, floods and other casualties, governmental regulations, limitations and restrictions as to the use and availability of materials, supplies and equipment and as to the use of the services, and unforeseeable and unusual demands for service. In any of such events, the Company shall do all things reasonably within its power to restore normal service as quickly as practicable.

Section 8. *Payment to the City.* In consideration of the rights and privileges herein granted, the

administration of the Franchise by the City, the temporary interference with the use of Public Rights-of-Way and cost and obligations undertaken by the City in relation thereto and in lieu of any license, charge, fee, Street or alley rental or other character of charge for use and occupancy of the Streets, alleys, and public places of the City, and in lieu of any inspection fee, the Company agrees to pay to the City franchise fees in the amount and manner described herein.

Company agrees to pay to the City quarterly during the continuance of this Franchise a sum of money equal to four (4%) of the Company's gross receipts for the preceding calendar quarter received by the Company from the sale of gas within the corporate limits of the City plus seven cents (7¢) per Mcf for natural gas transported by Company for its Transport Customers during such quarter. "Transport Customer" means any person or entity for whom Company transports gas through the distribution system of Company within the corporate limits of City for consumption within the corporate limits of City. The franchise fees hereunder shall be calculated for the calendar quarters ending March 31, June 30, September 30, and December 31 and shall be payable on or before the fifteenth day of May, August, November, and February following the quarter for which payment is made, beginning with the first such date following the Effective Date of this Franchise and each August 15th, November 15th, February 15th, and May 15th thereafter; provided, however, the first such payment shall be prorated as necessary to reflect only those gross receipts received and transportation volumes delivered by Company after the Effective Date of this Franchise. In no event shall the Company be required to remit to the City franchise fee amounts that for any reason whatsoever are not fully recoverable from its customers. Upon receipt of the above amount of money, the City shall deliver to the Company a receipt for such amount. If any payment due date required herein falls on a weekend or bank holiday, payment shall be made on or before the close of business of the first working day after the payment due date.

Section 9. *Annexations by City.* This Franchise shall extend to and include any and all territory that is annexed by the City during the term of this Franchise. Within sixty (60) days from the receipt of notice from the City of any such annexation, the Company shall assure that any and all customers within such annexed territory are included and shown on its accounting system as being within the corporate limits of the City of Friendswood. After such sixty (60) day period, the payment provisions specified in Section 8 of this Franchise shall apply to gross receipts and transport fees received by the Company from customers located within such annexed territory. Company shall true-up its map of City boundaries to the City's map on an annual basis.

Section 10. *Non-Exclusive Franchise.* Nothing contained in this Franchise shall ever be

construed as conferring upon the Company any exclusive or privileges of any nature whatsoever.

Section 11. *Compliance and Remedies.*

(a) In the event the Company by act or omission violates any material term, condition or provision of this Franchise, the City shall notify the Company in writing of such violation. Should the Company fail or refuse to correct any such violation within thirty (30) days from the date of City's notice, the City shall, upon written notification to the Company, have the right to terminate this agreement. Any such termination and cancellation shall be by ordinance adopted by City Council; provided, however, before any such ordinance is adopted, the Company must be given at least sixty (60) days' advance written notice. Such notice shall set forth the causes and reasons for the proposed termination and cancellation, shall advise the Company that it will be provided an opportunity to be heard by City Council regarding such proposed action before any such action is taken and shall set forth the time, date and place of the hearing.

(b) Other than its failure, refusal or inability to pay its debts and obligations, including, specifically, the payments to the City required by this Franchise, the Company shall not be declared in default or be subject to any sanction under any provision of this Franchise in those cases in which performance of such provision is prevented by reasons beyond its control.

(c) The rights and remedies of City and Company set forth herein shall be in addition to, and not in limitation of, any other rights and remedies provided at law or in equity; and City's exercise of any particular remedy shall not constitute a waiver of its rights to exercise any other remedy.

Section 12. *Reserve of Powers.* The City by the granting of this Franchise does not surrender or to any extent lose, waive, impair or lessen the lawful powers, claims and rights, now or hereafter vested in the City under the Constitution and statutes of the State of Texas and under the Charter and Ordinances of the City of Friendswood or other applicable law, to regulate public utilities within the City, to regulate rates of public utilities within the City, and to regulate the use of the Public Rights-of-Way by the Company; and the Company, by its acceptance of this Franchise, agrees that all lawful powers and rights, whether regulatory or otherwise, as are or as may be from time to time vested in or reserved to the City, shall be in full force and effect and subject to the exercise thereof by the City at any time and from time to time.

Section 13. INDEMNITY. THE COMPANY, ITS SUCCESSORS AND ASSIGNS, SHALL PROTECT AND HOLD THE CITY AND ITS OFFICERS, AGENTS, AND EMPLOYEES (COLLECTIVELY REFERRED TO IN THIS SECTION AS "THE CITY") HARMLESS AGAINST ANY AND ALL CLAIMS OR DEMANDS FOR DAMAGES TO ANY PERSON OR PROPERTY BY REASON OF THE CONSTRUCTION AND MAINTENANCE OF THE COMPANY'S NATURAL GAS DISTRIBUTION SYSTEM, OR IN ANY WAY GROWING OUT OF THE RIGHTS GRANTED BY THIS FRANCHISE, EITHER DIRECTLY OR INDIRECTLY, OR BY

REASON OF ANY ACT, NEGLIGENCE OR NONFEASANCE OF THE COMPANY OR THE CONTRACTORS, AGENTS OR EMPLOYEES OF THE COMPANY OR ITS SUCCESSORS AND ASSIGNS, AND SHALL REFUND TO THE CITY ALL SUMS WHICH THE CITY MAY BE ADJUDGED TO PAY ON ANY SUCH CLAIM, OR WHICH MAY ARISE OR GROW OUT OF THE EXERCISE OF THE RIGHTS AND PRIVILEGES HEREBY GRANTED OR BY THE ABUSE THEREOF, AND THE COMPANY OR ITS SUCCESSORS AND ASSIGNS SHALL INDEMNIFY, DEFEND, AND HOLD THE CITY HARMLESS FROM AND ON ACCOUNT OF ALL DAMAGES, COSTS, EXPENSES, ACTIONS, AND CAUSES OF ACTION THAT MAY ACCRUE TO OR BE BROUGHT BY, A PERSON, PERSONS, COMPANY OR COMPANIES AT ANY TIME HEREAFTER BY REASON OF THE EXERCISE OF THE RIGHTS AND PRIVILEGES HEREBY GRANTED, OR OF THE ABUSE THEREOF.

Section 14. *Relocation of Facilities.* The Company shall, upon written request of the City, relocate its Facilities within Public Rights-of-Way at Company's own expense, exclusive of Facilities installed for service directly to City, to accommodate public works or improvement projects that are being made by or for the benefit of the City, provided such benefit is evidenced by an executed agreement by the City and the entity responsible for the project. Public works or improvement projects may include, but are not limited to, street widening, changes of grade, water, sewer, or drainage upgrades, construction or reconstruction projects and relocation of traffic lanes. City shall bear the costs of all relocations of Facilities requested by the City for reasons other than the aforementioned public works improvement projects.

Section 15. *Governmental Function.* All of the regulations and activities required by this Franchise are hereby declared to be governmental and for the health, safety and welfare of the general public.

Section 16. *Records and Reports.*

(a) **Books of Account.** The Company shall keep complete and accurate books of accounts and records of its business and operations under and in connection with this Franchise. All such books of accounts and records shall be kept at the Company's principal office in Houston, Texas.

(b) **Access by City.** The City may conduct an audit or other inquiry or may pursue a cause of action in relation to the payment of the franchise fee only if such audit, inquiry, or pursuit of a cause of action concerns a payment made less than three (3) years before the commencement of such audit, inquiry, or pursuit of a cause of action. Each party shall bear its own costs of any such audit or inquiry. Upon receipt of a written request from the City, all books and records related to Company's operations under this Franchise shall be made available for inspection and copying no later than thirty (30) days from receipt of such

request.

(c) Interest on Underpayments and Overpayments.

(1) Amounts due to City for late payments shall include interest, compounded daily equal to the return on equity plus three percent (3%) granted to the Company in its most recent proceeding fixing rates applicable to customers within the corporate limits of the City.

(2) If the City identifies, as a result of a franchise fee compliance review, amounts owed by the Company from prior periods or prior underpayments, then the Company shall pay simple interest on such amounts equal to the return on equity granted to the Company in its most recent proceeding fixing rates applicable to customers within the corporate limits of the City. Said interest shall be payable on such sums from the date the initial payment was due until it is paid and shall not be billed to customers.

(3) Amounts due Company for past overpayments shall include simple interest equal to the return on equity granted to the Company in its most recent proceeding fixing rates applicable to customers within the corporate limits of the City; provided, however, if there is a change in the approved return on equity during the time period subject to the City's audit or inquiry, then for each time period during which there was an overpayment, the approved return on equity in effect during such time period shall be used in calculating interest under this subparagraph (c). Interest payable on such sums shall be credited to customers.

Section 17. Easement. In consideration for the compensation set forth in Section 8, City agrees that if City sells, conveys, or surrenders possession of any portion of the Public Right-of-Way that is being used by Company pursuant to this Franchise, City, to the maximum extent of its right to do so, shall first grant Company an easement for such use and the sale, conveyance, or surrender of possession of the Public Right-of-Way shall be subject to the right and continued use of Company.

Section 18. Acceptance. The Company shall, within thirty (30) days following the final passage and approval of this Franchise, file with the City Secretary of the City of Friendswood, a written statement signed in its name and behalf in the following form:

"To the Honorable Mayor: and City Council of the City of Friendswood:

CenterPoint Energy Resources Corp., dba CenterPoint Energy Texas Gas Operations, its successors and assigns hereby accepts the attached Franchise Ordinance and agrees to be bound by all of its terms and provisions."

CENTERPOINT ENERGY
RESOURCES CORP., DBA
CENTERPOINT ENERGY
TEXAS GAS OPERATIONS

By:

Tal R. Centers Jr., Division Vice President,
Regional Operations

Dated this ____ day of _____ 2020.

Section 19. *Severability.* If any provision, section, subsection, sentence, clause or phrase of this Franchise is for any reason held to be unconstitutional, void, or invalid or for any reason unenforceable, the validity of the remaining portions of this Franchise shall not be affected thereby, it being the intent the City of Friendswood in adopting this Franchise that no portion hereof or provision hereof shall become inoperative or fail by reason of any unconstitutionality or invalidity of any other portion, provision or regulation and, to this end, all provisions of this ordinance are declared to be severable.

Section 20. *Notices.* Every notice, order, petition, document, or other direction or communication to be served upon the City or the Company shall be deemed sufficiently given if sent by registered or certified mail, return receipt requested. Every such communication to the Company shall be sent to:

CenterPoint Energy
Resources Corp. Vice
President Regulatory
Relations P. O. Box
4567
Houston, TX 77210-4567

With a copy to:
General Counsel, Gas
Division
P. O. Box 2628
Houston, TX 77252-2628

Every such communication to the City or the City Council shall be sent to the:

City of Friendswood, Attn:
City Manager
910 South Friendswood

Drive
Friendswood, TX 77546

With a Copy to: City of Friendswood Attn:
City Attorney
910 South Friendswood Drive
Friendswood, TX 77546

Section 21. *Publication, Passage and Effective Date.* Pursuant to the Home Rule Charter of the City of Friendswood, Texas, Sec. 9.03, this Ordinance shall be read at two (2) regular meetings of the City Council. Within seven (7) days following the first reading of this Ordinance, the full text of this Ordinance shall be published one (1) time in the official newspaper of the City, and the expense of such publication shall be borne by the prospective Company. This Ordinance shall take effect and be in force from and after the first day of the month following thirty days after receipt of Company's acceptance filed pursuant to Section 18 ("Effective Date").

Section 22. *Repeal of Previous Ordinances.* On and after the Effective Date, this Franchise replaces all Previous Franchise agreements with the Company, which Previous Franchise Agreement shall be hereby repealed as of the Effective Date of this Franchise.

Section 23. *Compliance with Charter and Ordinances.* This Franchise, the rights granted hereby and the operations and activities performed by Company pursuant hereto shall be subject to applicable provisions of the Charter of the City of Friendswood, Texas. The Franchise and rights granted hereby and the operations and activities performed by Company pursuant hereto shall be subject to all valid ordinances and regulations of the City insofar as such ordinances and regulation (a) do not shorten the term hereof or terminate, abrogate, or materially and adversely affect the Franchise and right granted to Company hereby, (b) do not conflict with or are not inconsistent with the terms and provisions contained in this ordinance, with or are not inconsistent with the terms and provisions contained in this Ordinance, (c) prevent or interfere with Company's Federal and State regulatory obligations or (d) do not unreasonably regulate the Company's operations and activities in the City Right-of-Way. If Company believes a future Ordinance unreasonably regulates its operations and activities in the City Right-of-Way, City and Company shall meet and reach a mutually agreeable solution prior to its application to the Company. All such conflicting or inconsistent ordinances are hereby repealed to the extent of such conflict or inconsistency.

Section 24. *Adoption.* Passed and adopted with all necessary procedural formalities by the City Council of the City of Friendswood, Texas, at a regular meeting held at the regular place, at which a quorum was present throughout.

PASSED AND APPROVED on the first reading the 3rd day of February, 2020.

PASSED AND APPROVED on the second reading the 2nd day of March, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

§

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1. _____
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1. _____
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4. _____
5. _____
6. _____

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with the City Secretary and recorded by the City Secretary in full in the books for the purpose of recording the ordinances of the City of _____, Texas.

EXECUTED under my hand and the official seal of the City of _____, Texas at said City, this _____ day of _____, 2020.

Melinda Welsh, City Secretary, TRMC
City of Friendswood, Texas

[SEAL]

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/7/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ordinance No. T2020-09: First and Final reading of an ordinance amending City of Friendswood, Texas, Ordinance No. 2019-38, passed and approved October 7, 2019, same being an ordinance approving and adopting the City's General Budget for Fiscal Year 2019-2020 by approving "Budget Amendment III" to the "Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2019-2020"; providing for supplemental appropriation and/or transfer of certain funds; providing for severability; and providing other matters related to the subject.

Originating Department: Administrative Services

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

By its nature, our budget is an estimate of the revenues and expenditures needed to accomplish the City Council and Staff goals for the year. Throughout the year events occur that require adjustments to the budget. These adjustments may be needed for various reasons, such as the recognition of extraordinary revenues or expenditures, new projects that are authorized by Council or providing funding for expenditures resulting from extraordinary events like natural disasters. As the need arises, items for budget appropriations are accumulated and then submitted for approval at the City Council meeting each month. The budget adjustments covered by this ordinance comprise the third set for fiscal year 2019-20.

We have attempted to provide as much explanation of the adjustments as possible through two sets of exhibits. Exhibit A provides a narrative explanation of each budget amendment. Exhibit B provides the detail of each accounting transaction.

Ordinance and exhibits are reviewed and approved by the City Attorney prior to inclusion on a City Council meeting agenda.

Expenditure Required \$695,628

Amount Budgeted \$0

Appropriation Required \$695,628

Sources of Funds: Unassigned General Fund, Assigned General Fund Balance, General Fund Revenue, and Hazard Acquisition & Demolition Project

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Approval of this budget amendment will allow for timely procurement of program supplies and limit delays in the progress of capital improvement projects.

RECOMMENDATIONS

Recommend approval of the ordinance and exhibits covering Budget Amendment III 2019–20.

ATTACHMENTS

1. Ord 2020-09 BA III 2019-20
2. Ord 2020-09 Exhibit A
3. Ord 2020-09 Exhibit B

ORDINANCE NO. T2020-09

AN ORDINANCE AMENDING CITY OF FRIENDSWOOD, TEXAS, ORDINANCE NO. 2019-38, PASSED AND APPROVED OCTOBER 7, 2019, SAME BEING AN ORDINANCE APPROVING AND ADOPTING THE CITY'S GENERAL BUDGET FOR FISCAL YEAR 2019-2020 BY APPROVING "BUDGET AMENDMENT III" TO THE "ORIGINAL GENERAL BUDGET OF THE CITY OF FRIENDSWOOD, TEXAS, FOR THE FISCAL YEAR 2019-2020"; PROVIDING FOR SUPPLEMENTAL APPROPRIATION AND/OR TRANSFER OF CERTAIN FUNDS; PROVIDING FOR SEVERABILITY; AND PROVIDING OTHER MATTERS RELATED TO THE SUBJECT.

* * * * *

WHEREAS, by Ordinance No. 2019-38, the City Council of the City of Friendswood, Texas, adopted its "Original General Budget for Fiscal Year 2019-2020"; and

WHEREAS, the City Council has determined that revenues and/or reserves are available for supplemental appropriation, and/or that the transfer of certain funds interdepartmentally is economically feasible and in the best interest of prudent budgeting and for municipal purposes; and

WHEREAS, Section 8.04 of The City Charter provides for amendments after adoption of the budget; and

WHEREAS, the City Council desires to amend said Original General Budget to reflect such supplemental appropriation and/or transfer in the fiscal year 2019-2020;

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

Section 1. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. The “Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2019-2020,” is hereby amended for municipal purposes as shown on “Budget Amendment III” to the “Original Budget of the City of Friendswood, Texas, for the Fiscal year 2019-2020” attached hereto. Said Budget Amendment III shall be attached to and made a part of such Original General Budget by the City Secretary and shall be filed as required by state law, a true and correct copy of which is attached hereto as Exhibits “A” and “B” and made a part hereof for all purposes.

Section 3. In the event any clause, phrase, provision, sentence, or part of this ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Friendswood, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

PASSED AND APPROVED this 3rd day of February, 2020.

Mike Foreman
Mayor

ATTEST:

Melinda Welsh, TRMC
City Secretary

**City of Friendswood
Budget Amendment Summary
Fiscal Year 2019 – 2020
Budget Amendment III
February 3, 2020**

1. **Preliminary Engineering Services on Whitcomb Tract, \$20,150.** Appropriate funding to conduct terracing analysis on the Whitcomb property located along Clear Creek next to FM 528. This is the engineering work that will be done in relation to the Memorandum of Understanding with Clear Creek Community Church. The services will be performed by Dannenbaum Engineering Corporation. The funding source for this service will be unassigned general fund balance.
2. **Friendswood Lakes Boulevard, \$186,000.** Appropriate funds to move a high voltage transmission pole for the Friendswood Lakes Boulevard project. The transmission pole is in the middle of the projected path for the expansion of the boulevard. The Friendswood Lakes Boulevard project is a joint project with the Galveston County Bond Program. The funding source will be assigned general fund balance.
3. **Hurricane Harvey Buyout Lots, \$472,483.** Appropriate advance funding to purchase three homes through the Hazard Mitigation Grant Program. The City applied for and was awarded a federal grant through the Texas Division of Emergency Management for the buyout and demolition of homes flooded during Hurricane Harvey. The three properties that have agreed to the terms of the buyout are 810 Quaker Drive, 16614 Oxnard and 5303 Shady Oaks Lane. The funding source will be unassigned general fund balance and will be reimbursed once grant funding has been received from the State agency.
4. **Library Book Sales, \$4,476.** Appropriate Library book sale revenue to the Library department's operating budget. The funds will be appropriated to the Library's operating budget for books to be used in fiscal year 2020.
5. **Animal Control Donation, \$5,000.** Appropriate donation received from Ms. Linda Rudd. The donation will be used to help with pet adoptions. The funds will be appropriated to the Animal Control's operating services budget.
6. **Police Department Vehicle Insurance Reimbursement, \$119.** Appropriate insurance reimbursements received from Texas Municipal League Intergovernmental Risk Pool. Funding will be appropriated to the Police Department Patrol division's vehicle maintenance account for repairs made to unit P403.
7. **Grant Application Assistance, \$4,400.** Appropriate funds for sub-consultant services with RJN Group. The City is interested in seeking grant funding from the Texas Water Development Board's (TWDB) Flood Infrastructure Fund (FIF) for the purposes of developing a master drainage plan. The City is contracting with RJN for assistance with the initial FIF Abridged Application. The funding source for this service will be unassigned general fund balance.

City of Friendswood

02/3/2020

2019-2020 Budget Amendment III - Exhibit B

BA Number	Account Number	Project Number	Description	Amount
1	001-0000-30500		Appropriate unassigned general fund balance for engineering services on the Whitcomb property	(20,150)
1	001-3770-431.7800		Appropriate unassigned general fund balance for engineering services on the Whitcomb property	20,150
2	001-0000-30500		Appropriate assigned general fund balance to have TNMP move a high voltage transmission pole related to the Friendswood Lakes Blvd project	(189,000)
2	001-7001-431.8519		Appropriate assigned general fund balance to have TNMP move a high voltage transmission pole related to the Friendswood Lakes Blvd project	189,000
3	001-14018		Appropriate funds to purchase three properties in the HMGP for buyout and demolition.	472,483
3	001-10199		Appropriate funds to purchase three properties in the HMGP for buyout and demolition	(472,483)
3	120-10199		Appropriate funds to purchase three properties in the HMGP for buyout and demolition	472,483
3	120-26010		Appropriate funds to purchase three properties in the HMGP for buyout and demolition	(472,483)
4	001-0000-38600	DNBOOK	Appropriate the sale of books to the Library's operating budget for books	(4,476)
4	001-6310-459.5482	DNBOOK	Appropriate the sale of books to the Library's operating budget for books	4,476
5	001-0000-38600		Appropriate donation received from Ms. Rudd to Animal Control's operating services budget	(5,000)
5	001-2150-441.7400		Appropriate donation received from Ms. Rudd to Animal Control's operating services budget	5,000
6	001-0000-38310	P403	Appropriate insurance reimbursement for repairs made to Police Department Unit P403	(119)
6	001-2120-421.7498	P403	Appropriate insurance reimbursement for repairs made to Police Department Unit P403	119

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/7/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Ratify the Mayor's signature on a contract transferring ownership of retired K-9 Officer Ajay from the Friendswood Police Department to Officer Brandon Blair

Originating Department: Police Department

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

K-9 Ajay is 10 ½ years old and is no longer able to perform the duties of a police narcotic K-9. Therefore, Ajay is now retired. Ajay's handler, Officer Brandon Blair, will assume ownership of Ajay and agrees to the contract guidelines.

Under the Local Government Code in 2019, a retiring police dog was classified as salvage or surplus property and, according to code, surplus or salvage property could be auctioned, donated to a civic or charitable organization, or destroyed. With the passage of Proposition 10 and Senate Bill 2100, agencies may now transfer a retiring police dog to the animal's handler or another qualified person if the transfer is in the animal's best interest. Senate Bill 2100 allows the law enforcement agency's highest ranking officer to determine who receives the animal.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Chapter 614 in the Government Code provides for a contract for a transfer without charge and requires the transferee to humanely care for the animal, comply with all state and local laws applicable to keeping domestic animals and to notify the agency if the transferee is no longer able to humanely care for the animal. With the transfer, the agency will release all liability for animal including veterinary expenses.

RECOMMENDATIONS

Recommend Council approve ratifying the Mayor's signature on the contract document.

ATTACHMENTS

1. Transfer of Law Enforcement Dog Contract

**CITY OF FRIENDSWOOD
CONTRACT FOR TRANSFER OF LAW ENFORCEMENT DOG
ON ANIMAL'S RETIREMENT**

This Agreement is made and entered into by and between the parties, CITY COUNCIL OF THE CITY OF FRIENDSWOOD, ("GRANTOR"), a municipal corporation, acting by and through its Mayor, and BRANDON A. BLAIR, (hereinafter "GRANTEE")

RECITALS

WHEREAS, the Texas Constitution was amended by the passage of Proposition 10, to allow a law enforcement agency, such as the Friendswood Police Department, to transfer a retiring dog to the animal's handler or another qualified person if the transfer is in the animal's best interest; and

WHEREAS, the Texas State Legislature passed Senate Bill 2100 (SB 2100) to further implement Proposition 10, to allow a City Council to enter into a contract with a person for the transfer of a law enforcement dog when the law enforcement agency's highest-ranking officer, such as a chief, has determined who receives the animal;

WHEREAS, SB 2100 also requires the Contract transferring a law enforcement animal to contain various provisions;

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. The Police Chief of the City of Friendswood, Texas, has determined that the law enforcement dog, "Ajay", a male German Shepherd Dog, sable in color, born on April 29, 2009, ("the animal") is suitable for transfer, after consulting with the animal's veterinarian, handlers, and other caretakers and that the animal is surplus to the needs of the City because the animal is at the end of the animal's working life.
2. The Police Chief had determined that the animal is suitable and eligible for transfer and the animal may be transferred to GRANTEE, who is capable of humanely caring for the animal.
3. The GRANTOR conveys the animal to GRANTEE without charge to the GRANTEE.
4. GRANTEE agrees to assume full responsibility, ownership and control of the animal and to pay for all expenses related to the animal, with no costs to the City of Friendswood.
5. GRANTEE must humanely care for the animal, including providing food, shelter, and regular and appropriate veterinary care, including medication, to properly provide for the animal's health.

6. GRANTEE must comply with all state and local laws applicable to keeping domestic animals.
7. GRANTEE must notify the GRANTOR if GRANTEE is no longer able to humanely care for the animal and surrender the animal to GRANTOR.
8. GRANTOR must take possession of the animal upon receipt of the notice from GRANTEE that he is no longer able to humanely care for the animal or upon a finding by the City Council that the GRANTEE is no longer able to humanely care for the animal.
9. GRANTEE understands and agrees that pursuant Texas Government Code Sec. 614.215. LIABILITY, that GRANTOR is not liable in a civil action for any damages arising from the transfer, including damages arising from the animal's law enforcement training; and GRANTOR is not liable for veterinary expenses of the transferred animal, including expenses associated with care for a condition of the animal that existed before or at the time of transfer, regardless of whether the City of Friendswood was aware of the condition.
10. GRANTOR and GRANTEE understand and agree that Texas Government Code Sec. 614.218. EFFECT OF SUBCHAPTER, that Subchapter L of Chapter 614, Government Code does not waive sovereign governmental immunity to suit and from liability of the City of Friendswood transferring the animal.
11. GRANTOR agrees to the following waivers, release and agreements to indemnify the City of Friendswood, the Friendswood Police Department, their officials, officers, employees and agents, (collectively referred to as "Indemnified Parties"):
 - a. **Waiver and Release.** GRANTEE hereby waives all actions (whether legal, equitable or declaratory in nature), proceedings (whether in courts or administrative bodies), alternative dispute resolution procedures (whether arbitration, mediation or otherwise) demands, claims, and causes of action, and other means of recovery, of whatever nature, for injuries to person (including without limitation death, dismemberment and emotional distress), or damages (whether to person, property or business and including without limitation all forms of monetary recovery, whether for general, special, compensatory, or punitive damages, loss of earnings, loss of earning capacity, loss of profits or other damages of whatever nature), arising from the actions of or in any way related to the animal from the date of this Agreement.
 - b. **Indemnity and Hold Harmless.** GRANTEE shall indemnify, defend (with legal counsel selected by City) and hold and save harmless the Indemnified Parties, and each of them, harmless from and against any actions (whether legal, equitable or declaratory in nature), proceedings (whether in courts or administrative bodies), alternative dispute resolution procedures (whether arbitration, mediation, or otherwise) demands, claims and cause of action of whatever nature, costs and expenses (including attorney's fees), judgments, orders, decrees, liens and other encumbrances, liabilities, injuries to person (including without limitation, death, dismemberment, and emotional distress), damages (whether to person, property, or business, including without limitation, all forms of monetary recovery, whether for general, special, compensatory, or punitive damages, loss or earnings, loss of earning

capacity, loss of profits or other damages of whatever nature), arising from the actions of or in any way related to the animal from the date of this Agreement.

- c. **Notice of Claims.** GRANTOR shall provide written notice to GRANTEE within ten (10) days of the service on or delivery to GRANTOR of any claim, demand, suit, action, or other proceeding arising out of or in any way related to the subject matter covered under this Agreement.
- d. **Interpretation and Severability.** GRANTEE further expressly agrees that the foregoing release, waiver and indemnity agreement is intended to be as broad and inclusive as is permitted by the law of the State of Texas and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full force and effect. This Agreement shall not apply to any actions, proceedings, demands, claims and causes of action arising from the actions of the animal occurring before the date of the Agreement.

12. This Agreement shall not be assigned or transferred, nor shall any of the GRANTEE's duties be delegated. GRANTEE must notify the GRANTOR if GRANTEE is no longer able to humanely care for the animal and surrender the animal to GRANTOR.

13. All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered or mailed to the respective party as noted below. If address changes, the Party has to advise the other Party of that new address:

To GRANTOR

City of Friendswood
910 S. Friendswood Drive
Friendswood, Texas 77546

To GRANTEE

Brandon A. Blair
1600 Whitaker Drive
Friendswood, Texas 77546

14. This Agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties.

15. In the event any term of this Agreement is held invalid by a court of competent jurisdiction or if it is found to be in contravention of any federal or state statute or regulation or CITY ordinance, the Agreement shall be construed as not containing that portion or term, and the remainder of this Agreement shall remain in full force and effect.

16. The interpretation, validity, and enforcement of the Agreement shall be governed by and construed under the laws of the State of Texas. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the Galveston County, Texas.

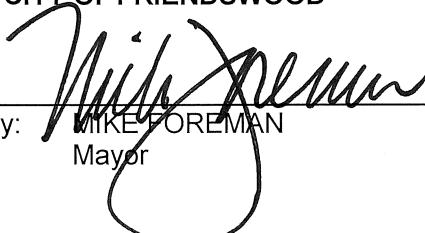
17. This Agreement comprises the entire integrated understanding between the parties concerning the services to be performed for this project. This Agreement supersedes all prior negotiations, representations, or agreements.

18. The individuals executing this Agreement represent a warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the PROVIDER and CITY. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

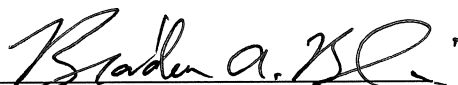
19. GRANTEE represents that he has had an opportunity to read this Agreement and seek the advice of independent legal counsel and is entering into the Agreement voluntarily.

IN WITNESS WHEREOF, the parties do hereby agree to the full performance of the terms set forth herein.

GRANTOR:
CITY OF FRIENDSWOOD

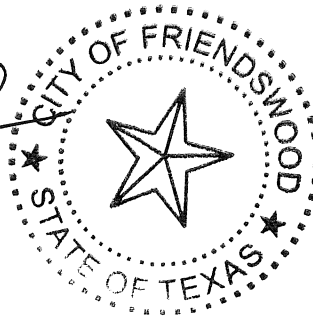

By: MIKE FOREMAN
Mayor

GRANTEE:
BRANDON A. BLAIR


By: Brandon A. Blair

ATTEST:


Melinda Welsh, TRMC
City Secretary



FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/8/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approve the purchase of a vac-truck and skid steer for the Public Works Department

Originating Department: Public Works

Degree of importance: Choose an Option Significant

SUMMARY / ORIGINATING CAUSE

In administration of the City's FY 19/20 annual budget preparation and approval process, Public Works had received approval for decision package proposals that included the authorization to proceed forward with the purchase of an imminently needed Vacuum Truck and Skid Steer for the improved operation of the department. As part of administering the required purchasing / evaluation process, one of the primary goals for Public Works and the City has been to abide by the guidelines pursuant the Local Government Code, Title 8, Subtitle A, Chapter 252, Subchapter B, Sec 252.022 General Exemptions, (12) personal property sold: (D) under an inter-local contract for cooperative purchasing administered by a regional planning commission established under Chapter 391. In compliance with this approved process, the Public Works Department had coordinated and vetted multiple product demonstrations for each piece of equipment via different approved vendors identified within the different cooperative purchasing programs.

In regards to consideration for the proposed purchase of the Vacuum Truck, Public Works staff met separately and on multiple occasions with each vendor identified as follows (Gapvax, Kaiser, Kinloch, & Pipehunter). The Kaiser product version starting at \$650k, is beyond our allocated approved budget. The Pipehunter and Gapvax product versions were within our approved budget, and both are also respectable products, but unfortunately did not meet the full needs and specs that could be of ultimate benefit to the department and the City. The Kinloch product, which is known as the reputable Vactor Truck, provided the best benefit per its application in example of a few of the following: (1) The application of a Jet Rodder Pump (which we feel will be more reliable per our anticipated application) compared to the use of Tri-Plex pumps used by the other proposed vendor products. The Jet Rodder Pump is designed as a hydraulically driven pump that has five slow moving parts resulting in less wear, heat, and variable flows. The Jet Rodder Pump also has a minimized operator error risk potential, as per its design of being able to run dry for a short duration. (2) The application of a Rapid Deployment Boom (RDB). The RDB allows the initial extension of its primary vac hose/pipe of approximately 15 feet down without even initially needing to attach any other needed hose/pipe attachments. This feature alone will prove not only a time saving constraint, but more importantly a long-term safety and ergonomic benefit to City staff utilizing this critical piece of heavy equipment in the field (as most manholes and work sites are typically within a 4 to 10 foot range of depth). (3) The application of the Intuitouch Control Panel linked together with a hand held fully controlled wireless remote panel, placing the benefit of the operation / use of the vac truck by the main operator directly on site of the work being executed (i.e. manhole, lift station, excavation), and not needing to be back at the actual vacuum truck. This is also an added safety feature and benefit. As part of capitalizing on and staying within the approved budget within this proposed purchase, we also evaluated and have included a hydro excavating application kit via use of the Vactor Truck. This again is another feature that could only be executed via the one pump Jet Rodder pump system, compared to the other products having to utilize a different pump to perform this same need. Overall the Public Works Department strongly feels the Kinloch Vactor Truck product is a safer / user friendly, better constructed, better ergonomic layout, and ultimately a better / longer lasting and reliable solution for the City. The proposed cooperative purchase program BuyBoard purchase price is \$441,289.00 for the Kinloch 2100i Vactor Truck on a Freightliner 114SD Chassis,

and is within the approved budget.

In regards to consideration for the proposed purchase of the Skid Steer piece of heavy equipment, Public Works had coordinated separately with two cooperative purchase program approved vendors represented as follows (ASCO, Mustang CAT, & Lansdowne Moody). We tasked both vendors to evaluate the application of the purchase of the three following manufactures (Case, CAT, & Kubota) of skid steers, to coincide with our proposed identified needs. Our needs being a reliable product that included a regular 80 inch wide bucket, a grapple bucket, a breaker, a ground shark mulch/brush cutter head, a safety door, and a 20 foot long heavy duty rated trailer to mobilize the piece of equipment as needed throughout the City. The purchase of the CAT would not be able remain within the budget constraints to include a mandatory/needed trailer. In consideration of the Case product, and although Case has been a reliable product for our backhoe and loader needs, Kubota has also proven to be an equal reliable product for us on our heavy equipment needs as well. Based primarily not only on price, but also ease of accessibility to known needed preventative maintenance and/or repair parts through the same local vendor whom we are selecting to purchase it from (whereas Case & CAT are only specific sole source providers for parts and service), we have selected to proceed forward with purchasing it from Lansdowne Moody. The cooperative purchase program Sourcewell purchase price is for \$101,645.00 for the Kubota SVL95-2HFWC skid steer version, and is within the approved budget.

For visibility purposes, please find this as Public Works goal and transparency process to proceed forward with both approved annual budget decision packages as outlined above.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Administration of the approved purchases will immediately, and significantly, improve the routine maintenance & emergency repair operation of the City of Friendswood's Public Works Department.

RECOMMENDATIONS

Staff recommends that City Council approve for the Public Works Department to proceed forward with the purchasing of a Vacuum Truck and Skid Steer through the cooperative purchase program.

ATTACHMENTS

1. Vacuum Truck Evaluation Backup Docs.
2. Form 1295 for Vactor Truck
3. Skid Steer Evaluation Back-up Docs.
4. Form 1295 for Skid Steer

Vactor/ Kinloch

Freightliner SD114 Chassis

12YD Debris Body

Ex-Ten Steel

1500 Gal Fresh Water

Aluminum Water Tanks

18" Hg Roots 824 Blower

80 GPM Variable Flow

2500PSI

1" x 800' Hose Reel

180 Degree Boom

10' Telescoping

15' Hydraulic Extendable

Fully Wireless Controls

Hydro Excavation Kit

5 Tool boxes

4-way camera system

4 side work lights

Digital footage counter

Digital Water level Indicator

Digital Debris Level indicator

Safety lighting

Arrow Stick

\$441,289.00

GapVax

Freightliner SD114 Chassis

10YD Debris Body

Ex-Ten Steel

1500 Gal Fresh Water

304 Stainless Steel Tanks

18" Hg Roots Blower

80 GPM

2500 PSI

1" x 800' Hose Reel

180 Degree Boom

10' Telescoping

N/A

Fully Wireless Controls

Hydro Excavation Kit

4 Tool boxes

Rear Camera

4 Side Work Lights

Digital Footage Counter

Manual

Manual

Safety Lighting

Arrow Stick

\$450,000.00

Pipehunter/ TX Underground

Freightliner 114SD Chassis

12 YD Debris Body

Stainless

1200 Gal Fresh Water

Stainless

18" Hg Roots Blower

80 GPM

2000 PSI

1" x 1000' Hose Reel

Rotating Boom

9' Telescoping

N/A

Wireless Boom Control Only

Hydro Excavation Kit

4 Tool Boxes

4-Way Camera

4 Side Work Lights

Manual

Manual

Manual

Safety Lighting

Arrow Stick

\$392,982.00



FREIGHTLINER OF AUSTIN

1701 Smith Rd. (Hwy. 183 So.)
Austin, Texas 78721

Bus: 512-389-0000
FAX: 512-389-2663
Wats: 1-800-395-2005

INV.

PURCHASING NAME CITY OF FRIENDWOOD		TELEPHONE 281-996-3200	
ADDRESS 910 SOUTH FRIENDSWOOD DR.		CITY FRIENDSWOOD	STATE TX
		ZIP CODE 77546	

I/We Hereby Purchase from You, Under the Terms and Conditions Specified, the Following:

YEAR 2020	MAKE FREIGHTLINER	MODEL/BODY 114SD	VIN TBD	LICENSE PLATE
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A documentary fee is not an official fee, a documentary fee is not required by law but may be charged to buyers for handling documents and performing services relating to the the closing of a sale. Buyers may avoid payment of the fee to the seller by handling the documents and performing the services relating to the closing of the sale. A documentary fee may not exceed \$50.00. This notice is required by law.

El cobro documental no es un cobro oficial. El cobro documental no es un requisito bajo la ley, pero se le puede cobrar. Al comprador por el rendimiento de los servicios relacionados con la completacion de la venta y por completar los documentos. El comprador puede evitar el pago al vendedor de este costo si el comprador mismo se encarga de manejar los documentos y de los servicios necesarios para la completacion de la venta. El cobro documental no puede sobrepasar los \$50.00 (U.S.) Este aviso es requerido bajo la ley.

Disclaimer of Warranties

Any warranties on the products sold hereby are those made by the factory. The Seller, Freightliner of Austin, hereby expressly disclaims all warranties, either expressed or implied including any implied warranty of merchantability or fitness for a particular purpose, and Freightliner of Austin, neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this vehicle.

MILEAGE:

BUY BOARD CONTRACT #521-16

CHASSIS SELLING PRICE

\$ 111,079.00

VACTOR 2100i COMBINATION SINGLE ENGINE SEWER
CLEANER

\$ 329,810.00

BUY BOARD FEE

\$ 400.00

CUSTOMER SIGNATURE

SALESMAN SIGNATURE KEVIN KRIEG

CONTRACTUAL DISCLOSURE STATEMENT FOR USED VEHICLE ONLY. *The information you see on the window form for this vehicle is part of this contract. Information on the window form overrides any contrary provisions in the contract of sale. *

MILEAGE:		TRADE-IN	
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YEAR	MAKE	MODEL/BODY	VIN	LICENSE PLATE
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MILEAGE:		TRADE-IN	
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YEAR	MAKE	MODEL/BODY	VIN	LICENSE PLATE
------	------	------------	-----	---------------

		TOTAL	\$ 441,289.00
PAYOFF TO:		Trade Allowance	N/A
ADDRESS:		Trading Difference	N/A
TELEPHONE: / FAX:		Sales Tax	N/A
GOOD UNTIL:		Vehicle Inventory Tax	N/A
QUOTED BY:		License Fee	N/A
SHOW LIEN TO:		Body Type:	Documentary Fee
ADDRESS:		License Wt.:	Federal Excise Tax
		State Insp.:	TOTAL SALE PRICE
DATED:		License:	Payoff on Trade
DRAFT FOR \$		Title:	Ext. Service Agreement
DRAFT THRU:		Transfer:	Less Deposit
ADDRESS:		Total Balance Due	\$ 441,289.00

Full disclosure required by federal regulation "Z", The Consumer Protection Act and The Texas Consumer Credit Code, will be made prior to consummation of a credit sale. This written order comprises the entire agreement pertaining to this purchase and no other agreement of any kind, verbal understanding or promise whatsoever, will be recognized. It is expressly agreed that the purchaser acquires no right, title or interest in or to the property which he agrees to purchase hereunder until such property is delivered to him/her and either the full price is paid in cash or satisfactory deferred payment agreement is executed by the parties hereto, the terms of which shall thereafter be controlling, and a clear title is furnished to dealer for the used cars or trucks involved, if any. THIS IS NOT A CONDITIONAL SALES CONTRACT, BUT IS A BUYER'S ORDER. All new vehicles carry the standard factory warranty. It is understood there is no guarantee on the above described new or used vehicle other than appears on this Buyer's Order. Mileage, if used vehicle model is not guaranteed and a verbal agreement by the Salesman will not be considered binding on the Seller. It is agreed that neither Freightliner of Austin nor the manufacturer will be

Prepared for:
 STEVE VAVRECKA
 CITY OF FRIENDSWOOD
 152355 BLACKHAWK BLVD
 FRIENDSWOOD, TX 77546
 Phone: 281-996-3384

Prepared by:
 Kevin Krieg
 FREIGHTLINER OF AUSTIN
 1701 SMITH ROAD
 AUSTIN, TX 78721
 Phone: 512-389-0000

S P E C I F I C A T I O N P R O P O S A L

Description	Weight Front	Weight Rear
Price Level		
SD PRL-20D (EFF:04/30/19)		
Data Version		
SPECPRO21 DATA RELEASE VER 001		
Vehicle Configuration		
114SD CONVENTIONAL CHASSIS	7,934	6,476
2020 MODEL YEAR SPECIFIED		
SET FORWARD AXLE - TRUCK		
STRAIGHT TRUCK PROVISION		
LH PRIMARY STEERING LOCATION		
General Service		
TRUCK CONFIGURATION		
DOMICILED, USA (EXCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
UTILITY/REPAIR/MAINTENANCE SERVICE		
GOVERNMENT BUSINESS SEGMENT		
LIQUID BULK COMMODITY		
TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
MAXIMUM 8% EXPECTED GRADE		
SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
FREIGHTLINER LEVEL II WARRANTY		
EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs		
EXPECTED REAR DRIVE AXLE(S) LOAD : 46000.0 lbs		
EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 66000.0 lbs		



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Description	Weight Front	Weight Rear
Truck Service		
SEWER/INDUSTRIAL VACUUM BODY		
VACTOR		
Engine		
CUM L9 370 HP @ 2000 RPM, 2100 GOV RPM, 1250 LB/FT @ 1400 RPM	-850	-70
Electronic Parameters		
75 MPH ROAD SPEED LIMIT		
CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		
PTO MODE ENGINE RPM LIMIT - 900 RPM		
PTO MODE BRAKE OVERRIDE - SERVICE BRAKE APPLIED		
PTO RPM WITH CRUISE SET SWITCH - 900 RPM		
PTO RPM WITH CRUISE RESUME SWITCH - 900 RPM		
PTO MODE CANCEL VEHICLE SPEED - 5 MPH		
PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
PTO MINIMUM RPM - 700		
REGEN INHIBIT SPEED THRESHOLD - 5 MPH		
Engine Equipment		
2016-2019 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION		
NO 2008 CARB EMISSION CERTIFICATION		
STANDARD OIL PAN		
ENGINE MOUNTED OIL CHECK AND FILL		
SIDE OF HOOD AIR INTAKE WITH DONALDSON HIGH CAPACITY AIR CLEANER WITH SAFETY ELEMENT, FIREWALL MOUNTED		
DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE		
(2) DTNA GENUINE, FLOODED STARTING, MIN 2000CCA, 370RC, THREADED STUD BATTERIES	-50	-10
BATTERY BOX FRAME MOUNTED		
STANDARD BATTERY JUMPERS		
SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB		
* WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
KEEP CABLES TIGHT TO RAIL AND CLEAR OF L H PTO SHAFT REF S/N BN3946		

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Description	Weight Front	Weight Rear
NON-POLISHED BATTERY BOX COVER		
NO CAB AUXILIARY POWER WIRING		
CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM		
NO RETARDER		
RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE	30	25
ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH		
INTEGRATED STACK AND B-PILLAR PIPE WITH MINIMUM STACK PROTRUSION ABOVE CAB		
RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP		
13 GALLON DIESEL EXHAUST FLUID TANK		
100 PERCENT DIESEL EXHAUST FLUID FILL		
STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
STANDARD DIESEL EXHAUST FLUID TANK CAP		
STAINLESS STEEL AFTERTREATMENT DEVICE/MUFFLER/TAILPIPE SHIELD		
HORTON 2-SPEED DRIVEMASTER ADVANTAGE POLAREXTREME FAN DRIVE		
AUTOMATIC FAN CONTROL WITH DASH SWITCH AND INDICATOR LIGHT, NON ENGINE MOUNTED		
CUMMINS SPIN ON FUEL FILTER		
COMBINATION FULL FLOW/BYPASS OIL FILTER		
FLEETGUARD PLAIN COOLANT FILTER		
1300 SQUARE INCH ALUMINUM RADIATOR	-20	
ANTIFREEZE TO -34F, ETHYLENE GLYCOL PRE- CHARGED SCA HEAVY DUTY COOLANT		
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
RADIATOR DRAIN VALVE		
ELECTRIC GRID AIR INTAKE WARMER		

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Description	Weight Front	Weight Rear
DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH	-35	
Transmission		
ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION		
Transmission Equipment		
ALLISON VOCATIONAL PACKAGE 172 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL RDS		
ALLISON VOCATIONAL RATING FOR ON/OFF HIGHWAY APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		
PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
S5 PERFORMANCE LIMITING PRIMARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
S5 PERFORMANCE LIMITING SECONDARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
2100 RPM PRIMARY MODE SHIFT SPEED		
2100 RPM SECONDARY MODE SHIFT SPEED		
FUEL SENSE 2.0 DISABLED - MAXIMUM PERFORMANCE - TABLE BASED		
DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
VEHICLE INTERFACE WIRING CONNECTOR WITHOUT BLUNT CUTS, AT BACK OF CAB		
ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR FIREWALL MOUNTED		
(2) CUSTOMER INSTALLED MUNCIE CS10 SERIES PTO'S		
PTO MOUNTING, LH AND RH SIDES OF MAIN TRANSMISSION		
MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
TRANSMISSION PROGNOSTICS - ENABLED 2013		
WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK	-15	

Prepared for:
 STEVE VAVRECKA
 CITY OF FRIENDSWOOD
 152355 BLACKHAWK BLVD
 FRIENDSWOOD, TX 77546
 Phone: 281-996-3384

Prepared by:
 Kevin Krieg
 FREIGHTLINER OF AUSTIN
 1701 SMITH ROAD
 AUSTIN, TX 78721
 Phone: 512-389-0000

Description	Weight Front	Weight Rear
TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		
Front Axle and Equipment		
MFS-20-133A 20,000# FL1 71.0 INCH KPI/3.74 INCH DROP SINGLE FRONT AXLE	260	
MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES	10	
NON-ASBESTOS FRONT BRAKE LINING CONMET CAST IRON FRONT BRAKE DRUMS FRONT BRAKE DUST SHIELDS	5	
FRONT OIL SEALS VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL STANDARD SPINDLE NUTS FOR ALL AXLES HALDEX AUTOMATIC FRONT SLACK ADJUSTERS STANDARD KING PIN BUSHINGS		
TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR POWER STEERING PUMP 4 QUART POWER STEERING RESERVOIR OIL/AIR POWER STEERING COOLER ORGANIC SAE 80/90 FRONT AXLE LUBE	130	
Front Suspension		
20,000# FLAT LEAF FRONT SUSPENSION GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION NO FRONT SUSPENSION OPTIONS FRONT SHOCK ABSORBERS	310	
Rear Axle and Equipment		
RT-46-160P 46,000# R-SERIES TANDEM REAR AXLE 5.63 REAR AXLE RATIO IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		450
MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES	40	40

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Description	Weight Front	Weight Rear
(1) INTERAXLE LOCK VALVE FOR TANDEM OR TRIDEM DRIVE AXLES		
BLINKING LAMP WITH EACH INTERAXLE LOCK SWITCH, INTERAXLE UNLOCK DEFAULT WITH IGNITION OFF		
MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
NON-ASBESTOS REAR BRAKE LINING		
CAM BRAKE AUXILIARY SUPPORT BRACKETS		
CONMET CAST IRON REAR BRAKE DRUMS		20
REAR BRAKE DUST SHIELDS		10
REAR OIL SEALS		
BENDIX EVERSURE LONGSTROKE 2-DRIVE AXLES SPRING PARKING CHAMBERS		
HALDEX AUTOMATIC REAR SLACK ADJUSTERS		
ORGANIC SAE 80/90 REAR AXLE LUBE		
STANDARD REAR AXLE BREATHER(S)		

Rear Suspension

HENDRICKSON RT463 @46,000# REAR SUSPENSION	750
HENDRICKSON RT/RTE - 6.00" SADDLE	
STANDARD AXLE SEATS IN AXLE CLAMP GROUP	
54 INCH AXLE SPACING	10
STEEL BEAMS AND BRONZE CENTER BUSHINGS WITH BAR PIN ADJUSTABLE END CONNECTIONS	
FORE/AFT CONTROL RODS	

Brake System

WABCO 4S/4M ABS	
REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES	
FIBER BRAID PARKING BRAKE HOSE	
STANDARD BRAKE SYSTEM VALVES	
STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM	
STANDARD U.S. FRONT BRAKE VALVE WITH ABS VALVES IN RAILS WITH RH HEAT SHIELDING	
RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE	
BW AD-9 BRAKE LINE AIR DRYER WITH HEATER	20

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	Description	Weight Front	Weight Rear
*	AIR DRYER MOUNTED INBOARD ON LH RAIL, LOCATE AT 4350		
*	STEEL AIR BRAKE RESERVOIRS; CUSTOMER ACCEPTS TANKS MOUNTED PERPENDICULAR TO RAIL	10	10
	MOUNT PERPENDICULAR REAR OF AFTERTREATMENT AT 2950 MOUNT REMAING TANKS IN AFTERFRAME		
	PULL CABLE ON WET TANK, PETCOCK DRAIN VALVES ON ALL OTHER AIR TANKS		
	METALLIC AIR MANIFOLD MOUNTED TO BACK OF CAB CROSSMEMBER WITH SIX 1/4 INCH FITTINGS AND 70 PSI PROTECTION VALVE	5	

Trailer Connections

UPGRADED CHASSIS MULTIPLEXING UNIT

Wheelbase & Frame

	7025MM (277 INCH) WHEELBASE		
N	7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI	810	140
	1/4 INCH (6.35MM) C-CHANNEL INNER FRAME REINFORCEMENT	240	460
	1800MM (71 INCH) REAR FRAME OVERHANG		
	FRAME OVERHANG RANGE: 71 INCH TO 80 INCH	-30	130
	24 INCH INTEGRAL FRONT FRAME EXTENSION	140	-20
	CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 193.14 in		
	CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 190.14 in		
	CALC'D FRAME LENGTH - OVERALL : 399.19		
	CALCULATED FRAME SPACE LH SIDE : 107.11 in		
	CALCULATED FRAME SPACE RH SIDE : 246.87 in		
	CALC'D SPACE AVAILABLE FOR DECKPLATE : 193.54 in		
	SQUARE END OF FRAME		
	FRONT CLOSING CROSSMEMBER		
	STANDARD WEIGHT ENGINE CROSSMEMBER		
*	STANDARD MIDSHIP #1 CROSSMEMBERS LOCATED AT H:3150 AND H:4750		
*	INCREASED CROSSMEMBER SPACING REQUIRED BY ENGINEERING WITH 562-054		

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	Description	Weight Front	Weight Rear
*	STANDARD REARMOST CROSSMEMBER MOUNTED 960MM AFT OF REAR SUSPENSION CROSSMEMBER		
	HEAVY DUTY SUSPENSION CROSSMEMBER		30
Chassis Equipment			
	OMIT FRONT BUMPER, CUSTOMER INSTALLED SPECIAL BUMPER, DOES NOT COMPLY WITH FMCSR 393.203	-100	
	GRADE 8 THREADED HEX HEADED FRAME FASTENERS INSTALLED WITH BOLT HEADS ON OUTSIDE OF FRAME		
*	DRILLING PREP FOR VACTOR PER DRAWING 504400J, REVISION B		
	D15-16004-000 CENTER PUNCH TO MARK CENTERLINE OF REAR SUSPENSION ON FRAME WEB		
Fuel Tanks			
	100 GALLON/378 LITER ALUMINUM FUEL TANK - LH	20	
	25 INCH DIAMETER FUEL TANK(S)		
	PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
	FUEL TANK(S) FORWARD		
	PLAIN STEP FINISH		
	FUEL TANK CAP(S)		
	DETROIT FUEL/WATER SEPARATOR WITH WATER IN FUEL SENSOR, HAND PRIMER AND 12 VOLT PREHEATER"	10	
	EQUIFLO INBOARD FUEL SYSTEM		
	NO NATURAL GAS VEHICLE FUEL TANK VENT LINE/STACK		
	AUXILIARY FUEL SUPPLY AND RETURN PORTS LOCATED ON LH FUEL TANK		
	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
*	FUEL COOLER MOUNTED LH OUTBOARD AT 3250		
Tires			
	MICHELIN XZY-3 425/65R22.5 20 PLY RADIAL FRONT TIRES	196	
	MICHELIN X MULTI D 11R22.5 16 PLY RADIAL REAR TIRES (NORTH AMERICAN ONLY)		120
Hubs			

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Description	Weight Front	Weight Rear
CONMET PRESET PLUS PREMIUM IRON FRONT HUBS		
CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
Wheels		
ACCURIDE 29374A 22.5X12.25 10-HUB PILOT 4.75 INSET 10-HAND ALUMINUM DISC FRONT WHEELS	-8	
ACCURIDE 42644 ACCU-LITE 22.5X8.25 10-HP ALUMINUM DISC REAR WHEELS		-240
Cab Exterior		
114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB		
AIR CAB MOUNTING		
NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE		
FRONT FENDERS		
3-1/2 INCH FENDER EXTENSIONS	15	
LH AND RH GRAB HANDLES		
BRIGHT FINISH RADIATOR SHELL/HOOD BEZEL		
STATIONARY BLACK GRILLE WITH BRIGHT ACCENTS		
CHROME HOOD MOUNTED AIR INTAKE GRILLE		
FIBERGLASS HOOD		
HOOD LINER, ADDED FIREWALL AND FLOOR HEAT INSULATION	5	
SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK		
SINGLE ELECTRIC HORN		
SINGLE HORN SHIELD		
DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME WITH (4) KEYS		
REAR LICENSE PLATE MOUNT END OF FRAME		
HALOGEN COMPOSITE HEADLAMPS WITH BRIGHT BEZELS		
(5) AMBER MARKER LIGHTS		
INTEGRAL STOP/TAIL/BACKUP LIGHTS		
STANDARD FRONT TURN SIGNAL LAMPS		
DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE		
DOOR MOUNTED MIRRORS		
102 INCH EQUIPMENT WIDTH		

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Description	Weight Front	Weight Rear
LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
STANDARD SIDE/REAR REFLECTORS		
RH AFTERTREATMENT SYSTEM CAB ACCESS WITH POLISHED DIAMOND PLATE COVER		
COMPOSITE EXTERIOR SUN VISOR	10	
63X14 INCH TINTED REAR WINDOW		
TINTED DOOR GLASS LH AND RH WITH TINTED OPERATING WING WINDOWS		
RH AND LH ELECTRIC POWERED WINDOWS, PASSENGER SWITCHES ON DOOR(S)	4	
TINTED WINDSHIELD		
8 LITER WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITHOUT FLUID LEVEL INDICATOR		
Cab Interior		
OPAL GRAY VINYL INTERIOR		
MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR		
MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR		
BLACK MATS WITH SINGLE INSULATION		
DASH MOUNTED ASH TRAYS AND LIGHTER		
FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING		
IN DASH STORAGE BIN		
(2) CUP HOLDERS LH AND RH DASH		
GRAY/CHARCOAL FLAT DASH		
5 LB. FIRE EXTINGUISHER	10	
HEATER, DEFROSTER AND AIR CONDITIONER		
STANDARD HVAC DUCTING		
MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
PREP KIT FOR CUSTOMER INSTALLED AUXILIARY HEATER, INSTALL SPECIFIC FOR VACTOR BODY, PLUMBING FROM ENG TO RAIL MTD SHUTOFF VALVES AT CUSTOMER SPECIFIED LOCATION	25	
* STANDARD HEATER PLUMBING WITH BALL SHUTOFF VALVES		
* AUXILIARY HEATER PLUMBING		

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Description	Weight Front	Weight Rear
VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR		
BINARY CONTROL, R-134A		
STANDARD INSULATION		
SOLID-STATE CIRCUIT PROTECTION AND FUSES		
12V NEGATIVE GROUND ELECTRICAL SYSTEM		
DOME DOOR ACTIVATED LH AND RH, DUAL READING LIGHTS, FORWARD CAB ROOF		
LH AND RH ELECTRIC DOOR LOCKS		
(1) 12 VOLT POWER SUPPLY IN DASH		
TRIANGULAR REFLECTORS WITHOUT FLARES	10	
BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION	30	
BASIC HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION	25	10
DUAL DRIVER AND PASSENGER SEAT ARMRESTS	8	
LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
VINYL WITH VINYL INSERT DRIVER SEAT		
VINYL WITH VINYL INSERT PASSENGER SEAT		
BLACK SEAT BELTS		
ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
4-SPOKE 18 INCH (450MM) STEERING WHEEL		
DRIVER AND PASSENGER INTERIOR SUN VISORS		

Instruments & Controls

	GRAY DRIVER INSTRUMENT PANEL	
	GRAY CENTER INSTRUMENT PANEL	
*	ENGINE REMOTE INTERFACE WITHOUT INTERLOCKS	
	BLACK GAUGE BEZELS	
	LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM	
	2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES	
	INTAKE MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS	
	97 DB BACKUP ALARM	3
	ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL	

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	Description	Weight Front	Weight Rear
	KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY		
	ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED		
	(1) HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH AND (1) SAE J1939 DIAGNOSTIC INTERFACE CONNECTOR LOCATED CENTER OF DASH		
	2 INCH ELECTRIC FUEL GAUGE		
	ENGINE REMOTE INTERFACE WITH INCREMENT/DECREMENT		
	ENGINE REMOTE INTERFACE CONNECTOR IN ENGINE COMPARTMENT		
*	VACTOR INTERLOCK PREP		
	ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
	TRANSMISSION OIL TEMPERATURE INDICATOR LIGHT		
	ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
	CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS		
	ELECTRIC ENGINE OIL PRESSURE GAUGE		
	OVERHEAD INSTRUMENT PANEL		
	AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH AND USB AND AUXILIARY INPUTS, J1939	10	
	DASH MOUNTED RADIO		
	(2) RADIO SPEAKERS IN CAB		
	AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF		
	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
	STANDARD VEHICLE SPEED SENSOR		
	ELECTRONIC 3000 RPM TACHOMETER		
	NO VEHICLE PERFORMANCE MONITOR	-5	
	IGNITION SWITCH CONTROLLED ENGINE STOP		
	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY		
	MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH		

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Description	Weight Front	Weight Rear
ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE		
INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS		

Design

PAINT: ONE SOLID COLOR

Color

CAB COLOR A: L0006EB WHITE ELITE BC
 BLACK, HIGH SOLIDS POLYURETHANE CHASSIS
 PAINT
 SUNVISOR PAINTED SAME AS CAB COLOR A
 STANDARD E COAT/UNDERCOATING

Certification / Compliance

U.S. FMVSS CERTIFICATION, EXCEPT SALES
 CABS AND GLIDER KITS

Secondary Factory Options

CORPORATE PDI CENTER IN-SERVICE ONLY

Raw Performance Data

CALC'D FRAME LENGTH - OVERALL : 399.19
 CALCULATED EFFECTIVE BACK OF CAB TO
 REAR SUSPENSION C/L (CA) : 190.14 in
 CALC'D SPACE AVAILABLE FOR DECKPLATE :
 193.54 in

Sales Programs

NO SALES PROGRAMS HAVE BEEN SELECTED

TOTAL VEHICLE SUMMARY

Weight Summary

	Weight Front	Weight Rear	Total Weight
Factory Weight ⁺	9219 lbs	8344 lbs	17563 lbs

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Total Weight ⁺	9219 lbs	8344 lbs	17563 lbs
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Extended Warranty

CUM 2017 L9: HD1 MD DTY 5 YEARS / 100,000 MILES / 161,000 KM
EXTENDED WARRANTY. FEX APPLIES

CUM 2017 L9: AT3 MD DTY 5 YEARS / 100,000 MILES / 161,000 KM
AFTERTREATMENT. FEX APPLIES

ALLISON 3000 RDS SERIES TRANSMISSION EXTEND WARRANTY, 5
YEARS/UNLIMITED MILES FEX

TOWING: 5 YEARS/UNLIMITED MILES/KM EXTENDED TOWING
COVERAGE \$550 CAP FEX APPLIES

(+) Weights shown are estimates only.

If weight is critical, contact Customer Application Engineering.

(***) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.



Presents a Proposal Summary

of the



2100i

Combination Single Engine Sewer Cleaner with Positive Displacement Vacuum System Mounted on a Heavy Duty Freightliner Truck Chassis

for

The City of Friendswood

PRODUCT DESCRIPTION

- 2100i with Roots 824-18" Hg. Blower, 12[✓] Yard Debris body, 1500 Gallons of Fresh Water
- Tandem Axle Freightliner SD114 Chassis

STANDARD FEATURES

- Aluminum Fenders
- Mud Flaps
- Electric/Hydraulic Four Way Boom
- Color Coded Sealed Electrical System
- Remote Pendant Control w/35' Cord
- Intuitouch Electronic Package
- Double Acting Dump Hoist Cylinder
- Handgun Assembly w/35' x 1/2" Hose w/Quick Disconnects
- 3" Y-Strainer at Water Pump Inlet
- Ex-Ten Steel Cylindrical Debris Tank
- Flexible Hose Guide
- 30 Deg. Sand Nozzle w/Carbide Inserts
- 30 Deg. Sanitary Nozzle w/Carbide Inserts
- 15 Deg. Penetrator Nozzle w/Carbide Inserts
- Nozzle Storage Rack
- Vacuum Tube Storage: Curbside (2) Pipe, Rear Door (2) Pipe
- 1" Nozzle
- 10' Leader Hose
- Flat Rear Door w/Hydraulic Locks and Door Power-up/Down, Open/Close Feature[✓]
- Dual 10" Stainless Steel Float Shut Off System/Rear Mounted
- Debris Body Vacuum Relief System
- Debris Deflector Plate
- 60" Dump Height
- Water Sight Gauge DS/PS
- Liquid Float Level Indicator
- Boom Transport Post Storage
- 3" Y-Strainer @ Water Pump w/3" Drain Valve
- Performance Package: (Hyd Variable Flow, Dual PTO's, Dual Hyd. Pumps)
- 1" Water Relief Valve for Vactor Water Pump
- Stainless Steel Microstrainer
- Blower Air Shift Controls
- Hydraulic Cooling Package
- Midship Handgun Coupling
- Side Mounted Water Pump
- Hose Wind Guide (Dual Roller)
- Hose Footage Counter - Mechanical
- Hose Reel Manual Hyd. Extend/Retract
- Hose Reel Chain Cover (Full)
- Tachometer/Chassis Engine W/Hourmeter
- Circuit Breakers
- LED Lights. Clearance, Back-Up, Stop, Tail & Turn
- Tow Hooks, Front and Rear
- Electronic Back-Up Alarm
- Hydraulic Tank Shutoff Valves
- 7" Vacuum Pipe Package
- Emergency Flare Kit
- Fire Extinguisher 5 Lbs.
- Low Water Alarm with Water Pump Flow Indicator
- Front Joystick Boom Control

- Rodder System Accumulator- Jack Hammer on/off control w/ manual valve
- Digital Hose Footage Counter
- Water Pump Hour Meter
- PTO Hour Meter
- Hydraulic Oil Temp Alarm
- Digital Water Pressure Gauge
- Chassis Modifications

ADDITIONAL FEATURES

- 48" x 22" x 24" Curb Side Aluminum Toolbox with Lighting
- Roots 824-18" Hg. Blower
- 180 Degree Rotation, 10 Ft. Telescoping Boom x 15 Ft. Hydraulic Extendable
- Boom out of Position Light/Alarm
- 80 GPM Variable Flow Water System
- 2500 PSI Water Pressure
- 1" x 800' Piranha Sewer Hose, 2500 PSI
- Hydraulic Extending/Rotating 15" Hose Reel (1" x 800') Capacity
- Module Paint, Dupont Imron Elite - Sanded Primer Base
- Debris Body Flush Out System
- 6" Rear Door Port, No Valve, 6:00 Position
- Centrifugal Separators
- Folding Pipe Rack, Curbside, 7" Pipe
- Fixed Rear Door Pipe Rack, 7" Pipe
- Rear Door Splash Shield
- Lube Manifold
- Plastic Lube Chart
- Wireless Controls, including hose reel controls
- Rotatable Boom Inlet Hose, 10 x 15 RDB
- Handgun Couplers, Front and Rear
- Hydro Excavation Kit - Includes Lances, Nozzles, Storage Tray, and Vacuum Tubes
- Automatic Hose Level Wind Guide, Non-Indexing
- High Pressured Hose Reel
- Rodder Pump Drain Valves
- Rear Directional Control, Split LED Arrow Traffic Controller, 10 Lights
- Waterproof, Rechargeable, Wireless, Handheld, LED Spot Light w/12V Charger and Plug
- Strobe Light, LED, Rear, Federal Signal, Amber
- Federal Signal Strobe Lights - 4 Flashing Light LED System
- Debris Body-Up Alarm
- Worklights (2), LED, 10 x 15 RDB
- Toolbox, Front Bumper Mounted, 16 x 12 x 18 w/(2) LED Side Markers
- Behind Cab Toolbox with Lighting
- Toolbox, Driver Side Chassis Frame, 24w x 24h x 24d, with Lighting
- Toolbox, Driver Side Subframe, 18w x 24h x 24d, with Lighting
- Camera System, Front, Rear and Both Sides
- Safety Cone Storage Rack - Post Style
- Digital Water Level Indicator
- Debris Body Level Indicator
- Blower High Temperature Safety Shutdown
- Vactor Standard Manual and USB Version - 1 + Dealer

This quote is in accordance with the Buy Board Cooperative Purchasing contract number 593-19.

This quote is given as a matter of convenience. Due to the motor vehicle laws in the State of Texas, this transaction is required to go through a franchised chassis dealer. Therefore, any purchase orders and checks should be sent to the chassis dealership.

Factory Total: \$436,990.00

Price valid until 12/31/2019

Product Model: 2100i

Quote Number: 2019-33784

Price List Date: 7/1/2019

Proposal Notes:

1. Multiple unit orders will be identical to signed proposal. Changes or deviations to any unit of a multiple unit order will require a new signed proposal.
2. Chassis specifications and data codes for customer supplied chassis must be submitted to and approved by Vactor Manufacturing prior to submittal of customer purchase order
3. All prices quoted are in US Dollars unless otherwise noted.

SIGNED BY:

_____ Date: _____

THIS CHANGES
EVERYTHING.



AGAIN.

VACTOR®
2100i

THE NEW VACTOR® 2100i. SIMPLY BETTER.



intuitive. intelligent. innovative. individualized. incomparable.

These words describe the new Vactor 2100i. Add it all together and you have a machine that combines proven performance with a new level of simplicity and ease. With an emphasis on ergonomics, Vactor has engineered an array of innovations that together speeds work, reduces fatigue on your operators, and lets them focus on the work in front of them, not the machine behind them. Among the host of innovations you'll find on the 2100i are:

- New IntuiTouch™ single in-cab control screen for PTO/Transfer Case Activation that is as simple as pushing a button
- New IntuiTouch operator control station that features a singular, adjustable control panel for operator ease and comfort during all sewer cleaning functions
- New 7" easy-to-read screen at the operator's station to monitor critical data from the sewer cleaning system and chassis
- New optional wireless controls, including updated belly pack and handheld remotes featuring a view screen for monitoring key operational functions when working away from the truck
- New optional RDB 1015™ Rapid Deployment Boom telescopes out 10 feet and extends the debris hose down 15 feet minimizing the need for additional tubes, speeding and easing set-up and tear-down

The new 2100i is truly the evolution of a revolution that is not just easier to operate...it's easier on the operator

VACTOR 2100i.

INTUITIVE IN EVERY WAY.

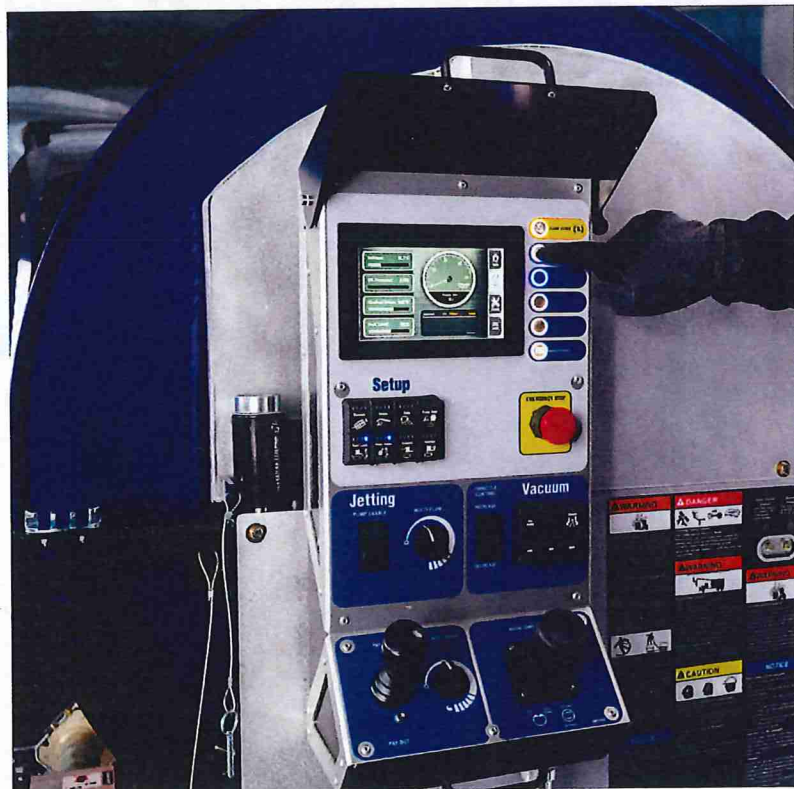
New IntuiTouch™ one-touch in-cab controls redefine simplicity

- 7" touch screen control features backlit tactile buttons
- Includes controls and viewing screen for camera, lighting, recirculation and PTO/Transfer case activation
- One-Touch engagement to activate PTO and transfer case – allowing operators to gain control of all operational systems
- Operator can view the current operating mode, recirculation status, flows, pressures and more



New IntuiTouch control station puts all cleaning system functions into a single, simple control panel

- Articulating controls with up/down adjustment for individualized maximum comfort – articulation allows the control panel to adjust on a 90 degree arc for better access and screen visibility while operating the hose reel and boom
- All controls are consolidated into a single control panel including a 7" dashboard screen with glove-friendly tactile buttons featuring at-a-glance data for water pressure and flow, hose footage, chassis RPM, vacuum information, water level*, debris tank level* and more



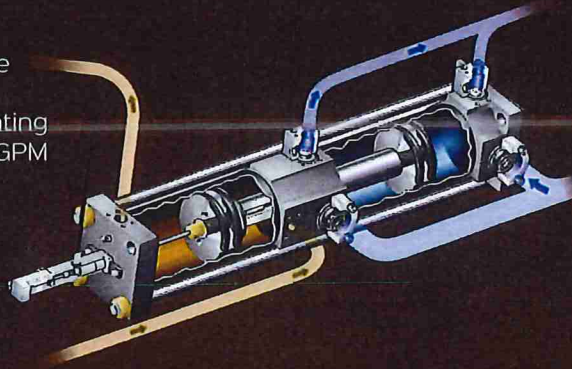
- New, reliable touch buttons with backlit feedback enable the operator to know if a selected function is active
- The new hose reel joystick significantly improves response time and pays in and out in the direction of the hose reel
- The boom joystick has a telescoping feature built in, giving the operator full mobility with multiple direction boom movement for quicker set up
- Operators have full control of the water system via a single Multi-Flow control dial – enabling them to precisely match the flow and pressure to the job requirements
- E-stops located at all operator control points bring the unit to a safe condition to protect both the operator and the equipment

*Optional equipment

UP AND DOWN, FRONT AND BACK THE VACTOR 2100i OFFERS YOU GREATER OPERATING EASE AND EFFICIENCY.

- JetRodder[®] Water Pump

- Uniquely designed for sewer cleaning, the JetRodder Water Pump provides smooth continuous flows through its entire operating range – ranges available from 0 to 100 GPM and pressures up to 3000 PSI
- Easily activated, powerful “Jackhammer” action for long runs or difficult blockages
- The slow movements of its five moving parts make the Vactor JetRodder pump the industry leader in longevity and carefree maintenance



- Vactor's Multi-Flow system lets operators set the flow at a lower rpm resulting in better fuel economy without sacrificing performance
- Vactor's unique air-routing and filtration system get the work done faster, safer, and more productively
- All water valves are located in the same mid-ship control station, reducing the amount of walking back and forth around the truck by the operator
- The quieter engine design, high ground clearance, lower water fill point, and twist-and-lock pipe restraints enhance the operator experience
- The hose reel can telescope out up to 15 inches and rotate up to 270° for optimal positioning
- Vactor's water tank system is designed and built with high quality, high-strength light weight aluminum for maximum capacity and maintaining a low center of gravity – the tanks feature superior corrosion resistance and are backed by a 10-year standard warranty
- Unique Modul-Flex design provides for maximum capacities and optimum weight distribution on every truck
- Standard 60 inch (1524 mm) high dump enables you to unload debris into roll-offs up to 5-feet (1.524 m) high without requiring a lift or ramp



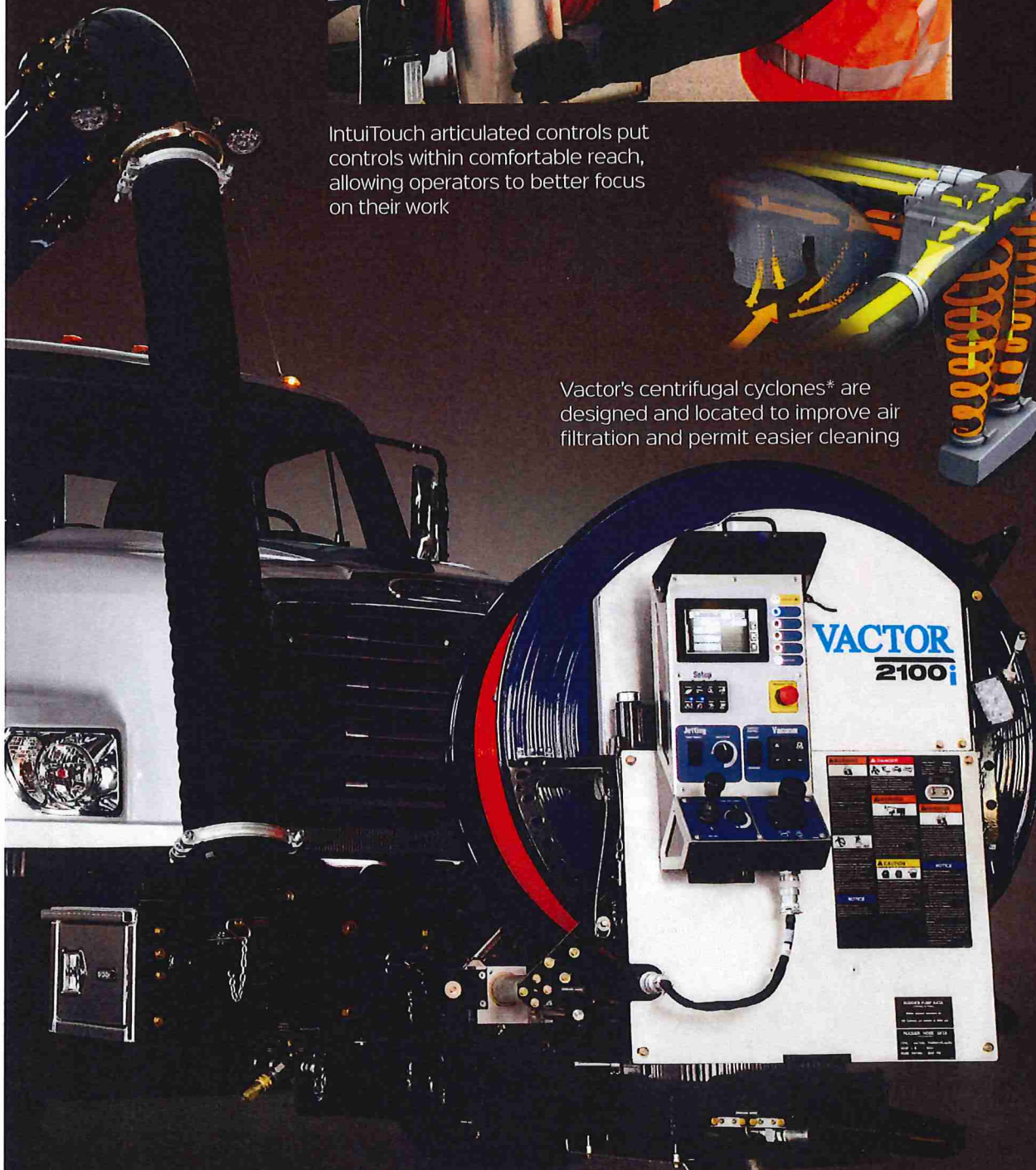
VACTOR
2100i



IntuiTouch articulated controls put controls within comfortable reach, allowing operators to better focus on their work



Vactor's centrifugal cyclones* are designed and located to improve air filtration and permit easier cleaning

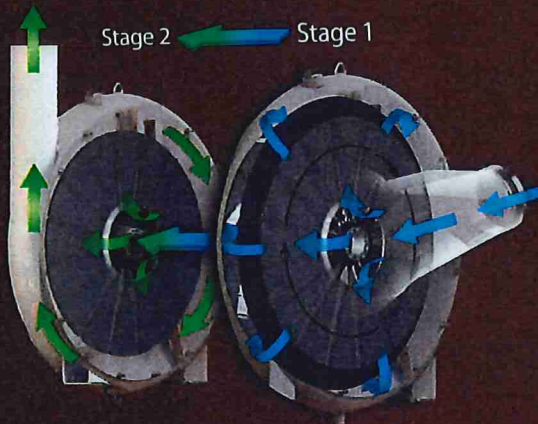
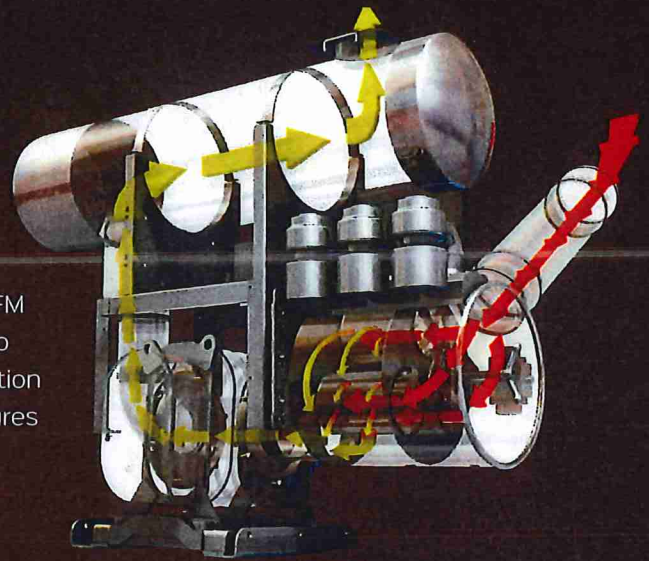


*Optional equipment

THE VACTOR 2100i COMES IN THE CONFIGURATIONS YOU NEED.

Our Positive Displacement (PD) model is ideal for pulling material long distances

With blower offerings providing inlet volumes in excess of 5000 CFM and 18 Hg vacuum, the Vactor 2100i PD is the machine you need to tackle your deepest pulls. In addition, our multi-stage blower filtration system is the most productive of its kind, and unique design features make the 2100i the most operator friendly unit available.



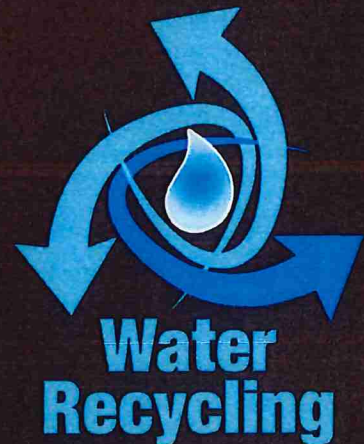
For all around service, choose a single engine, single or dual stage fan model

Vactor's fan system is the right choice for all-around sanitary and storm sewer cleaning. Whether equipped with a single or dual (for greater vacuum) fan system, our lightweight, perfectly balanced aluminum fan provides superior performance to handle your toughest jobs. Our unique system also minimizes energy consumption while maximizing performance.

Our water recycling model saves thousands of gallons of clean water every shift

Simple to operate, our self-cleaning system offers significant advantages:

- Absolute water filtration to 100 micron particle sizes eliminates most abrasive particles to protect the water pump, hoses, nozzles, and sewer lines
- 5-stage filtration system combines settling, centrifugal separation and absolute filtration to 100 microns
- Simultaneous operation recycles water while cleaning lines
- No moving parts in the body or tanks
- Never a need to enter a body or tank to maintain the system components



CUSTOMIZE YOUR 2100i WITH PERFORMANCE DRIVEN OPTIONS.

Our RDB 1015 Rapid Deployment Boom **RDB 1015**™

Our revolutionary new boom telescopes 10 feet out and extends the debris hose down 15 feet speeding work, and, in many cases, eliminating the need for additional tubes, reducing operator fatigue. The RDB 1015 offers you:

- Dramatic reduction in set-up and tear-down time with boom's ability to pay-in and pay-out 15 feet of vacuum hose
- Reach greater depths without raising the position of the boom to enhance speed and efficiency
- The ability to work in areas of low overhead clearance without raising the boom and still reach needed depths



New wireless controls

Vector has enhanced its wireless controls with new belly pack and handheld remotes that feature two-way data transmission, including active pressure and flow information for the water and the ability to monitor hose footage being paid out or retracted. Our wireless controls also allow:

- Extensive operation with greater control away from the fixed operator station
- Multiple control functions including hose reel control, boom control, e-stop and more



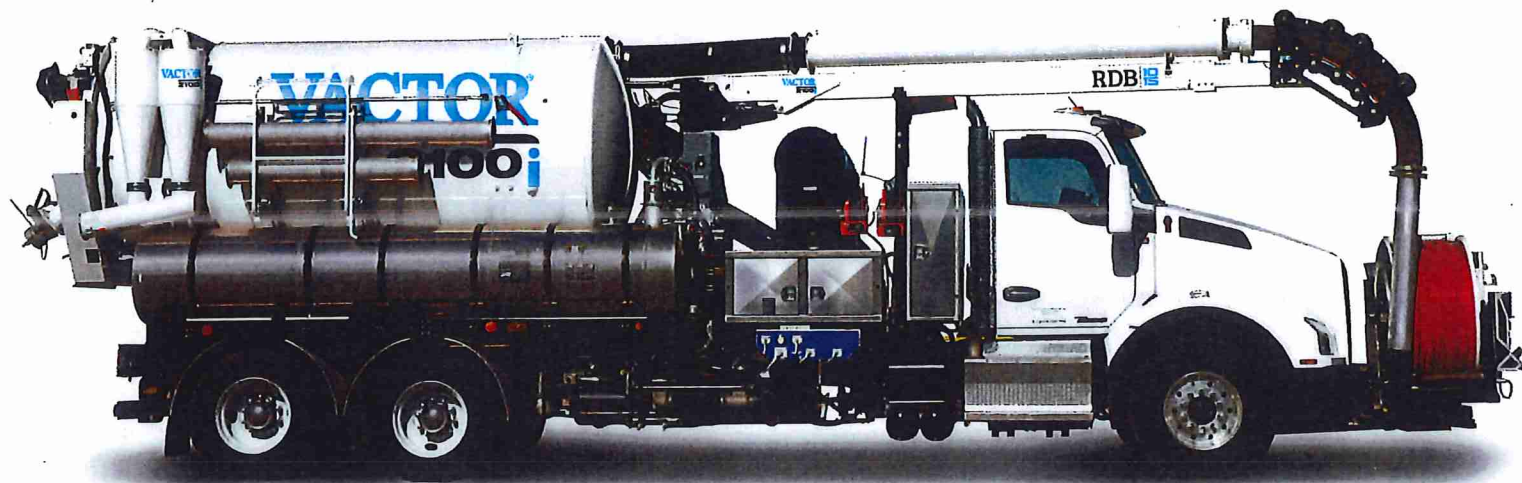
Over 100 precision-engineered enhancements are available, including:

- Cold weather recirculation system
- Liquid debris pump-off system
- Debris flush-out system
- Fail-safe hydraulic door locking system
- Water tank capacity up to 1,500 gallons (5,678 L)
- Pump delivery system up to 120 gpm
- Hose reel capacity up to 1,000 ft. (305 m)
- Automatic hose level wind guide
- Safety warning lighting packages
- Hydro-Excavation Kits

Demo the new Vector 2100i today.
Visit Vector.com to find your local dealer.

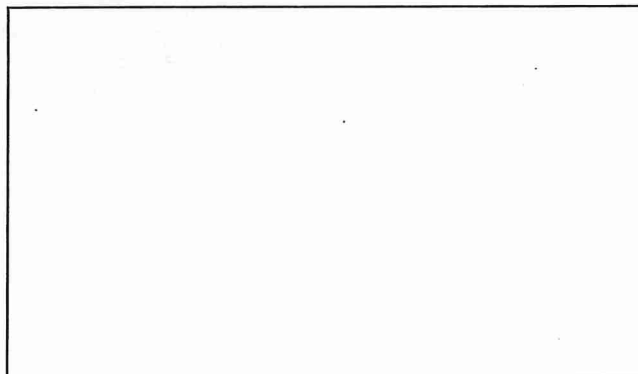
THE NEW VACTOR 2100i

Performance you expect from a proven leader.



For nearly half a century, Vactor® Manufacturing has been the leader in building combination sewer cleaners that offer innovations and design advantages that drive productivity, enhance operator performance and security, and bring operations large and small greater economy and efficiency. With the new Vactor 2100i, we have once again raised the bar, bringing you a new level of operating ease and greater control.

More than a manufacturer, Vactor offers you customized solutions featuring unmatched quality and backed by powerful support. When the rain is falling and the water is rising, Vactor is the brand you can trust.



VACTOR®

Subsidiary of Federal Signal Corporation

2100i.vactor.com

Vactor Manufacturing, Inc. • 1621 South Illinois Street • Streator, IL 61364 USA
Phone 815.672.3171 • Fax 815.672.2779

Specifications subject to change without notice. Some products shown with optional equipment. Vactor®, JetRodder®, IntuiTouch™, RDB 1015™, and ParkNClean® are registered trademarks of Vactor Manufacturing. This product may be covered by one or more United States Patents and/or pending patent applications. See: www.vactor.com/patents. Vactor is a subsidiary of Federal Signal Corp. Federal Signal is listed in the NYSE by the symbol FSS.

Effective Date 2/18

P/N 00107-F

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RDB 1015™

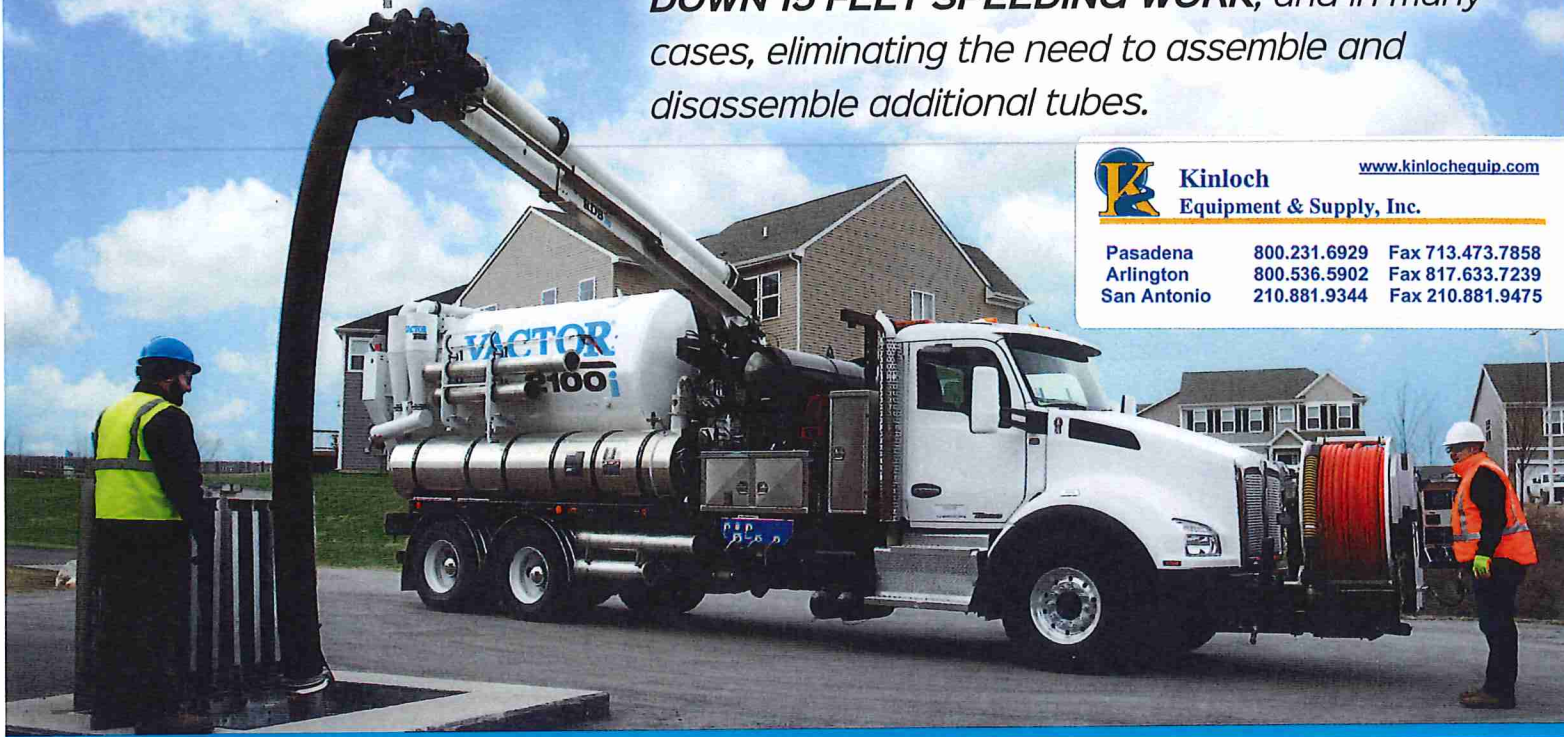
*Vector's revolutionary new boom telescopes 10 FEET OUT and extends the **DEBRIS HOSE DOWN 15 FEET SPEEDING WORK**, and in many cases, eliminating the need to assemble and disassemble additional tubes.*



**Kinloch
Equipment & Supply, Inc.**

www.kinlochequip.com

Pasadena	800.231.6929	Fax 713.473.7858
Arlington	800.536.5902	Fax 817.633.7239
San Antonio	210.881.9344	Fax 210.881.9475



RAPID DEPLOYMENT BOOM

The RDB 1015™ Offers You:

- Dramatic reduction in set-up and tear-down time with boom's ability to pay-in and pay-out 15 feet of vacuum hose
- The ability to work in areas of low overhead clearance without raising the boom and still reach needed depths with enhanced speed and efficiency
- Transport with catch basin tube attached to start work immediately, or without it for unmatched visibility
- No additional operator maintenance over a traditional 10' telescoping boom

Learn more about this revolutionary new boom and see it in action!

2100i.vector.com/RDB1015

VECTOR 2100i

1621 South Illinois Street • Streator, IL 61364 U.S.A. • (815) 672-3171 Phone • Vector.com

*Patent Pending © 2018 Vector Manufacturing. Effective 3/18 P/N: 00230

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UNDERGROUND

Phone 800 373 1318 Fax 281 485 5953

1617 Garden Road Pearland TX 77581

VacHunter 121328PH8C TM Combo**SINGLE ENGINE**

Quote Date: November 6, 2019
 Customer: City of Friendswood Texas
 Contact Info: Alex Rodriguez

Due Date:
 Salesman: David Mills
 Stock #
 P.O. Number:

Part Number	Description	Quantity	Price	Total
DEBRIS TANK				
	2400 Gallon Capacity 12 YD 72" Barrell	1	STD	STD
	Hydraulic Rear Door	1	STD	STD
	Hydraulic Dump Tank Lift	1	STD	STD
	High-Pressure Body Washout System	1	STD	STD
	6" ANSI Flange Drain with Butterfly Valve Lower door stand Pipe	1	STD	STD
	Ladder On Debris Tank & Ladder To Deck	1	STD	STD
	Baffled Water Tank	1	STD	STD
	Debris Tank Float Ball Level Indicator	1	STD	STD
	3" Gravity Drain To Front Bumper	1	\$ 1,700.00	\$ 1,700.00
	Special Splash Shield 10" off Door	1	\$ 1,500.00	\$ 1,500.00
	Purge Valve Gravity Drain 1 1/4 Ball Valve	1	\$ 345.00	\$ 345.00
	300 GPM Stanley Pump Off 10ft Lay Flat Hose		\$ 5,000.00	\$ -
	450 GPM Stanley Pump Off 10ft Lay Flat Hose		\$ 7,900.00	\$ -
	3" Knife Valve		\$ 750.00	\$ -
	6" Knife Valve		\$ 1,500.00	\$ -
	Stainless Steel Expanded Metal Screen Over Rear Door Drain		\$ 695.00	\$ -
	Stainless Steel Debris Tank & Door	1	\$ 18,000.00	\$ 18,000.00
	Stainless Steel Final Filter & Cyclone	1	\$ 6,500.00	\$ 6,500.00
HOSE REEL FRONT MOUNT 3/8" STEEL DESIGN HYDRAULIC DRIVE HOSE REEL DUAL CHAIN DRIVE				
	Reel Speed Control	1	STD	STD
	Double Roller Levelwind	1	STD	STD
	Articulating Reel Hydraulic	1	STD	STD
	1000' Capacity x 3/4"		\$ 1,500.00	
	1000' Capacity x 1"	1	\$ 2,000.00	\$ 2,000.00
	Manual Footage Counter	1	\$ 712.00	\$ 712.00
	Level Wind w/ Counter		\$ 830.00	\$ -
	Digital Footage Counter		\$ 3,500.00	\$ -
	Auto Lube Swivel	1	\$ 125.00	\$ 125.00
SEWER HOSE & CLEANING TOOLS 3000 PSI				
	Tiger Tail(1)Std 3"	1	STD	STD
	Nozzle Rack	1	STD	STD
	15 Degree Nozzle	1	STD	STD
	30 Degree Nozzle	1	STD	STD
	Nozzle Skid Assy 6"	1	STD	STD
	3/4" Leader hose	10	\$ 13.00	\$ 130.00
	3/4" Jet Hose	1000	\$ 4.15	\$ 4,150.00
3007-1481680	Red Dawg Sand Hog Nozzle		\$ 435.00	
3007-1761680	RED DAWG Root Nozzle HD		\$ 800.00	\$ -
3007-1661680	RED DAWG 10 Jet Nozzle		\$ 357.00	\$ -
3007-111ST-Alum	RED DAWG Texan Lite Nozzle		\$ 1,530.00	\$ -
W6-1"	Wire Fin Skid For 6" Pipe		\$ 87.12	\$ -
	Manhole - Upper Roller Aluminum	1	\$ 250.00	\$ 250.00
	Manhole - Hook	1	\$ 35.00	\$ 35.00
WATER SYSTEM				
	1200 Gallon Stainless Steel Water Tank (Single 1000 Gallon	1	STD	STD
	25' Fill Hose w Storage Rack	1	STD	STD
	Baffled Water Tank	1	STD	STD
	Debris-Water Tank Interconnect		\$ 2,500.00	\$ -
	Hydrant Fill Strainer	1	\$ 225.00	\$ 225.00
	Hydrant Wrench	1	\$ 25.00	\$ 25.00

PipeHunter, Inc.

1617 Garden Road, Pearland, TX 77581
 www.pipehunter.com - 800.373.1318

Part Number	Description	Quantity	Price	Total
	Corner White Strobes (2) Front (2) Rear (2) Midship - Blue/Amber	1	\$ 1,800.00	\$ 1,800.00
	Light - Hand Held Spot Light		\$ 192.00	\$ -
	Light - Low Water Warning Light	1	\$ 205.00	\$ 205.00
	LED Light - Work Light-(Control panel)	1	\$ 200.00	\$ 200.00
	LED Light - Work Light (Engine-Pump area)	1	\$ 200.00	\$ 200.00
	LED Light - Work Light (BOOM)	2	\$ 200.00	\$ 400.00
	LED Light - Work Light (Mounted Please State Area)		\$ 200.00	\$ -
	LED Lights in Toolboxes	4	\$ 200.00	\$ 800.00
	Strobe Light	1	\$ 325.00	\$ 325.00
	Panel Light	1	\$ 80.00	\$ 80.00
	Light - Work Light (Arrowstick PS) LED	1	\$ 200.00	\$ 200.00
	Light - Work Light (Arrowstick DS) LED	1	\$ 200.00	\$ 200.00
	12 Volt Power Outlet On Control Panel Female		\$ 85.00	\$ -
	Back Up Camera With Side Cameras	1	\$ 1,800.00	\$ 1,800.00
	Back Up Camera With Front Rear Camera	1	\$ 2,500.00	\$ 2,500.00
	Back Up Alarm	1	\$ 200.00	\$ 200.00
MANUALS				
	PipeHunter Operator's Manual CD	1	STD	STD
FRAME & AXLE				
	Industrial Frame	1		
	DOT LIGHTING PACKAGE	1		
	Traffic Cone Rack	2	\$ 125.00	\$ 250.00
LINER OPTION				
	PipeHunter Speed Liner Frame & Reel	1		

Liner Color: **TBD**

Quoted By: David Mills 11 5 2019

Customer Discount2020 Freightliner 114SD 66000 GVWR, " CA Auto Trans
3000 Series 350 HP

Peterbilt

*348 Trans Act***\$112,000.00**

Total Options: \$ 75,482.00
 Base Price: \$ 249,000.00
 Sub Total: \$ 324,482.00
 Discount: \$ 43,500.00
 Sub Total: \$ 280,982.00

Freight:

Ship Method: Delivered & Training Included

Notes:

Total: **\$ 402,982.00**

PH PRICING 2019 tb

Signing this quote confirms that you have verified the specifications and agree with the final costs. Any specification changes made after verification may alter costs. It is the dealer/customer's responsibility to ensure that the equipment ordered meets specifications and/or quotations.

Terms: **MUNICIPAL (NET 30) CONTRACTORS (COD)**

CHASSIS MUST " CA CHASSIS & PTO Programming Specs
List

Auto Neutral Safety- When air parking brake applied, the transmission goes to neutral.

Rear Toggle for chassis throttle at rear of unit, Chassis provider will provide a kit to include pre wired harness for connecting toggle to engine harness

Max RPM of 2100 Bump Ramp rate to match typical cruise control rate

On hold down of toggle, to idle

MOUNT REEL GVW 40000 Rear 20 Front Auto Trans 3000 Series 10 Bolt PTO 350 HP PTO TO BE OPEN BOTH PORTS

FRONT

Signature: _____

Date: _____



Combination Truck

Introducing the PipeHunter Combination Truck series. A bi-product of 50+ years in the environmental equipment industry, this truck really gets work done for contractors and municipalities alike. We left out the junk others cling to and left a simple and rugged machine with protective measures for major components.

Some would say we invented the adjective "Simple". We don't claim to, but we sure have executed on it. It takes a deep understanding of the marketplace to find where the opportunities lie, that is what we have capitalized on. Our unique perspective and experience with the market has produced a healthy understanding of what works, and what doesn't. Our performance and productivity is our proof that we have hit the nail on the head.







CONTRACT PRICING WORKSHEET
For MOTOR VEHICLES Only

Contract
No.:

HT06-18

Date
Prepared:

11/14/2019

**This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents
MUST be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.**

Buying Agency:	City of Friendswood	Contractor:	Houston Freightliner
Contact Person:	Alex Rodriguez	Prepared By:	Adam Neuse
Phone:		Phone:	713-580-8148
Fax:		Fax:	713-676-1603
Email:	arodriguez@ci.friendswood.tx.us	Email:	adam.neuse@strhouston.com

Product Code:	C3	Description:	2019 Freightliner 114SD TRA
---------------	----	--------------	-----------------------------

A. Product Item Base Unit Price Per Contractor's H-GAC Contract: 89830

B. Published Options - Itemize below - Attach additional sheet(s) if necessary - Include Option Code in description if applicable.
(Note: Published Options are options which were submitted and priced in Contractor's bid.)

Description	Cost	Description	Cost
RT-46-164P 46,000LB RR Axle	3188	Air Cab Mounts	91
Driver Controlled Differential Lock (Both Axles)	1091	Stationary Grille	221
RT463 46,000 LB RR Suspension	2426	LH/RH Electric Power Windows	164
262" Wheelbase	1159	LH/RH Electric Door Locks	74
7/16X3-9/16X11-1/8 " Frame 120 KSI	654	Premium High Back Air Driver Seat	318
1/4" Inner Frame Reinforcement	717	Premium High Back Air Passenger Seat	338
24 Inch Front Frame Extension w Insert	375	Adjustable Steering Column	359
RH Understep Aftertreatment w/ Vert Stack	617	AM/FM Radio w/ Bluetooth	299
Dual West LH/RH West Coast Heated Mirror w Remote	215	Front Sun Visor	140
425/65R22.5 FR Tires	471	Gap Vax MC1510-3S3X COMBINATION JET/VAC	334411
11R22.5 RR Tires	255	Subtotal From Additional Sheet(s):	
Jacobs Compression Brake	1915	Subtotal B:	349498

C. Unpublished Options - Itemize below / attach additional sheet(s) if necessary.
(Note: Unpublished options are items which were not submitted and priced in Contractor's bid.)

Description	Cost	Description	Cost
MFS-20-133A 22,000LB FR Axle	4224	ALCOA LVL ONE 88367X RR Aluminum Wheels	1144
23,000 LB FR Suspension	898	Subtotal From Additional Sheet(s):	
ALCOA LVL ONE 82362X FR Aluminum Wheels	706	Subtotal C:	6972

Check: Total cost of Unpublished Options (C) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B). For this transaction the percentage is: 2%

D. Total Cost Before Any Applicable Trade-In / Other Allowances / Discounts (A+B+C)

Quantity Ordered:	1	X Subtotal of A + B + C:	446300	=	Subtotal D:	446300
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E. H-GAC Order Processing Charge (Amount Per Current Policy) Subtotal E: 1500

F. Trade-Ins / Special Discounts / Other Allowances / Freight / Installation / Miscellaneous Charges

Description	Cost	Description	Cost
Freightliner Standard Destination Charge	2,200		
		Subtotal F:	2200

Delivery Date: **G. Total Purchase Price (D+E+F):** 450000

PREPARED BY

GapVax, Inc.

Andrew Garcia - Agarcia@gmail.com

PREPARED FOR

Alex Rodriguez

City of Friendswood
15355 Blackhawk blvd
Friendswood, TX, 77546

QUOTE

GapVax



QUOTE ID
1937643767

PRICING FROM
5/3/2019



	OPTION DESCRIPTION	NOTES	QTY
CHASSIS OPTIONS			
CHA001	CUSTOMER SUPPLIED CHASSIS	MODEL YEAR 2020	1
DEBRIS BODY OPTIONS			
STD	10 USABLE YARD DEBRIS TANK MADE OF 3/16" ASTM A-572 GRADE 50 EXTEN STEEL		STANDARD
STD	FULL-OPENING REAR TAILGATE		STANDARD
STD	STAINLESS STEEL TAILGATE SEALING ROD		STANDARD
STD	FOUR HYDRAULIC REAR DOOR LOCKS		STANDARD
STD	DUAL TAILGATE LIFT CYLINDERS		STANDARD
STD	THREE TIE-OFF ANCHORS ON TOP OF BODY		STANDARD
STD	FIVE YEAR WARRANTY ON DEBRIS TANK AND WATER TANK AGAINST RUST THROUGH, DISTORTION AND CRACKS		STANDARD
STD	THREE TIE-OFF ANCHORS ON TOP OF THE BODY 6' APART		STANDARD
A1	DEBRIS BODY FLUSH OUT SYSTEM		1
A2A	DRAIN AT BOTTOM OF TAILGATE - 6" BRASS LEVER VALVE WITH 15' OF LAYFLAT HOSE	VALVE IS NOT 100% LEAK PROOF	1
A3-CS	FLOAT TYPE LIQUID LEVEL INDICATOR ON SIDE OF DEBRIS TANK		1
A12A	FILTER SCREEN FOR DRAIN VALVE (LONG BOX)	REQUIRES A2	1
A21	CURBSIDE LADDER TO PORT INSPECTION AREA		1
A18	PURGE VALVE AT GRAVITY DRAIN (1-1/4" BALL VALVE)		1
A22A	GALVANIZED BOLT ON TAILGATE SPLASH SHIELDS		1
A37A	UPGRADE BODY INLET CANNON TO 12" HX STYLE WITH 4" CLEANOUT		1
A39	LONG POLE HOLDER TO ACCOMMODATE (3) 12' CLAM DIGGERS		1
WATER TANK OPTIONS			
STD	1500 GALLON WATER TANK MADE OF 3/16" 304 STAINLESS STEEL		STANDARD
STD	4" HIGH ANTI-SIPHON RING WITH (4) 2-1/2" HOLES		STANDARD
STD	WATER TANK LEVEL SIGHT TUBE ON CURBSIDE		STANDARD
STD	DRAIN VALVE AT BOTTOM OF WATER TANK		STANDARD
STD	3" FILL LINE WITH 2-1/2" FIRE HOSE CONNECTION CURBSIDE		STANDARD
STD	3" WATER STRAINER WITH STAINLESS STEEL SCREEN ON WATER TANK FILL LINE		STANDARD
STD	3" SUPPLY LINE TO WATER PUMP MOUNTED AT REAR OF TANK		STANDARD
B10	ADDITIONAL 3" FILTER BETWEEN TANK AND PUMP (3" Y-STRAINER)	NOT COMPATIBLE WITH J14	1
B23A	GALVANIZED BAFFLES IN THE WATER TANK		1
VACUUM SYSTEM OPTIONS			
STD	DUAL STAINLESS STEEL SHUTOFF FLOAT BALLS		STANDARD
STD	NOISE & VIBRATION DAMPENING MOUNTS		STANDARD
STD	STAINLESS STEEL VEE-WIRE SAFETY SCREEN		STANDARD

STD	6" SAFETY VACUUM RELIEF	STANDARD
STD	EMERGENCY STOP FUNCTION FOR VACUUM	STANDARD
C8	UPGRADE TO ROOTS TYPE VACUUM PUMP 4,500 CFM AND 18" HG	1
WATER SYSTEM OPTIONS		
STD	TRI-PLEX WATER PUMP SYSTEM	STANDARD
STD	800 PSI WASHDOWN CIRCUIT WITH 50' X 1/2" HOSE	STANDARD
STD	AIR PURGE SYSTEM FOR PRIMARY CIRCUIT	STANDARD
STD	LOW POINT DRAIN VALVES ON WATER LINES	STANDARD
STD	SET WASHDOWN CIRCUIT TO 800 PSI	1
D3A	GIANT GP8000 SERIES WATER PUMP RATED 80 GPM @ 2,500 PSI	1
D27A	10 GPM 2500 PSI HYDRAULICALLY DRIVEN PUMP	1
D4A	UPGRADE TO URACA MULTIFLOW VALVE - SET WASHDOWN CIRCUIT TO 800 PSI	1
D7A	50' X 1/2" HAND GUN REEL FOR WASHDOWN CIRCUIT	1
D7B	50' X 1/2" HAND GUN REEL FOR HX CIRCUIT	1
D21	WATER RECIRCULATION VIA AUTOMATIC TRANSMISSION	1
BOOM OPTIONS		
STD	8" FRONT MOUNTED TELESCOPING BOOM WITH 26' REACH AND 180 DEG. ROTATION	STANDARD
STD	180 DEGREE POWER ROTATION VIA WORM DRIVE	STANDARD
STD	DUAL 4" LIFT CYLINDERS	STANDARD
STD	CAB PROTECTION RACK	STANDARD
E6	REMOTE LUBE FOR BOOM LIFT AND ROTATION	1
E7	3/16" HEAVY DUTY BOOM ELBOW WITH 6" FORMED CHANNEL RADIUS	1
HOSE REEL OPTIONS		
STD	FRONT FRAME MOUNTED HOSE REEL WITH 180 DEGREE ARTICULATION	STANDARD
STD	HOSE REEL RTED FOR 800' OF HOSE AND 4,000 PSI	STANDARD
STD	EXTERIOR HOSE EXPANSION RIBS	STANDARD
F1C	DIGITAL FOOTAGE COUNTER - SHAFT-MOUNTED	1
F6	UPGRADE FRONT HOSE REEL TO POWER ARTICULATE	1
F11	AUTOMATIC HOSE LEVEL WINDER	1
CONTROLS, GUAGES, ACCESSORIES OPTIONS		
STD	CAB-MOUNTED AIR SHIFT CONTROLS FOR BLOWER, HYDRAULICS, AND WATER PUMP	STANDARD
STD	WEATHER-TIGHT CONTROL PANEL MOUNTED AT FRONT HOSE REEL	STANDARD
STD	OPERATOR CONTROL PANEL INCLUDES GUAGES FOR ENGINE, HYDRAULICS, VACUUM, AND WATER PUMP	STANDARD
STD	EMERGENCY STOP DE-ENERGIZE WATER PUMP AND BREAK VACUUM	STANDARD
STD	30' PENDANT REMOTE WITH BOOM FUNCTIONS	STANDARD
G2E	G2E CONTROL SYSTEM WITH PV780 DISPLAY INCLUDES:	1
	LOW WATER SHUTDOWN PROTECTION	1
	HIGH WATER TEMPERATURE SHUTDOWN PROTECTION	1
	ENGINE OVERSPEED PROTECTION	1
	ON-SCREEN DIAGNOSTICS WITH WATER PUMP FLOW, PTO HOURS AND ENGINE RPMS	1
	TEMPERATURE AND PRESSURE GUAGES FOR VACUUM, WATER, HYDRAULICS, AND ENGINE	1

	PROVISION FOR INCLUDING DIGITAL FOOTAGE COUNTER ON SCREEN	F1C NOT INCLUDED	1
	E-STOP FOR WATER VACUUM AND HYDRAULICS		1
	NETWORKED SYSTEM FOR CONTROLLING SYSTEM FUNCTIONS FROM FRONT BOX, WIRELESS, OR CURBSIDE		1
	CURBSIDE CONTROL SYSTEM		1
	TRANSMISSION CONTROL FOR SHIFTING OUTSIDE OF THE CAB		1
	OMNEX TD1140 WIRELESS SYSTEM WITH INTEGRAL 50' PENDANT INCLUDES:		1
	HOSE SPOOL IN/OUT WITH SPEED CONTROL		1
	FRONT HOSE REEL WATER ON/OFF, PRESSURE ON/OFF		1
	CURBSIDE DUMP CONTROLS AND BODY WASHOUT CONTROLS		1
G4A	HIGH DEBRIS LEVEL LIGHT & ALARM WIRED TO VACUUM RELIEF	REQUIRES A3	1
G5	BLOWER TEMPERATURE GUAGE		1
G14	BODY UP LIGHT		1
G15	TAILGATE UP LIGHT		1
G16	BOOM UP LIGHT		1
G19	WIRELESS REMOTE WITH BOOM AND VACUUM FUNCTIONS		1
	LIGHTING		
STD	TRUCK-LITE LED RUNNING (MARKER) LIGHTS		STANDARD
STD	LED STOP/TAIL/TURN LIGHT WITH POLISHED STAINLESS STEEL BOXES		STANDARD
H31A	ONE SUPER LED STROBE BEACON LIGHT - WHELEN L31	CALIFORNIA TITLE 13 COMPLIANT	1
H31B	ONE SUPER LED STROBE BEACON LIGHT - WHELEN L31		1
H5C	(2) BOOM WORK LIGHTS - HIGH INTENSITY HELL PB1500 LED WORK LIGHTS (PN: LHT022406)		1
H6C	(2) REAR WORK LIGHTS - HIGH INTENSITY HELL PB1500 LED WORK LIGHTS (PN: LHT022406)		1
H7CD	(6) SIDE WORK LIGHTS - HIGH INTENSITY HELLA PB1500 LED WORK LIGHTS (PN:LHT022406) (3 PER SIDE)		1
H11	HAND SPOTLIGHT WITH 25' CORD AND RETRACTABLE REEL		1
H15B	WHELEN ION SUPER LED FLASHERS - 12 LIGHT HEADS		1
	2 ON EACH SIDE FRONT @ 90 DEGREES, 2 ON EACH SIDE MIDDLE @ 45 DEGREES, 2 ON EACH SIDE REAR (1 @ 45 DEGREES)		1
H22	REAR ARROW LIGHT - LED 44" WIDE		1
	STORAGE OPTIONS		
STD	25' FIRE HOSE BASKET		STANDARD
STD	TWO (2) GALVANIZED STEEL TUBE TRAYS		STANDARD
I6C-DS	ALUMINUM, 30" WIDE X 24" TALL X 24" DEEP, MOUNTED ON THE DRIVER'S SIDE		1
I9B	48" TOOL BOX - ALUMINUM, 48" WIDE X 24" TALL X 24" DEEP, MOUNTED ON THE CURBSIDE		1
I14	TRAFFIC CONE HOLDER ON DRIVER'S SIDE		1
I17A	NOZZLE RACK - SIX (6) NOZZLES, 1"		2
I26B	TWO BUMPER TOOL BOXES - ALUMINUM, 16" HIGH X 12" WIDE X 18" DEEP WITH FOLD DOWN DOOR		1
	CHASSIS OPTIONS		
STD	DOT LIGHTING / FENDERS / MUD FLAPS / TAILGATE SAFETY PROP, ICC LIGHTS		STANDARD
STD	REMOTE ACTUATED BODY SAFETY PROP		STANDARD
STD	70 GALLONS AW-46 HYDRAULIC OIL, LEVEL/TEMPERATURE GAUGE, SHUTOFF ON SUCTION		STANDARD
STD	REAR BUMPER, TRIANGLE KIT, FIRE EXTINGUISHER, BACKUP ALARM		STANDARD
STD	ALLISON 10-BOLT PTO UPGRADE		STANDARD

J0	FRONT BUMPER - MAY NOT BE REQUIRED IN ALL STATES		1
J3	TOW HOOKS FRONT		1
J4B	TOW HOOKS REAR - FRAME MOUNTED		1
J12	METAL MUD FLAPS IN FRONT OF REAR TIRES		1
PAINT OPTIONS			
STD	PAINTED WITH PPG URETHANE PAINT		STANDARD
STD	PAINT FRAME AND PARTS BLACK		STANDARD
STD	FLEET FINISH		STANDARD
K10	PAINT BODY ANY COLOR OTHER THAN WHITE	PAINT CODE # REQUIRED	1
K13	PAINT PARTS ANY COLOR OTHER THAN BLACK	PAINT CODE # REQUIRED	1
K14	PAINT BOOM, CONTROL BOX AND HOSE REEL ANY COLOR OTHER THAN BLACK	PAINT CODE # REQUIRED	1
K21	CUSTOM DECAL PACKAGE		1
MISCELLANEOUS OPTIONS			
STD	25 FEET OF VACUUM TUBING (5) AND CLAMPS		STANDARD
STD	TIGER TAIL HOSE GUIDE		STANDARD
STD	TWO BLUE STAR SEWER CLEANING NOZZLES		STANDARD
M3	FILL HOSE 25' X 2 1/2"		1
M5	LEADER HOSE 10' X 1"		1
M9C	1" COBRA SEWER HOSE - 2,500 PSI X 800 FT PLASTIC (ORANGE) (PN: HOS022492)		1
M26	1" SIX WIRE EXTENDER		1
M27	TIGER TAIL (TOTAL OF TWO)		1
M31	ROLLER GUIDE ASSEMBLY FOR UPPER MANHOLE		1



PRICING SUMMARY

PRICE OF BASE UNIT WITH OPTIONS	\$ 345,820.00
TRADE-IN	
DELIVERY	\$ 4,257.00
ESTIMATED SUBTOTAL:	\$ 350,077.00
SALES TAX	
FEDERAL EXCISE TAX (BODY)	\$ -
FEDERAL EXCISE TAX (CHASSIS)	\$ -
TOTAL PRICE (PER UNIT)	\$ 350,077.00

ALL PRICES ARE IN US DOLLARS

DUE TO EXTREME MARKET VOLATILITY AND PENDING U.S. GOVERNMENT SECTION 232 TRADE CASES ALL PRICES AND AVAILABILITY ARE SUBJECT TO CHANGE WITHOUT NOTICE, ALL QUOTES TO BE CONFIRMED AT TIME OF ORDER

***** FOB DESTINATION *** TERMS - NET, 15% DOWN *****

SIGNATURE _____

DATE _____

Please return a signed copy to Agarcia@gmail.com

GapVax Incorporated

Terms and Conditions of Sale

1. **ORDERS.** All orders are subject to acceptance by an officer of GapVax Inc. Orders for products not regularly carried in stock or requiring special engineering or manufacture are in every case subject to approval by an officer of GapVax.
2. **PERFORMANCE.** GapVax Inc. shall not be liable for failure to complete the contract in accordance with its terms if failure is due to wars, strikes, fires, floods, accidents, delays in transportation or other causes beyond its reasonable control.
3. **EXPERIMENTAL WORK.** Work performed at customer's request such as sketches, drawings, design, testing, fabrication and materials shall be charged at current rates.
4. **SKETCHES, ENGINEERING DRAWINGS, MODELS** and all preparatory work created or furnished by GapVax Inc. shall remain its exclusive property; and no use of same shall be made, nor may ideas obtained therefrom be used, except with the consent of and on terms acceptable to GapVax Inc.
5. **CANCELLATION.** Orders regularly entered cannot be canceled except upon terms that will compensate GapVax Inc. for any loss or damage sustained.
6. **SHIPMENT.** All proposals are based on continuous and uninterrupted delivery of the order upon completion, unless specifications distinctly state otherwise. In the event that agreement is reached for GapVax Inc. to store completed items, they will be immediately invoiced to the customer and become due and payable. Storage shall be at the risk of the customer and GapVax Inc. shall be liable only for ordinary care of the property.
7. **CUSTOMER'S PROPERTY.** GapVax Inc. shall charge the customer at current rates, for handling and storing customer's property (e.g. truck chassis) held for more than thirty (30) days after notification of availability for shipment. All customer's property, or third party's property, that is stored by GapVax Inc. is at the customer's or other party's risk. GapVax is not liable for any loss or damage thereto caused by fire, water, corrosion, theft, negligence, or any cause beyond its reasonable control.
8. **PRICES.** All orders are subject to current prices in effect at the time of order acknowledgment.
9. **F.O.B. POINT.** Unless otherwise stated, all prices listed are F.O.B. point of manufacture.
10. **TAXES.** Unless specifically stated, prices listed do not include Federal, State, City or other excise occupation, sales, use or similar taxes which are extra and are to be added at rates in effect at time of shipment. If federal Excise Taxes are included or listed on the reverse side of this paper, they are stated at the rates and regulations in effect at the time this order is written, and are subject to revision in accordance with rates and regulations in effect at time of shipment.
11. **PRODUCT IMPROVEMENT.** GapVax Inc. reserves the right to change manufacturing specifications and procedures without incurring any responsibility for modifying previously shipped products.
12. **MOUNTING PRICES.** Mounting prices assumes normal factory installation on a truck chassis suitable for the unit purchased. Relocation of batteries, gas tanks, mufflers, air tanks, etc. will be an additional charge, billed at the standard factory labor rate.
13. **WARRANTY.** GapVax Inc. warrants its products to be free from defects in material and workmanship, subject to the limitations and conditions set forth in its current published warranty but makes no warranty of merchantability or fitness for any particular purpose. GapVax Inc. does not assume liability for any loss of product, time or any direct, indirect, or consequential damage, losses or delay or any nature whatsoever. No warranty, express or implied, is made or authorized to be made and no obligation is assumed or authorized to be assumed with respect to products of GapVax Inc. other than that set forth in the current, published warranty. It is to be understood that the acceptance this order is expressly conditioned upon your acceptance of GapVax Inc. standard written warranty for the products sold hereunder GapVax Inc. hereby disclaims any responsibility or liability for any consequential losses delays or downtime resulting from orders hereunder the use of its products. GapVax does not and will not warranty any tank coating or tank lining.
14. This agreement shall be construed according to the laws of the State of Pennsylvania. Our failure at anytime to exercise any right we may have under the agreement shall not constitute a waiver thereof nor prejudice our right to enforce same thereafter.
15. This order, including the above terms and conditions contains the complete and final agreement between the





CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:
2020-579419

Date Filed:
01/21/2020

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Kinloch Equipment & Supply, inc.
Pasadena, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Friendswood

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

593-19
Combination Sewer Cleaner

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.



6 UNSWORN DECLARATION

My name is Morgan Kinloch Taylor, and my date of birth is 02/26/1993.

My address is 3320 Pasadena Blvd, Pasadena, TX, 77503, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Galveston County, State of Texas, on the 21 day of January, 20 20.
(month) (year)

Morgan Kinloch Taylor
Signature of authorized agent of contracting business entity
(Declarant)

Lansdowne Moody	Alvin Equip	ASCO	Mustang CAT
96.4 HP	96.4 HP	90.0 HP	106 HP
Kubota SVL95-2HFWC	Kubota SVL95-2SHFC	Case TV450 Skid Loader	CAT 299D3 CTL DCA6
Oil Cooler			
Ground Shark Mulch Head	Loftness Mulch Head	Brush Cutter	Brushcutter
Demo Door	Demo Door	Demo Door	Demo Door
80" Bucket	80" Bucket	78" Bucket	80" Bucket
Grapple Bucket	Grapple Bucket	Grapple Bucket	Grapple Bucket
Breaker	Breaker	Angle Broom	Broom
20' Equip Trailer	20' Trailer	Breaker	Breaker
High Flow, Quick attach coupler, Wide Track, Cab with a/c and heat, backup camera, & radio	High Flow, Quick attach coupler, Wide Track, Cab with a/c and heat, backup camera, & radio	20' Trailer	
		High Flow, Quick attach coupler, Wide Track, Cab with a/c and heat, backup camera, & radio	High Flow, Quick attach coupler, Wide Track, Cab with a/c and heat, backup camera, & radio
\$101,645.00	\$112,239.99	\$101,701.67	\$100,816.44



COMPETITIVE COMPARISON

MODEL	Kubota SVL95-2s Vertical	Bobcat T770 Vertical	CAT 299DXHP Vertical	Takeuchi TL12 Radial	Deere TV380 Vertical	CASE TV380 Vertical
Lift Arm Path						
Emission Level	Tier 4 Final	Tier 4 Final	InterimTier4	InterimTier4	InterimTier4	Tier 4 Final
Engine Model	V3800-TIEF4	D34	Cat C3.8 DIT	V3800-CR-JE4	4TNV94CHT	F5BFL413E
Manufacturer	Kubota	Doosan	Cat	Kubota	Yanmar	FPT
Horsepower	96.4	92	106	108	97	90
Peak torque	Nm	np	np	375	395	383
Rated RPM	2400	2400	np	2400	2500	2500
Cylinders	4	4	4	4	4	4
Displacement	3.769	3.4	3.8	3.769	3.1	3.4
Bore Stroke	100x120	np	100 x 120	100 x 120	np	99x110
Hand or Dial / Foot Throttle	Dial/Foot	Hand	Hand/Foot	Hand	Hand	Dial/Foot
Rated Operating Capacities: 50% Tipping Load	4572	4965	4650	4051	4725	3800
Rated Operating Capacities: 35% Tipping Load	3200	3475	3225	2833	3300	2660
Tipping Load ISO 14397	lb	9143	9300	8102	9425	7600
Breakout Force, Tilt Cylinder	lb	7961	7552	8670	13875	7510
Breakout Force, Lift Arm Cylinder	lb	6742	6111	8550	6600	6020
Traction Force	kgf	5524	4280	6244	5227	np
Track Width - Standard	in (mm)	17.7 (450)	17.7 (450)	17.7 (450)	17.7 (450)	17.7 (450)
Track Width - Optional	in (mm)	n/a	-	-	15.6 (400)	n/a
Length of Track on ground	in (mm)	65.6 (1667)	69.6 (1767)	62.8 (1595)	np	64.5 (1638)
Track Gauge	in (mm)	59.5 (1512)	60.3 (1532)	np	np	58.3 (1481)
Track Rollers (per side)	each	5	5	6	5	4
Independent Bogie Carriage		NA	NA	NA	NA	NA
Travel Speed Lo	mph	5	5.2	4.9	5.3	8.2
Travel Speed Hi	mph	7.3 Std	8.4 Std	7.2 Std	7.8 Std	12.2
Ground Pressure	psi	4.4	5.3	4.6	4.5	4.5
Hydraulics self-leveling bucket		Std	Opt	Std	Opt	Opt
Loader Hydraulic Flow	GPM (L/min)	24.1 (91.0)	23 (87.1)	23.2 (88)	25 (95)	24.2 (91.5)
Loader Hydraulic Pressure	psi	3495	3495	3045	3452	3050
Auxiliary Hydraulic Flow Std/HF (Opt)	GPM (L/min)	40 (151)	36.5 (138)	40.4 (153)	34.1 (129)	37.6 (142.5)
Auxiliary Hydraulic Pressure	PSI	3553	3495	3045	3452	3050
Length w/o Bucket	in (mm)	123.5 (3137)	114.3 (2903)	123.5 (3135)	120 (3050)	119.1 (3025)
Length w/Bucket on ground	in (mm)	154.6 (3929)	141.6 (3597)	151.8 (3856)	144 (3660)	143.2 (3639)
Height to Top of Cab	in (mm)	83.3 (2116)	81.3 (2065)	83.7 (2126)	84.6 (2150)	80.4 (2042)
Vehicle Width	in (mm)	77.2 (1962)	78.0 (1981)	78.0 (1981)	80.7 (2050)	76 (1930)
Ground Clearance	in (mm)	11.5 (293)	8.1 (206)	9.1 (231)	10.2 (260)	9.5 (241)
Departure Angle	degrees	31	31	30	31	32
Hinge Pin Height at max lift	in	128.5	132	125.6	126.1	131.6
Reach at max lift and dump	in	40.7	33.6	30.6	38.8	31.4
Clearance at max lift and dump	in	97.3	104.3	97.3	95.7	105.1
Maximum Dump Angle	degrees	43	42	52	38.7	45
Maximum Rollback Angle on Ground	degrees	27	31	np	31.4	35
Hydraulic System	gal	18	np	14.5	25	11.8
Hydraulic Tank	gal	10	np	10.3	np	6
Fuel Tank	gal	28.8	43.9	32.2	23.8	25.5
Diesel Exhaust Fluid (DEF)	gal	5	np	NA	NA	2.8
Operating Weight (ROPS)	lb	11299	10465	11612	11618	10550

NA = Not Available

np = Not Provided

Kubota Tractor Corporation reserves the right to change the stated specifications without notice. This brochure is for descriptive purposes only and reasonable efforts were used to set forth the contained information. Some items shown may be optional and some products shown may not be available in all dealerships. Kubota disclaims all representations and warranties, express or implied, or any liability from the use of this brochure. For complete warranty, safety and product information, consult your local Kubota dealer and the operator's manual. Power (HP/KW) and other specifications are based on various standards or recommended practices. For your safety, Kubota strongly recommends the use of a Robust Protective Structure (ROPS) and seat belt in almost all applications. This brochure is intended for the United States and US territories only. For information regarding Kubota products or services outside these areas, see Kubota Corporation's global web site. Kubota does not provide parts, warranty or services for any product which is re-sold or resold in any country other than the country for which the product(s) were designed or manufactured.

LANDSOWNE-MOODY CO.

1600 FM 528 Webster Texas 77598
Office (281) 338-1563 Mobile (281) 460-7951



QUOTATION

City of Friendswood

Customer Name: Sourcewell Contract Number ID# 118517

PO Box 1288 / 15355 Blackhawk Blvd.

Address:

Friendswood Texas 77546

City: State Zip

Del. Date: _____

Buyer: **Savino**

Acct. No.: ***046160**

Tel # 281-996-3384

Email: schapa@friendswood.com

Created on: Thursday, January 23, 2020

Salesman: Russ Humphries

Qty.	Make	Model	Price	Amount
1	Kubota	SVL95-2HFWC Skid Steer Loader	\$ 63,583.00	\$ 63,583.00
1	Kubota	AP-HD80LLC 80" Construction Bucket	\$ 1,658.00	\$ 1,658.00
1	Loftness	HD Hydraulic Oil Cooler 12CFISUV2	\$ 5,967.00	\$ 5,967.00
1	Paladin	GROUNDSHARK 30272 Mulch Head	\$ 10,985.00	\$ 10,985.00
1	Kubota	Lexan Demo Door	\$ 2,989.00	\$ 2,989.00
1	Kubota	AP-GB3080 Scrap Grapple Bucket	\$ 3,950.00	\$ 3,950.00
1	Paladin	237500M-0022 SFB500 BREAKER	\$ 5,988.00	\$ 5,988.00
1	Trailer	20' Equipment Hauler with fold ramps HD Tires	\$ 6,525.00	\$ 6,525.00
		NO TAX / Exempt Customer	\$ -	\$ -
		Governmental Discounts Applied	\$ -	\$ -
		All Pricing Includes Dealer Set Up, PDI and Freight	\$ -	\$ -
		Sourcewell Contract Number ID# 118517	\$ -	\$ -

Notes:

SVL95-2HFWC Skid Steer Loader / High Flow / Hydraulic Quick Attach Coupler / Wide Track / Pressurized Cab with AC and Heat. Back Up camera and Radio listed as line items. Pricing includes all freight, dealer prep, fuel, assembly and shop charges. Payment price includes Kubot KTAC insurance. MSRP As equipped \$126,267

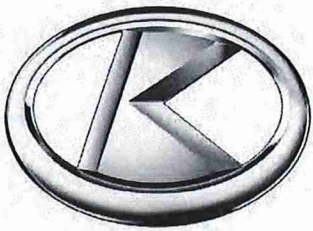
	OPTIONS		\$ -	\$ -
	MULTI SEAL®, the world leader in industrial tire sealant - ALL TIRES	\$ -	\$ -	\$ -
	1 yr. Extended Warranty on Tractor ONLY	\$ -	\$ -	\$ -
	2 yr. Extended Warranty on Tractor ONLY	\$ -	\$ -	\$ -
	***** ALL PRICING GOOD UNTIL END OF THE MONTH*****		\$ -	\$ -
Trade In Information			Sub Total	\$ 101,645.00
Model:	Serial No.:		Trade In	\$ -
Allowance: \$ -	Hours:		Sub Total	\$ 101,645.00
Description:			Tax	\$ -
Print Date: January 23, 2020			CASH Total	\$ 101,645.00
(if paying by credit card ONLY)			Credit Card Total	\$ -
			Down Payment	\$ -

0.00% 60

Months Promotional Financing - Monthly estimate: \$ 1,836.00
(Monthly Finance term insurance coverage on equipment)



new
Axle
rating =
Weight
Capacity =



For Earth, For Life
Kubota

SVL

KUBOTA COMPACT TRACK LOADER SVL75-2 / SVL95-2s

The outstanding power and exceptional comfort of Kubota's new Compact Track Loaders take high performance and productivity to a new level.



Need more productivity? Put the all-new Kubota Compact Track Loader to work for you.

Kubota, a trusted and world-leading manufacturer of construction equipment, is proud to introduce the all-new SVL75-2/SVL95-2s Compact Track Loaders. These new compact track loaders deliver best-in-class bucket breakout force and lifting capacity, outstanding stability, a wide and comfortable operator area, and much more. When it comes to high performance, reliability and comfort, the road leads to Kubota.

- **OUTSTANDING PERFORMANCE**
- **EXCEPTIONAL COMFORT**
- **EASY MAINTENANCE AND IMPRESSIVE DURABILITY**

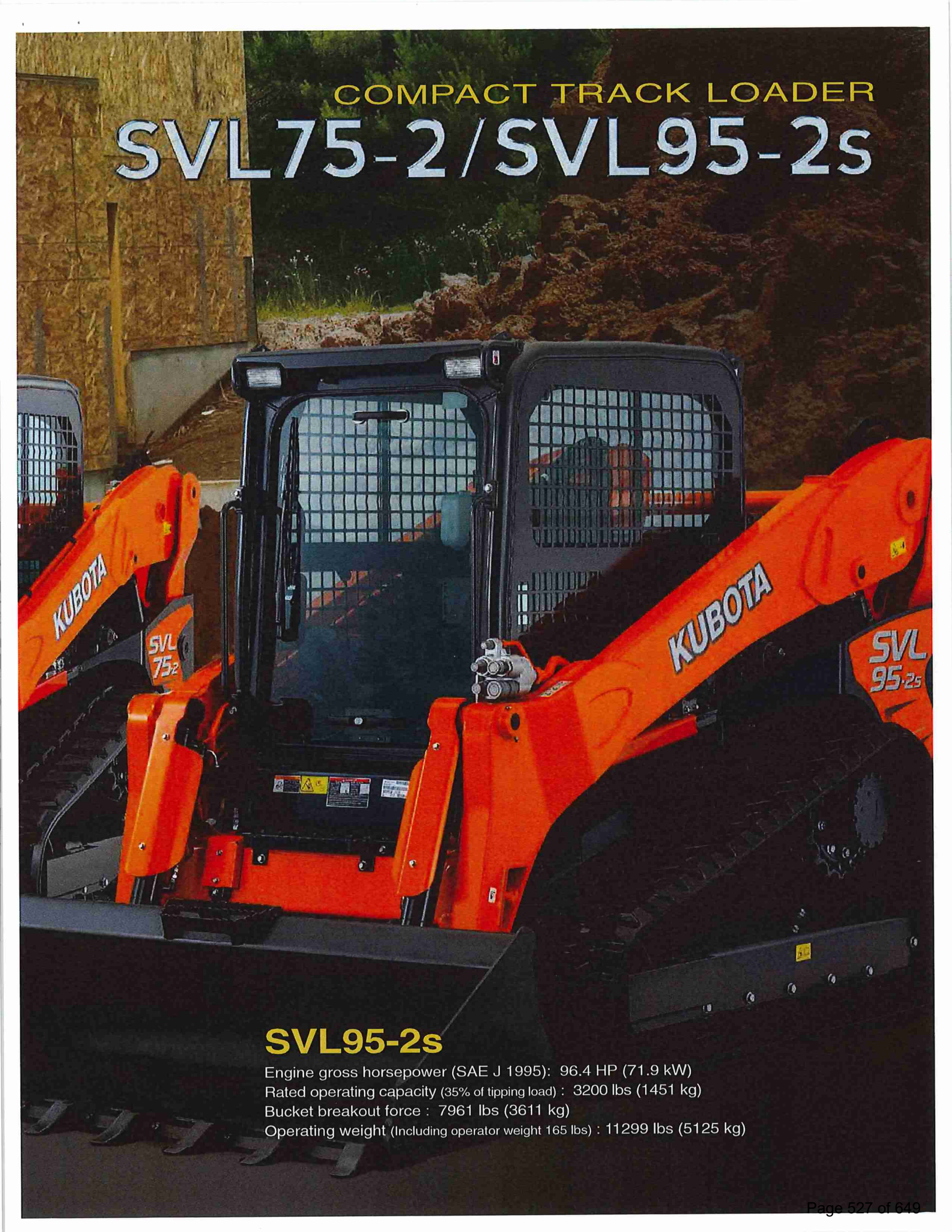
SVL75-2

Engine gross horsepower (SAE J 1995): 74.3 HP (55.4 kW)

Rated operating capacity (35% of tipping load) : 2300 lbs (1043 kg)

Bucket breakout force : 6204 lbs (2814 kg)

Operating weight (Including operator weight 165 lbs) : 9039 lbs (4100 kg)

A photograph of a Kubota SVL95-2s compact track loader. The machine is orange and black, with a large black protective cage around the operator's cab. The loader is positioned in front of a large pile of brown mulch or wood chips. The background shows a wooden building and some greenery. The text "COMPACT TRACK LOADER" is in yellow, and "SVL75-2/SVL95-2s" is in large white letters at the top. The loader's arm is extended to the right, and the "KUBOTA" and "SVL 95-2s" logos are visible on it. The loader's tracks are visible at the bottom.

COMPACT TRACK LOADER SVL75-2/SVL95-2s

SVL95-2s

Engine gross horsepower (SAE J 1995): 96.4 HP (71.9 kW)

Rated operating capacity (35% of tipping load) : 3200 lbs (1451 kg)

Bucket breakout force : 7961 lbs (3611 kg)

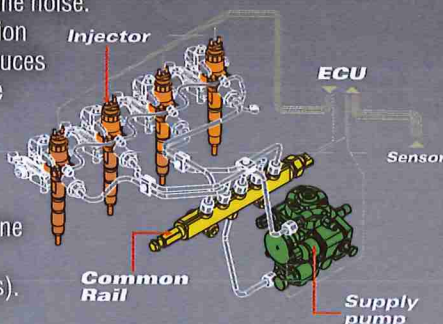
Operating weight (Including operator weight 165 lbs) : 11299 lbs (5125 kg)



Kubota engine

Common Rail System and Diesel Particulate Filter (DPF) Muffler

The Common Rail System (CRS) electronically controls the fuel injection timing and amount in stages rather than all at once for optimal combustion; resulting in greater efficiency, better fuel economy and less engine noise. The combination of Exhaust Gas Re-circulation (EGR) and Diesel Particulate Filter (DPF) reduces the emissions making the SVL Series engine Tier IV certified.



● Powerful Kubota engine

The powerful and reliable Kubota-built engine gets the job done quickly and easily with 74.3 hp* (SVL75-2) or 96.4 hp* (SVL95-2s).

* Engine HP Gross (SAE J 1995)

● SCR meter panel

An SCR system helps the SVL95-2s meet Final Tier4 requirements. A quick glance at the digital panel tells you how much Diesel Exhaust Fluid (DEF) remains in the tank and also when to refill it.





	SVL75-2	SVL95-2s
Bucket Breakout Force:	6204 lbs	7961 lbs
Arm Breakout Force:	4766 lbs	6742 lbs
Tipping Load:	6570 lbs	9143 lbs

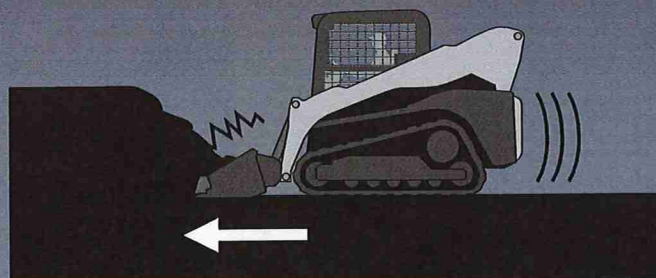
● Automatic regeneration system

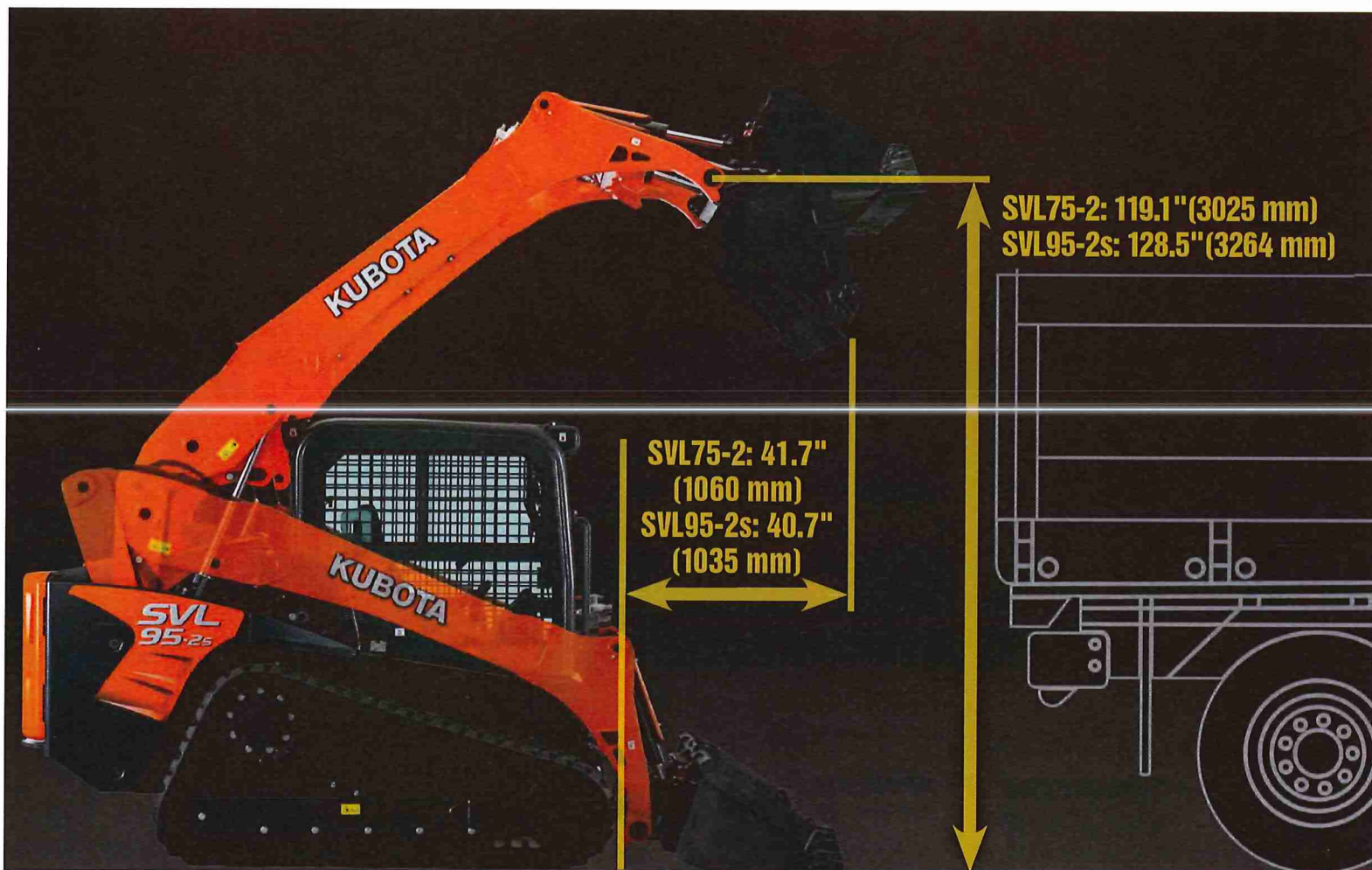
Kubota's original automatic regeneration system automatically burns accumulated particulate matter (soot) in the DPF muffler to keep the muffler clean for longer operation. For operational and safety reasons, automatic regeneration can be turned off with the inhibit switch when compact track loader is operating in areas that are near people, animals, and flammable materials.



● Electronic Travel Torque Management

Electronic Travel Torque Management System lets you work faster with more power. The ECU constantly monitors the load of the machine to optimally control hydraulic pump output according to the load, preventing engine stalls for smoother operation even under severe conditions.



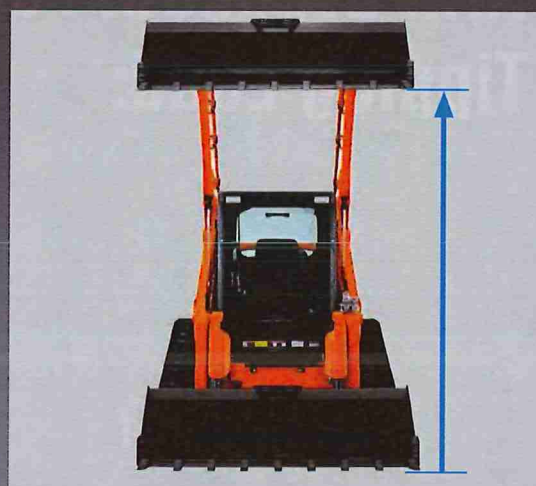


Kubota Unique Vertical Lift Design



- **Long Reach for Maximum Lifting and Dumping**
- **High Bucket Hinge Pin Height**

Kubota's unique vertical lift is designed to deliver an exceptionally long reach of 41.7 inches (SVL75-2) and 40.7 inches (SVL95-2s). In addition, the tip of the arm is optimally shaped for a tall hinge pin height of 119.1 inches (SVL75-2) / 128.5 inches (SVL95-2s) for easy dumping into trucks.



- **Standard Self-leveling Function**

This feature helps keep the bucket or fork in a horizontal position without the need to manually adjust the angle during lifting.

Travel Performance

1. Standard Two-speed Travel

Shift from low gear at 4.7 mph (SVL75-2) / 5.0 mph (SVL95-2s) to high gear at 7.1 mph (SVL75-2) / 7.3 mph (SVL95-2s) to get the job done faster.

2. Pilot Valve with Shuttle Piston

This ensures consistent oil flow which improves stability when going straight.

3. Higher Ground Clearance

A high ground clearance of 11.7 inches (SVL75-2) / 11.5 inches (SVL95-2s) lets you travel over large obstacles with ease.

4. Strong Traction Force

Kubota's original track lug design gives you more grip and a stronger traction force of 9678 lbs (SVL75-2) / 12178 lbs (SVL95-2s).



Powerful hydraulic system

● Load Sensing System (SVL95-2s)

● Enhanced Control Valve System (SVL95-2s)

The SVL95-2s features a new Load Sensing System and improved control valve to provide even more powerful pushing and driving forces, even for combined attachment operations. Plenty of power to travel on slopes and handle attachment work also means you'll get the job done faster.

● Adjustable Maximum Oil Flow Control (Option) (SVL95-2s)

Quick and easy 5 modes of the AUX flow ensures the optimal flow rate for every job you do. Adjustable Maximum Oil Flow Control is available only for high flow.

● Enhanced High-flow Hydraulics (Option) (SVL75-2/SVL95-2s)

Having high flow increases the hydraulic muscle for attachments that need more hydraulic horsepower. With this option auxiliary hydraulic flow increases from to 29.3gpm (SVL75-2) / 40gpm (SVL95-2s). The coupler manifold includes both 1/2" and 3/4" couplers.

Aux. hydraulic flow

SVL75-2	Std.	17.4 gpm (66 lpm)
	High	29.3 gpm (110.9 lpm)
SVL95-2s	Std.	23.1 gpm (87.6 lpm)
	High	40 gpm (152 lpm)



EXCEPTIONAL COMFORT

Comfortable Cab

● Wider Cab Entrance

A wider entrance makes it easier to get in and out.

● Wide And Clean Cab

The spacious interior minimizes fatigue even during long work hours.

● High-back Full Suspension Seat

The standard suspension seat offers outstanding comfort. (Air Suspension seat is optional)

● Arm Rest

The spacious cab also includes ergonomically placed arm rests on the right and left sides of the seat to minimize operator fatigue. The arm rests have been designed to increase operator space.

● Wide Leg Room

The cab provides ample leg room to reduce operator fatigue.

● Ready for radio installation (Option)

The SVL-series Factory Closed cab now comes prewired with speakers already installed, all that needs to be added is the radio.

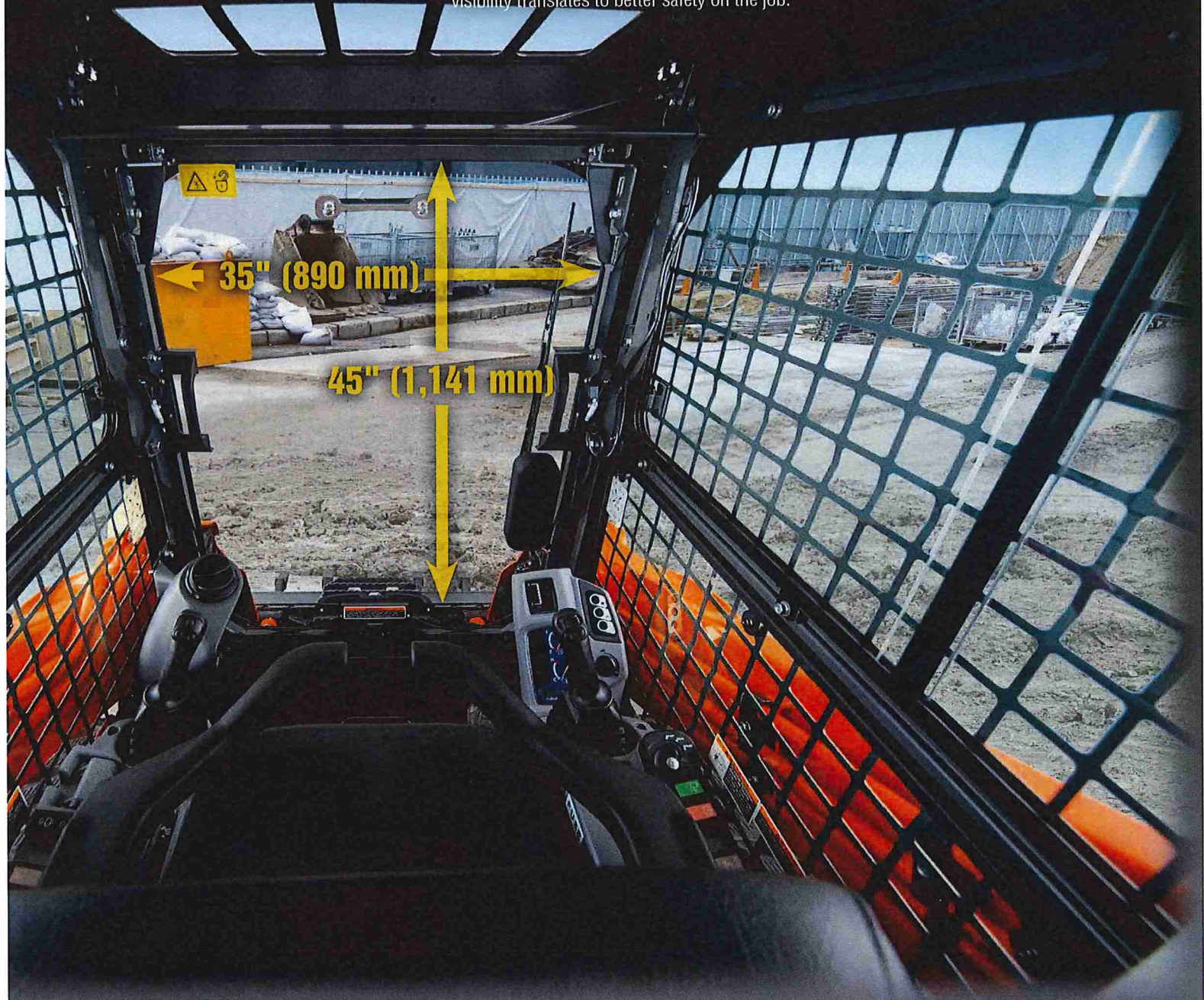
● Easy-clean Floor Mat and Drain Outlet

The soft rubber floor mat is easy to remove and clean. And with the built-in drain outlet, the mat can be washed in the cab.



Excellent 360° Visibility

The edge of the bucket can be seen from the seat. Improved visibility translates to better safety on the job.



● Hand/Dial and Foot Throttle

The SVL95-2s' dial and foot throttle, and the SVL75-2's hand and foot throttle both allow you to match the engine speed to the task. The hand/dial throttle is ideal for jobs requiring constant engine speed such as cold planing, trenching or snow blowing. The foot throttle lets the operator vary engine speed for other applications.



EXCEPTIONAL COMFORT

Pressurized Cab

The cab is pressurized to keep dust, flying debris, and insects away to enhance comfort on the job. Furthermore, noise is kept down to let you work for long hours with minimal fatigue.



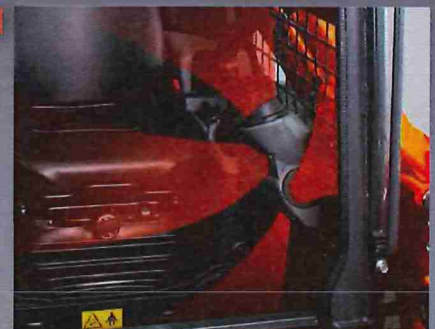
Excellent Air Conditioning Performance

● Optimized Air Conditioning

Thanks to improved vents, the climate control system provides an optimized airflow for outstanding cooling and heating performance—and supreme operator comfort—all year round.

● Enhanced Defrosting and Demisting Functions

Ample airflow prevents the windows from fogging up or freezing during the cold months of the year.

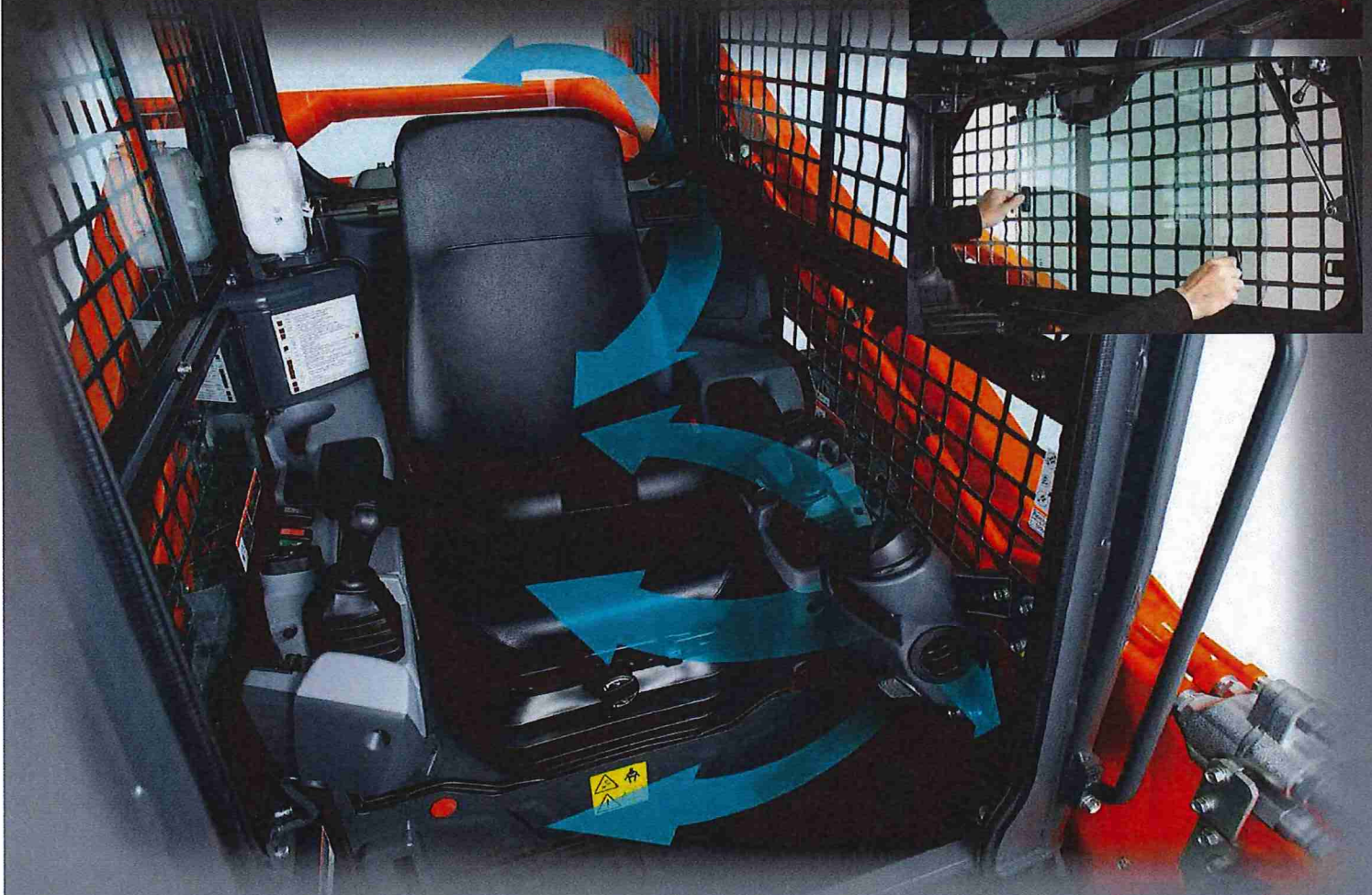


CAB

Easy-open Sliding Windows

The sliding front door can be opened regardless of the position of bucket or attachment; allowing you to get in or out in difficult situations and also work with the front door open. It is a added benefit when hooking up attachments, improving the visibility and safety.

The sliding side windows are split in the middle and can be opened separately from the front or rear.



EASY MAINTENANCE IMPRESSIVE DU

Easy Maintenance

● Routine Checks

Simply open the rear bonnet to access all components for daily routine inspections.



● Slide-and-tilt Radiator and Oil Cooler

The radiator can be tilted for easy cleaning.

● DEF easy refill access (SVL95-2s)



● Large Space for Tool Box

The SVL75-2 offers a convenient and large tool box for storing a grease gun and other necessities.

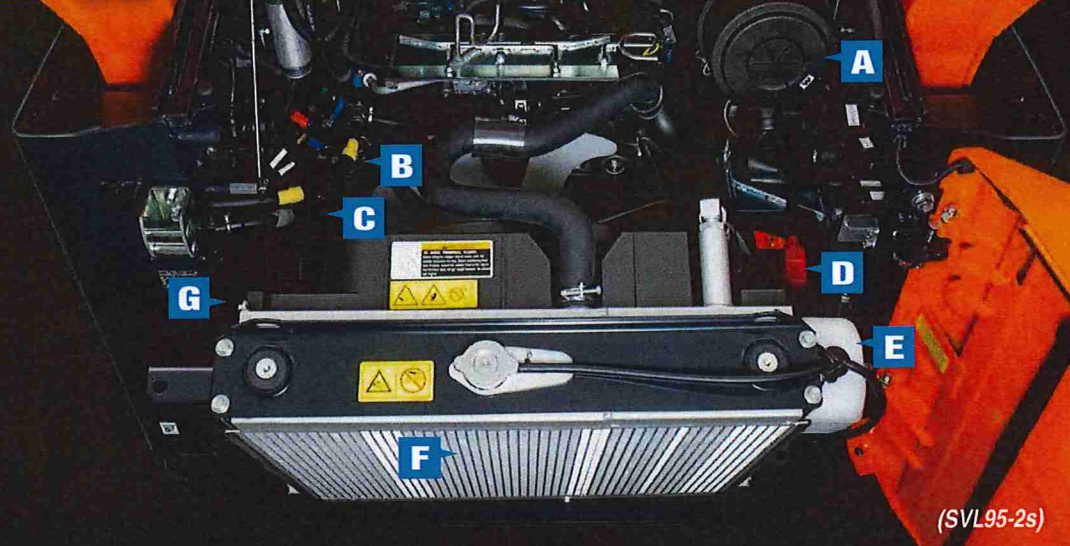


● Tilt-up Cab

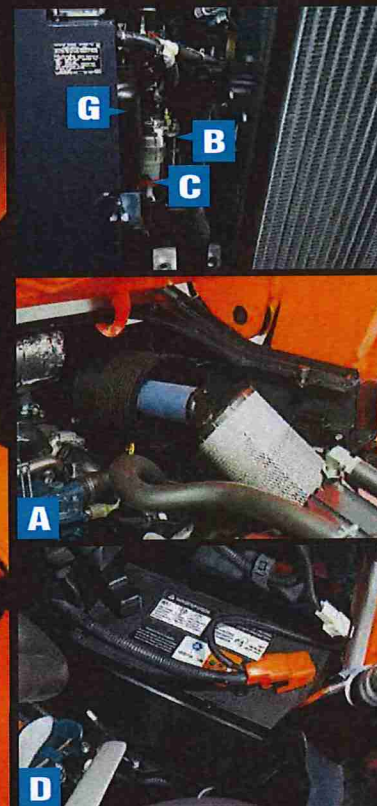
The cab can be tilted 72° without having to lift the arm, allowing easy access to the hydraulic pumps, valves, lines and hydraulic tank.



ANCE & RABILITY

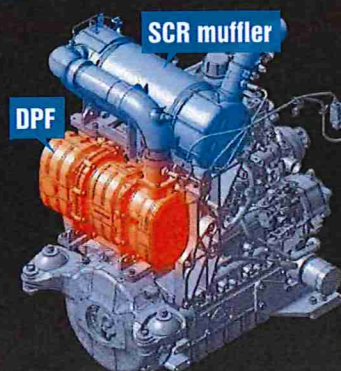


- A. Dual Element Air Cleaner**
- B. Fuel Filter**
- C. Water Separator**
- D. Maintenance-Free Battery**
- E. Coolant**
- F. Slide-and-tilt Radiator**
- G. DEF tank**



Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR)

The Diesel Particulate Filter and Selective Catalytic Reduction meet the latest Tier4 diesel emissions regulation by collecting particulate matter (PM) and NOx from exhaust gas for cleaner exhaust emissions.



Impressive Durability

1. Welded, Integrated Mainframe and Undercarriage

The undercarriage forms an integral part of the main frame for maximum durability.

2. Kubota Original Rubber Tracks

Kubota's original rubber tracks offer outstanding durability and long-life performance. Furthermore, Kubota's original lug pattern prevents soil from accumulating and improves traction force. 15" (380 mm) wide tracks are optional for the SVL75-2.

3. Triple Flange Lower Track Rollers

A highly reliable triple flange design not only minimizes the risk of detracking, but improves stability as well. They are lifetime sealed and lubricated.



VERSATILITY

With a wide variety of attachments available*, Kubota Compact Track Loaders are the most versatile machine on your jobsite.

**Not all attachments are OEM-KUBOTA.*

Auger

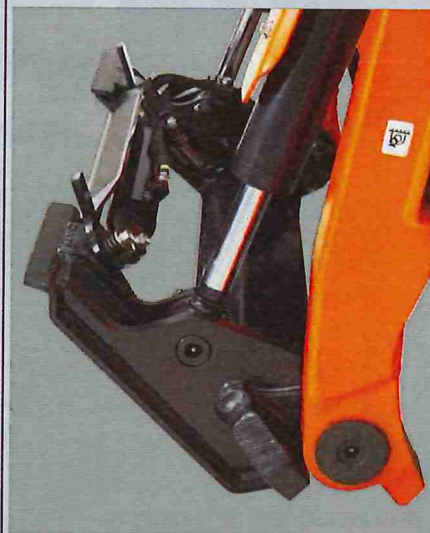


Grapple Bucket



Quick Coupler

An optional Hydraulic quick coupler is available. You can attach or remove attachments using a switch without leaving the seat.



Pallet Fork



Sweeper



Breaker

Cold Planer

4-in-1 Bucket

Snow Blade

Brush Cutter

Broom

Tiller

Snow Blower

Buckets

Dozer Blade

Tilt Attach

EQUIPMENT

STANDARD EQUIPMENT

- Open CAB (ROPS / FOPS Level 1)
- Top / Rear window
- Suspension seat
- 2" Retractable seat belt
- Operator presence control
- Pull down arm rest
- Hand/Dial and Foot throttle
- 12V electric outlet
- Horn
- Lockable fuel cap
- Backup alarm
- Working lights (Front 2 / Rear 2)
- Glow plug
- Mechanical quick coupler
- Loader arm float function
- Bucket self-leveling (up only)
- Wet disc parking brakes
- Two-speed travel
- Rubber crawler
 - SVL75-2-12.6" (320mm)
 - SVL95-2s-17.7" (450mm)

OPTIONAL EQUIPMENT

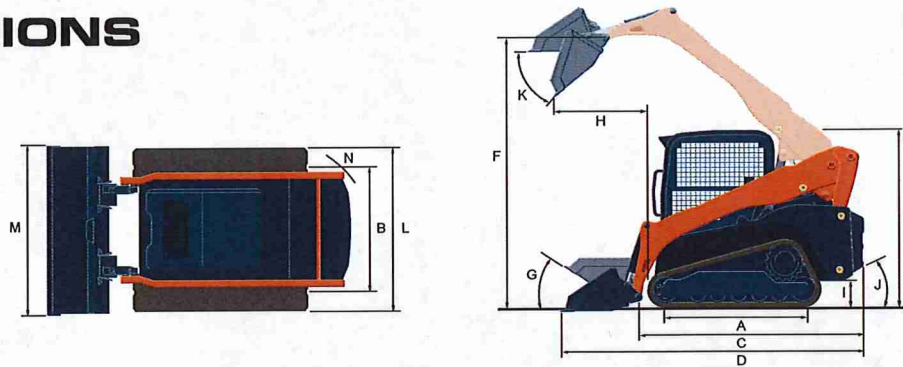
- High-flow hydraulics (1/2" and 3/4" couplers for both models)*
- Adjustable maximum oil flow*
- 14-pin coupler for attachments
- Wide rubber crawler*
 - SVL75-2-15" (380mm)
- Radio Ready*
- Air ride suspension seat
- 3" Retractable seat belt
- Rear bonnet lock Kit
- Rear view mirror
- Hydraulic quick coupler*
- Strobe light
- Beacon light
- Engine block heater
- Radiator screen
- ...and much more.

**Factory Option*

SPECIFICATIONS

Model				SVL75-2	SVL95-2s	
Type of operator station				Open CAB / Closed CAB	Open CAB / Closed CAB	
Engine	Model			V3307-CR-TE4	V3800-TIEF4	
	Emission certification			Tier 4	Tier 4	
	Gross HP (SAE J1995)	HP (kW)/rpm		74.3 (55.4)/2400	96.4 (71.9)/2400	
	Net HP (SAE J1349)	HP (kW)/rpm		68.8 (51.3)/2400	87.0 (64.9)/2400	
	Displacement	cu.in. (cc)		203.3 (3331)	230.0 (3769)	
	Cylinders			4	4	
	Bore x Stroke	in.(mm)		3.7 (94) x 4.72 (120)	3.94 (100) x 4.72 (120)	
Aspiration				Turbocharged	Turbocharged	
Loader Performance	Rated operating capacity-35% tipping load		lbs. (kg)	2300 (1043)	3200 (1451)	
	Tipping load		lbs. (kg)	6570 (2980)	9143 (4147)	
	Breakout force	Bucket	lbf. (kg)	6204 (2814)	7961 (3611)	
		Lift arm	lbf. (kg)	4766 (2162)	6742 (3058)	
	Lift arm path			Vertical	Vertical	
Undercarriage	Track Width	Standard	in. (mm)	12.6 (320)	17.7 (450)	
		Wide	in. (mm)	15.0 (380)	N/A	
	Ground pressure	Standard	psi	5.6 / 5.8	4.4 / 4.5	
		Wide	psi	4.7 / 4.9	N/A	
	Track rollers (per side)			4	5	
	Track ground contact length			in. (mm)	56.5 (1436)	65.6 (1667)
	Travel speed	Low	mph (km/h)	4.7 (7.5)	5.0 (8.0)	
		High	mph (km/h)	7.1 (11.5)	7.3 (11.7)	
	Traction force			lbs. (kg)	9678 (4390)	12178 (5524)
Min. ground clearance			in. (mm)	11.7 (296)	11.5 (293)	
Hydraulic system	Aux. hydraulic flow	Std./High	gpm (ℓ/min.)	17.4 (66.0) / 29.3 (110.9)	23.1 (87.6) / 40.0 (152)	
	Aux. hydraulic pressure		psi (kgf/cm²)	3185 (224.0)	3553 (249.8)	
Service refill capacities	Hydraulic system		gal. (ℓ)	15.9 (60)	17.96 (68)	
	Hydraulic tank		gal. (ℓ)	9.2 (35)	10.1 (38.1)	
	Fuel tank		gal. (ℓ)	24.6 (93)	28.8 (109)	
	DEF tank		gal. (ℓ)	N/A	5.0 (18.8)	
Operating weight (Includes operator weight 165lbs.)			lbs. (kg)	9039 (4100) / 9315 (4225)	11299 (5125) / 11574 (5250)	

DIMENSIONS



Model				SVL75-2	SVL95-2s
A	Length of track on ground	in. (mm)		56.5 (1436)	65.6 (1667)
B	Track gauge	in. (mm)		53.3 (1355)	59.5 (1512)
C	Length w/o bucket	in. (mm)		109 (2768)	123.5 (3137)
D	Length w/bucket on ground	in. (mm)		140.8 (3576)	154.6 (3929)
E	Height to top of cab	in. (mm)		82 (2083)	83.3 (2116)
F	Bucket hinge pin height at max. lift	in. (mm)		119.1 (3025)	128.5 (3264)
G	Rollback angle at carry position	degree		27	27
H	Reach at max. lift and dump	in. (mm)		41.7 (1060)	40.7 (1035)
I	Ground clearance	in. (mm)		11.7 (296)	11.5 (293)
J	Departure angle	degree		31.5	31
K	Max. dump angle	degree		40	43
L	Vehicle width	Standard track / Wide track	in. (mm)	65.9 (1675) / 68.3 (1735)	77.2 (1962)
M	Width with bucket		in. (mm)	68 (1727)	80 (2032)
N	Turning radius from center-machine rear		in. (mm)	107.1 (2720)	127 (3220)



KX080-4

From our excavators, skid steers and wheel loaders to our tractor/loader/backhoes, Kubota offers a wide range of reliable, high-performance construction equipment to get the job done right.



M62



SSV65/SSV75

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Kubota®

KUBOTA TRACTOR CORPORATION

Kubota Tractor Corporation, 1000 Kubota Drive, Grapevine, TX 76051 Tel (817) 756-1171
 Western Division: 1175 S. Guild Ave., Lodi, CA 95240 Tel (209) 334-9910
 Central Division: 14855 FAA Boulevard, Fort Worth, TX 76155 Tel (817) 571-0900
 Northern Division: 6300 at One Kubota Way, Groveport, OH 43125 Tel (614) 835-1100
 Southeast Division: 1025 Northbrook Parkway, Suwanee, GA 30024 Tel (770) 995-8855

Visit our web site at: www.kubota.com



Cat. No.8925-01-US Printed in Japan '16-12D. ◇ 10



CE - #515-16, GM - #529-17

SVL95-2SHFC WEB QUOTE #1477451

Date: 10/9/2019 6:55:08 AM

- Customer Information -

CHAPA, SAVINO

CITY OF FRIENDSWOOD

SCHAPA@FRIENDSWOOD.COM

2819963362

*112,259.99 - Total w/ Attach
+ Tax*

Quote Provided By

ALVIN EQUIPMENT COMPANY, LLC

Ricky Kubeczka

3375 E. HWY. 6

ALVIN, TX 77511

email: RICKY@ALVINEQUIPMENT.COM

phone: 2813313177

- Standard Features -

- Custom Options -



Kubota

S Series

SVL95-2SHFC

*** EQUIPMENT IN STANDARD MACHINE ***

FEATURES

Final Tier 4 Certified Kubota Diesel Engine
Electronic Travel Torque Management System
Vertical Lift Path Loader Frame
Standard Front Quick Coupler, Float Standard
Hydraulic Quick Coupler Option
Loader Arm Self-Leveling
Loader Boom Lock
Open ROPS/FOPS
Optional enclosed and pressurized cab with A/C
High Back, Adjustable, Vinyl, Suspension Seat
2" Retractable Seat Belt And 2-Piece Seat Bar
23.1 gpm Auxiliary Hydraulics Standard, 40.0 gpm Option
Direct To Tank Return Line
Rigid Mounted Undercarriage, 5 Lower Track Rollers
High Grip Rubber Tracks, 17.7" Standard
Two Speed Travel System
Automatic Wet Disk Parking Brake
Kubota 4 Hydraulic Pump Load Sensing System
3 Variable Displacement Pumps,
1 additional piston pump for High Flow Option
Hydraulic Joystick Controls
ISO Operating Pattern
Dial Knob And Foot Throttle Controls
Stall Guard Engine Control
Automatic Glow Plugs
Key Switch Stop System
Self Bleed Fuel System
2 Front And 2 Rear Working Lights
Hour Meter, Engine Temperature, DEF, And Fuel Gauges And Warning Lights
Horn And Backup Alarm
Lockable DEF Tank Cap
Lockable Fuel Cap
Radio Ready on Enclosed Cabs

BASIC UNITS

SVL95-2SHFC, 17.7" Rubber Tracks,
A/C ROPS/FOPS Cab
Hydraulic Quick Coupler,
High Flow Auxiliary Hydraulics

OPERATIONAL

DIMENSIONS

Operating Weight*, SVL95-2s, 17.7" Rubber Tracks,
Open ROPS/FOPS Cab,
Mechanical Quick Coupler 11,299 lbs.
Rated Operating Capacity (ROC) @ 35%
of Tipping Load complies with ISO 14397-1
and SAE J 818) 3,200 lbs.
Rated Operating Capacity (ROC) @ 50%
of Tipping Load 4,572 lbs.
Tipping Load 9,143 lbs.
Auxiliary Hydraulics Flow 23.1 / 40.0 gpm
Travel Speed (Low / High) 5.0 / 7.3 mph
Reach @ Maximum Height 40.7"
Height to Hinge Pin 128.6"
Ground Pressure 4.4 psi.
Traction Force 12,178 lbf.

* Includes operator's weight, 175 lbs.

ENGINE

V3800-Tier 4 Kubota Final Tier 4 Diesel Engine
4 Cylinder, 4 Cycle, Turbo Charged
96.0 Gross HP @ 2400 rpm

DIMENSIONS

Cab Height 83.4"
Width (without attachment) 77.2"
Length (without attachment) 123.5"
Length of Track on Ground 65.6"

SVL95-2SHFC Base Price: **\$82,047.00**

(1) SPECIAL APPLICATION DOOR KIT FOR CAB \$3,095.00
S6658-SPECIAL APPLICATION DOOR KIT FOR CAB

(1) 80" HEAVY DUTY LOW PROFILE LONG FLOOR BUCKET (20.9 CU-FT) W/CUTTING EDGE AP-HD80LLC-80" HEAVY DUTY LOW PROFILE LONG FLOOR BUCKET (20.9 CU-FT) W/CUTTING EDGE \$1,750.00

(1) HOSE STAY \$98.00
S6689-HOSE STAY

Configured Price: **\$86,990.00**

BUY BOARD Discount: **(\$20,877.60)**

SUBTOTAL: **\$66,112.40**

2Yr SVL95-2SHFC Extended Warranty (4000 hrs) **\$6,000.00**

Dealer Assembly: **\$215.33**

Freight Cost: **\$665.00**

PDI: **\$250.00**

LOFTNESS 61BSQ38GO MULCHING **\$22,300.00**

Total Unit Price: **\$95,542.73**

Quantity Ordered: **1**

Final Sales Price: **\$95,542.73**

82542.73

Purchase Order Must Reflect
the Final Sales Price

To order equipment - purchase orders must be made out and returned to:

Kubota Tractor Corporation
Attn: National Accounts
1000 Kubota Drive
Grapevine, TX 76051
or email NA.Support@kubota.com
or call 817-756-1171 or fax 844-582-1581

*All equipment specifications are as complete as possible as of the date on the quote. Additional attachments, options, or accessories may be added (or deleted) at the discounted price. All specifications and prices are subject to change. Taxes are not included. The PDI fees and freight for attachments and accessories quoted may have additional charges added by the delivering dealer. These charges will be billed separately. Prices for product quoted are good for 60 days from the date shown on the quote. All equipment as quoted is subject to availability.

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CONTRACT PRICING WORKSHEET		Submission #	1907
		Date Prep:	10/9/2019
This Worksheet is prepared by LAND PRIDE and given to BuyBoard Member. Quote MUST accompany Purchase Order and MUST be issued to LAND PRIDE .			
Buying Agency:	City of Friendswood	Contractor:	Land Pride c/o Alvin Equipment Co. (Alvin)
Contact Person:	Savino Chapa	Prepared By:	Troy L. Olson - National Accts. Manager
Phone:	281-996-3362	Phone:	785-822-5651
Fax:		Fax:	
Email:	schapa@friendswood.com	Email:	troy.olson@landpride.com
Product Code:	AP-BR510	Description:	Land Pride Hydraulic Breaker (LP2021)
A. Product Item Base Unit Price Per Contractor's Buy Board Contract: # 529-17			\$ 10,150.00
B. Published Options - Itemize below - Attach additional sheet if necessary - Include Option Code in description if applicable (Note: Published Options are options which were submitted and priced in Contractor's bid.)			
Description	Cost	Description	Cost
03 - Skid Steer Plate w/ Bolt-on Breaker Mount	\$1,010.00		
23 - 102" Skid Steer Hose	\$318.00		
Subtotal from additional sheet(s):			
Subtotal B:			\$ 1,328.00
C. Unpublished Options - Itemize below - Attach additional sheet if necessary (Note: Unpublished options are items which were not submitted and priced in Contractor's bid.)			
Description	Cost	Description	Cost
Subtotal from additional sheet(s):			
Subtotal C:			\$ -
D. Total Cost before any other applicable Charges, Trade-Ins, Allowances, Discounts, Etc. (A+B+C)			
Quantity Ordered :	1	X Subtotal of A+B+C :	\$ 11,478.00 = Subtotal D: \$ 11,478.00
E. Other Charges, Trade Ins, Allowances, Discounts, Etc.			
Description	Cost	Description	Cost
Freight: (LTL)	\$317.76		
Set Up:	\$125.00		
Delivery:	\$0.00		
Subtotal E:			\$ 442.76
Discount Percentage :			25.00%
Discount Total :			\$ 2,869.50
Estimated Delivery Date :		In Stock	F. Total Purchase Price (D+E) : \$ 9,051.26

Alvin Equipment Company, Inc.

3375 E. Hwy. 6 - P.O. Box 1907 Alvin, Tx 77512

Phone 281-331-3177 / Fax 281-585-4012

www.alvinequipment.com

ricky@alvinequipment.com

— QUOTATION —



Customer Name City of Friendswood
Address _____
City _____ State TX Zip _____
Phone _____ Cell _____ Fax _____

Date

10/24/2019 Salesman

RICKY KUBECZKA

Quantity	Description	Amount
1	Ranch King by Ameritrail TQP20610-16ER2F	
	Equipment Hauler Bumper pull 20' x 6' 10" with	
	2' Dovetail, 8K Axles, Electric brakes,	
	16" Wheels 14Ply tires, Spare tire, &	
	5' Fold Up Ramps Spring Assist	\$8,141.00
1	Ranch King by Ameritrail Tilt 20610-16E	
	20' 6' 10" Tilt trailer, 18' Treated wood tilt deck,	
	4' front stationary 1/8" diamond plate,	
	8K Drop axles, Electric brakes, & Spare tire	\$9,716.00
1	Ranch King by Ameritrail PT25-16D2C1	
	20' + 5' Dovetail bumper pull deckover, 18" wide over	
	flush ramps spring assist, 8K axles,	
	Electric brakes, 16" wheels 14 ply tires, &	
	Spare tire	\$10,175.00
	About a 5 Week order time	

Quotation Good For 20 Days - Official Signature _____



HEAVY DUTY EQUIPMENT HAULER (TQP)

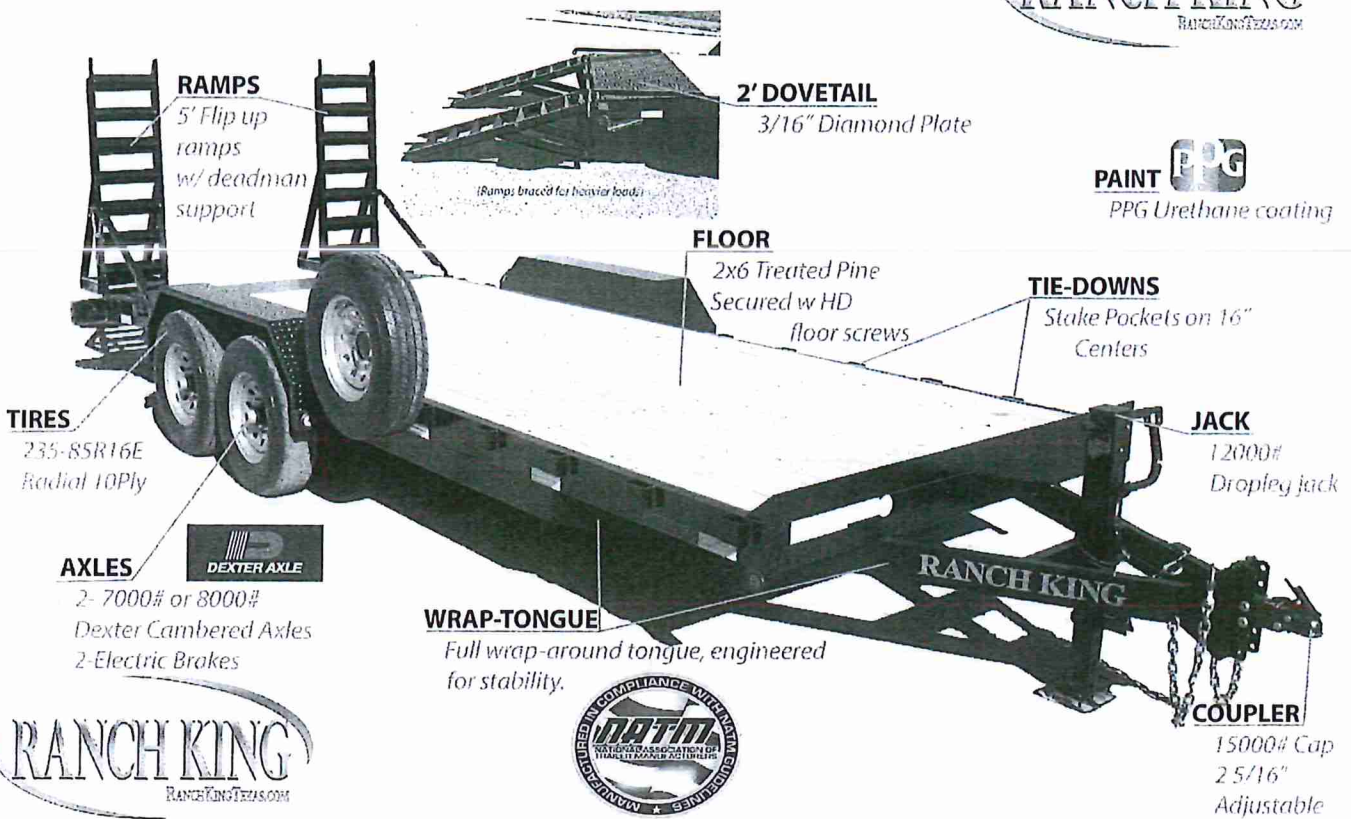
Mainframe c6x13#

Crossmembers c3 x 3.5# on 12" centers

GVWR 14000#-16000#

BED LENGTH 12-24'

BED WIDTH 82"



20' x 6' 10"

\$ 8, 141.00

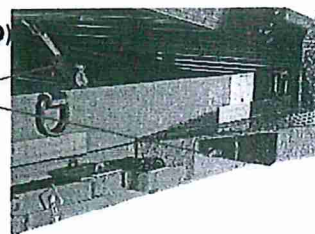


LOW-PROFILE HYDRAULIC DAMPENING TILT TRAILER (TILT90D)

GVWR 14000-20000#
BED LENGTH 16-22'
BED WIDTH 72"-82"

HYDRAULIC DAMPENING

Balance tilt hydraulic dampening system designed for easy lockout during loading



(bearing added on jack arm for smooth actuation, up & down)



LIGHTS

All LED Rubber mounted lights in HD enclosed steel boxes

TIRES

235-80R16E
10 Ply radial tires

DECK

Treated pine decking on the balance tilt and diamond plate on the front 4' stationary deck

FENDERS

HD 1/8" Diamond plate fender with center gusset support.

JACK

12000# Dropleg jack with the handle mounted to drivers side

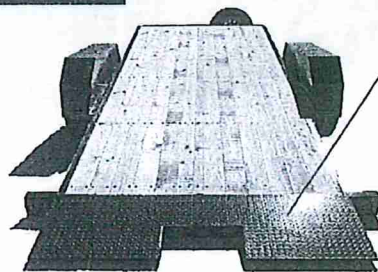
AXLES

DEXTER 7000# Cambered Axles. Electric Brakes on both



MAINFRAME

Low-Profile mainframe designed for safe and easy loading and unloading



SPARE MOUNT

Front facing spare mount (shown with optional spare tire)



COUPLER

15000# CAP 2 5/16" Adjustable coupler

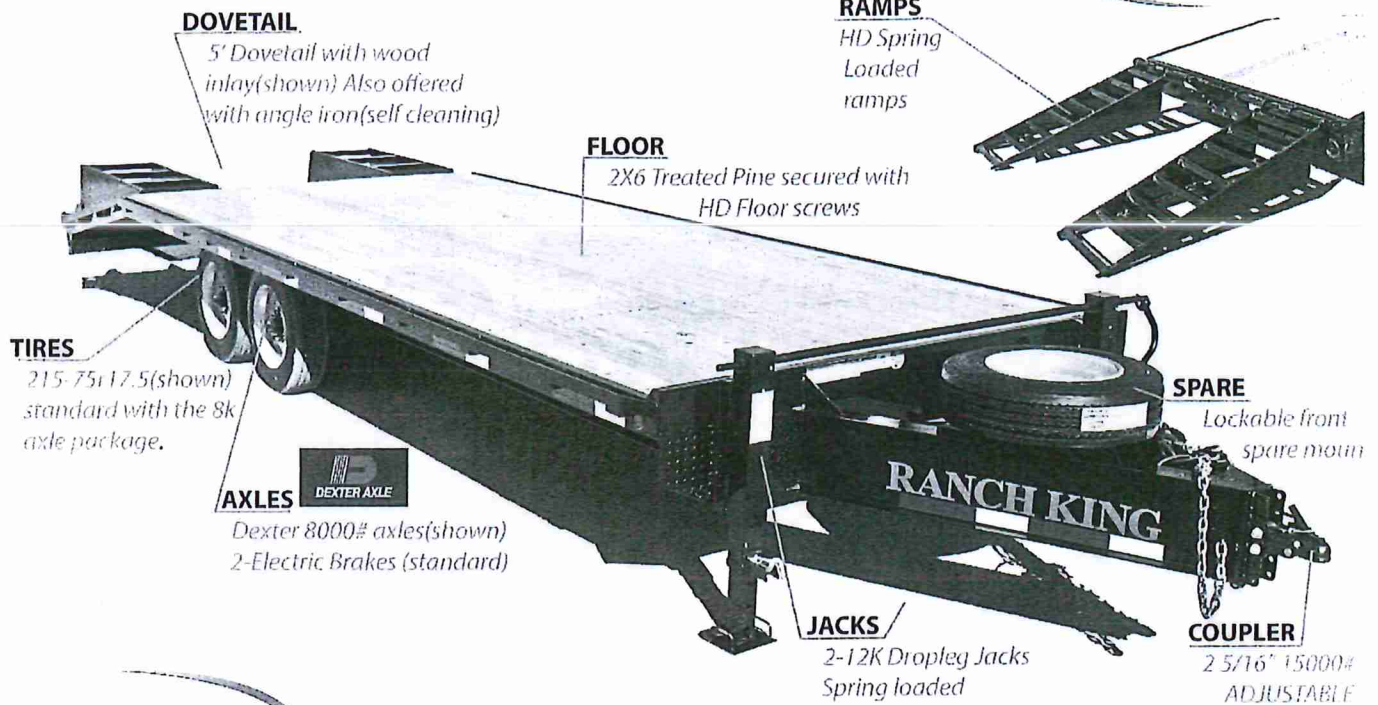


20' x 6'10"

\$ 9,716.00

HEAVY DUTY DECKOVER TONGUE-PULL (PT)
MAINFRAME HD I-BEAM
CROSSMEMBERS C3X3.5# ON 16"CENTERS

GVWR 14000#-20000#
BED LENGTH 16'-32'
BED WIDTH 102"



Premium Urethane Topcoat with Epoxy Primer

20'x5' Dovetail
 410,175⁰⁰

Total \$ 101,896.91 w/attach



CONTRACT PRICING WORKSHEET For Standard Equipment Purchases

Contract No.:

EM06-19

Date Prepared:

11/18/2019

This Worksheet is prepared by Contractor and given to End User. If a PO is issued, both documents **MUST** be faxed to H-GAC @ 713-993-4548. Therefore please type or print legibly.

Buying Agency:	City of Friendswood	Contractor:	Associated Supply Company (ASCO)
Contact Person:	Mac Mosqueda	Prepared By:	Skipper Robinson
Phone:	281-996-3368	Phone:	(832) 316-2507
Fax:		Fax:	(713) 649-5571
Email:	mmosqueda@friendswood.com	Email:	srobinson@ascoeq.com

Product Code:	EM19A25	Description:	CASE TV450 Compact Track Loader (ser# NKM480138)
---------------	---------	--------------	--

A. Product Item Base Unit Price Per Contractor's H-GAC Contract: 67504.28

B. Published Options - Itemize below - Attach additional sheet if necessary - Include Option Code in description if applicable
(Note: Published Options are options which were submitted and priced in Contractor's bid.)

Description	Cost	Description	Cost
761537 - EH2 Platinum Cab	-5780		
761183 - Enclosed Cab w/HVAC - Demo Door	1211.08		
761062 - Air Ride Suspension Seat	Included		
761201 - Heavy Duty Front Lights	Included		
761173 - Floor Mat E-H Controls	Included		
761205 - Heavy Duty Rear Door	Included		
761039 - Enhanced High Flow Package	4295.56		
8500187 - 450 BELT HD Track	270.64		
761133 - 78" Low Profile Extended Bucket	738.48		
761148 - 78" Bolt on cutting edge	176.12		
		Subtotal From Additional Sheet(s):	
		Subtotal B:	911.88

C. Unpublished Options - Itemize below - Attach additional sheet if necessary
(Note: Unpublished options are items which were not submitted and priced in Contractor's bid.)

Description	Cost	Description	Cost
72" Hi Flow Brush Cutter	7159		
72" Grapple Bucket - brush	4506.5		
20' 15,000lb trailer (7000 lbs axles)	5780.25		
		Subtotal From Additional Sheet(s):	
		Subtotal C:	17445.75

Check: Total cost of Unpublished Options (C) cannot exceed 25% of the total of the Base Unit Price plus Published Options (A+B).

For this transaction the percentage is:

25%

D. Total Cost before any other applicable Charges, Trade-Ins, Allowances, Discounts, Etc. (A+B+C)

Quantity Ordered:	1	X Subtotal of A + B + C:	85861.91	=	Subtotal D:	85861.91
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E. Trade-Ins / Special Discounts / Other Allowances / Freight / Installation / Miscellaneous Charges

Description	Cost	Description	Cost
Freights from factory	2500	Additional discount	-5000
Pre-Delivery Inspection	1750		
Local Delivery	750		
		Subtotal E:	0

Delivery Date:	30 Days	F. Total Purchase Price (D+E):	85861.91
----------------	---------	--------------------------------	----------



QUOTATION

ASCO EQUIPMENT
6203 LONG DR
HOUSTON, TX 77087
713-649-0940

DATE: 11/18/2019
SALESMAN: Skipper Robinson
ATTENTION: Mac Mosqueda

TO: City of Friendswood.

QUANTITY	PRODUCT INFORMATION	SERIAL NUMBER	EQ NUMBER	PRICE
1	Angle Broom attachment for Case TV450.			\$7,685.00

EQUIPMENT SPECIFICATION	TRADE-IN
	NOTES

I acknowledge that I have been given the option purchase the following: Physical Damage Insurance, Extended Warranty, and SiteWatch/Telematics. (initial).	Equipment Purchase	\$	7,685.00
	Trade in Allowance	\$	-
	Freight	\$	-
	Total Proposal	\$	7,685.00
	Sales Tax	\$	-
	Diesel Tax	\$	-
	Inventory Tax	\$	-
	Total w/ Tax	\$	7,685.00

THIS IS NOT A FINANCE OFFER. FINANCING IS SUBJECT TO CUSTOMER CREDIT APPROVAL AND MUST BE DOCUMENTED ON OFFICIAL APPROPRIATE FORMS. PHYSICAL DAMAGE INSURANCE IS REQUIRED ON ALL FINANCE EQUIPMENT AND IS NOT QUOTED HERE. THIS QUOTE **DOES NOT** INCLUDE ANY APPLICABLE TAXES, DELIVERY FEES, OR OTHER APPLICABLE FEES UNLESS OTHERWISE NOTED ABOVE. NET DUE ON DELIVERY OR APPROVED FINANCE. A CANCELLATION CHARGE OF 20% OF TOTAL PURCHASE PRICE WILL BE ASSESSED AND IS HERBY AGREED TO BY THE CUSTOMER ON ALL CANCELLED ORDERS. ALL USED EQUIPMENT IS SOLD **AS IS WHERE IS**. ALL USED EQUIPMENT QUOTED IS SUBJECT TO PRIOR SALE AND IS NOT GUARANTEED. PRICE, TERMS, AND DELIVERY DATE ARE SUBJECT TO APPROVAL BY THE MANAGEMENT OF THE COMPANY. QUOTATION EXPIRES IN 10 DAYS UNLESS OTHERWISE NOTED.

ACCEPTED BY	
CUSTOMER: _____	DATE _____
SALESMAN: _____	DATE _____
MANAGER: _____	DATE _____



QUOTATION

ASCO EQUIPMENT
6203 LONG DR
HOUSTON, TX 77087
713-649-0940

DATE: 10/15/2019
SALESMAN: Skipper Robinson
ATTENTION: Mac Mosqueda

TO: City of Friendswood

QUANTITY	PRODUCT INFORMATION	SERIAL NUMBER	EQ NUMBER	PRICE
1	3M Striker- Hydraulic Hammer for Case TV370			\$8,250.00

EQUIPMENT SPECIFICATION	TRADE-IN
	NOTES

I acknowledge that I have been given the option purchase the following:
Physical Damage Insurance, Extended Warranty, and SiteWatch/Telematics.
(Initial).

Equipment Purchase	\$	8,250.00
Trade in Allowance	\$	-
Freight	\$	100.00
Total Proposal	\$	8,350.00
Sales Tax		
Diesel Tax		
Inventory Tax		
Total w/ Tax	\$	8,350.00

THIS IS NOT A FINANCE OFFER. FINANCING IS SUBJECT TO CUSTOMER CREDIT APPROVAL AND MUST BE DOCUMENTED ON OFFICIAL APPROPRIATE FORMS. PHYSICAL DAMAGE INSURANCE IS REQUIRED ON ALL FINANCE EQUIPMENT AND IS NOT QUOTED HERE. THIS QUOTE DOES NOT INCLUDE ANY APPLICABLE TAXES, DELIVERY FEES, OR OTHER APPLICABLE FEES UNLESS OTHERWISE NOTED ABOVE. NET DUE ON DELIVERY OR APPROVED FINANCE. A CANCELLATION CHARGE OF 20% OF TOTAL PURCHASE PRICE WILL BE ASSESSED AND IS HERBY AGREED TO BY THE CUSTOMER ON ALL CANCELLED ORDERS. ALL USED EQUIPMENT IS SOLD AS IS WHERE IS. ALL USED EQUIPMENT QUOTED IS SUBJECT TO PRIOR SALE AND IS NOT GUARANTEED. PRICE, TERMS, AND DELIVERY DATE ARE SUBJECT TO APPROVAL BY THE MANAGEMENT OF THE COMPANY. QUOTATION EXPIRES IN 10 DAYS UNLESS OTHERWISE NOTED.

ACCEPTED BY

CUSTOMER:	DATE
SALESMAN:	DATE
MANAGER:	DATE

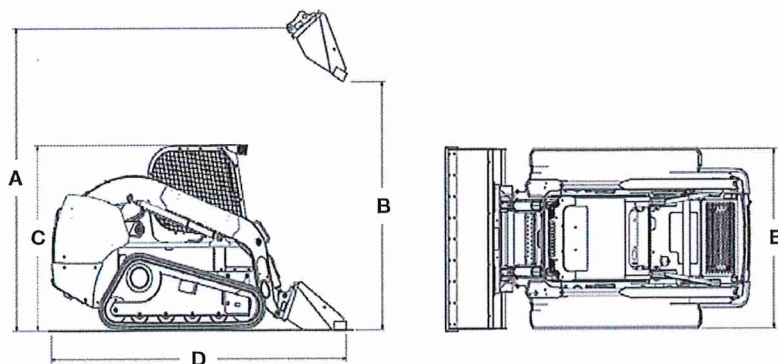
CASE
CONSTRUCTION

TV450
COMPACT TRACK LOADER



SINCE 1842

SPECIFICATIONS AND DIMENSIONS



Line drawings are for illustrative purpose only and may not be exact representation of unit.

DIMENSIONS	TV450
A. Height To Bucket Hinge Pin	131.6 in (3.34 m)
B. Dump Height With Foundry/Excavating Bucket	101.9 in (2.59 m)
C. Height To Top Of ROPS	80.4 in (2.04 m)
D. Overall Length With Foundry/Excavating Bucket	144.6 in (3.67 m)
E. Over The Track Width	76.0 in (1.93 m)

SPECIFICATIONS	TV450
Engine Make / Model	FPT F5B FL413 D*C001
Emissions Certification	Tier 4 Final
Gross Horsepower @ 2500 RPM – hp (kW)	90 (67)
Net Horsepower @ 2500 RPM – hp (kW)	84 (63)
Peak Torque @ 1400 RPM – lb-ft (N·m)	282 (383)
Displacement / Cylinders – in³ (L)	207 (3.4)/4
Rated Operating Capacity – ROC 35% – lb (kg)	3,150 (1 432)
Rated Operating Capacity – ROC 50% – lb (kg)	4,500 (2 045)
Tipping Load – lb (kg)	9,000 (4 091)
Bucket Cylinder Breakout Force – lb (kN)	9,188 (41.8)
Auxiliary Hyd. Standard / High Flow – gpm (L/min)	24.2 (91.5)/39.5 (149)
Operating Weight – lb (kg)	10,610 (4 823)
Lift Configuration	Vertical Lift

PRODUCT HIGHLIGHTS

Now the largest model in the CASE compact track loader line-up, the all-new TV450 satisfies your need for a hard-working, heavy-lifting, durable machine.

The TV450 offers optional high-flow (39.5 gpm at 3,450 psi) and enhanced high-flow (35 gpm at 4,000 psi) auxiliary hydraulics for excellent power and attachment versatility, so you achieve increased performance and more productivity when powering critical, high capacity attachments.

Strong. Productive. The TV450 features a rated operating capacity of 4,500 lbs at 50% tipping load and increased bucket & lift cylinder breakout forces. These product enhancements deliver better performance essential for operations that demand more lift capacity like carrying a pallet of bricks. The machine also includes standard bucket cylinder guards.

Along with these performance upgrades, CASE also reinforced structures for enhanced machine durability and reliability, so your new TV450 can stand up to your hardy work demands.



KEY SEGMENTS:



©2018 CNH Industrial America LLC. All rights reserved. CASE is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. CNH Industrial Capital is a trademark in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. Printed in U.S.A. Contains 10% post-consumer fiber.

Form No. CCE201805TV450

IMPORTANT: CASE Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your CASE dealer/distributor will be able to give you details of the products and their specifications available in your area.



CASE Construction Equipment is biodiesel-friendly.

NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.



Always read the Operator's Manual before operating equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.



MUSTANG CAT

LET'S WORK TOGETHER

*Total \$100,584.52 w/attach
No TRAILER*

Machine Sales Quotation

Reference# 27112-2

October 30, 2019

Steven Vavrecka
CITY OF FRIENDSWOOD
PO BOX 1288
FRIENDSWOOD, 77549

Mustang CAT Sales Representative

Stuart Newton
Mobile: 832-540-9086
SNewton@mustangcat.com

Mr. Vavrecka,

Thank you for considering Mustang CAT. Our proposed solution for your needs is summarized below with additional detail on the following page or pages. Please review this proposal thoroughly. Our recommended solution is based on our current understanding of your requirements. Please contact me if your requirements have changed or if you have any questions about the products and services we are recommending.

We hope to earn your business and look forward to working with you. When you are ready to move forward, please sign and date on the bottom of page one and return it to me.

Mustang CAT recommended solution for CTL

CAT Machines

299D2 CAHF 299D3 CTL DCA6 (pre-tax)

\$100,584.52

Total Investment (pre-tax):

\$100,584.52

Accepted by:

Printed Name

Date

Customer Signature

MACHINERY

RENTAL

USED EQUIPMENT

PARTS & SERVICE

888.NEXT.CAT | 888.639.8228

MUSTANGCAT.COM

Model:	299D2 CAHF
Serial No.:	TBD

ARRANGEMENT		
OPTION	DESCRIPTION	LIST
568-4654	299D3 CTL DCA6	\$98,180.00
0P-9001	LANE 1 ORDER	
512-4284	INSTRUCTIONS, ANSI, USA	
435-9238	FILM, SELF LEVEL, ANSI	
389-7672	TRACK,RUBBER,450MM(17.7IN)BLCK	\$ 665.00
441-4818	PRODUCT LINK, CELLULAR PL240	
421-8926	SERIALIZED TECHNICAL MEDIA KIT	
0P-1176	CAROLINA CDC - - AVAILABILITY	\$ 1.00
0P-2266	SHIPPING/STORAGE PROTECTION	\$ 207.00
444-6050	KIT, TURBO DEBRIS GUARD	\$ 285.00
584-0828	KIT, DEBRIS	\$1,874.00
584-3877	KIT, GUARDING	\$ 640.00
MACHINE LIST PRICE:		\$101,852.00

ATTACHMENTS		
0P0096	SSL 78 BKT	\$1,880.56
532-9106	HAMMER, B6	\$8,375.00
532-9240	BRACKET, LINES, SSL, MD-LG	\$1,597.00
217-6230	BUCKET-IND. GR, 80", BOCE	\$6,074.00
448-5660	BROOM, MANUAL ANGLE, BA118C	\$7,819.00
424-0435	BRUSHCUTTER, BR272, 72" HF	\$7,011.00
	UL752 BALLISTIC DOOR	\$2,000.00
ATTACHMENTS LIST PRICE:		\$34,756.56



List Price FOB Factory:	\$136,608.56
Dealer Discount:	(\$36,024.04)
Make Ready:	Included
Factory Freight:	Included
Warranty:	Included
Total Trade-In:	N/A
Subtotal:	\$100,584.52
Sales Tax:	N/A
Heavy Equipment Fee:	\$ 231.95
Diesel Surcharge:	N/A
Document Fee:	N/A
Total Sale Price:	\$100,816.47

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

Certificate Number:
2020-580164

Date Filed:
01/23/2020

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Lansdowne - Moody
Houston, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City Of friendswood

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

7951

Kubota SVL95 Skid steer loader with demo door and hydraulic oil cooler. Mulch Head / Concrete Breaker / Grapple Bucket /20' Equipment Trailer

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.



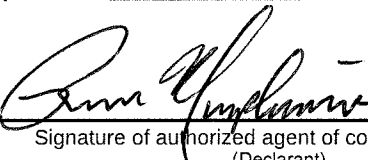
6 UNSWORN DECLARATION

My name is RUSSEL LEE HUMPHRIES, and my date of birth is 5.17.1978.

My address is 528 TREASURE DRIVE, LIVERPOOL, TX, 77577, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in HARRIS County, State of TEXAS, on the 23 day of JANUARY, 2020.
(month) (year)


Signature of authorized agent of contracting business entity
(Declarant)

LANSDOWNE-MOODY

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/8/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approving a Memorandum of Understanding (MOU) with Clear Creek Community Church to define limits and perform drainage modeling of possible drainage project

Originating Department: Engineering

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

This Memorandum of Understanding (MOU) would formalize an arrangement between the City and Clear Creek Community Church (CCCC) to perform drainage modeling on CCCC's property on FM 528 between Clear Creek and Bay Area Boulevard. This phase of the proposed project would be limited to preliminary engineering work. Should the model demonstrate that a viable flood mitigation project exists, the City and CCCC will consider a future MOU (Phase 2) in which CCCC would convey an easement to the City.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

The City will at its sole cost and expense commission drainage modeling and engineering work to establish the optimal terracing project for the CCCC property. The modeling work will, in alignment with the Rice Study, explore terracing options at this location on Clear Creek.

RECOMMENDATIONS

The MOU has been reviewed by the City Attorney. Staff recommends execution of the MOU.

ATTACHMENTS

1. Terracing project MOU signed - Jan 16 2020 - 1-34 PM
2. CCCC Map

MEMORANDUM OF UNDERSTANDING REGARDING PHASE ONE (1) OF A TERRACING PROJECT IN THE CITY OF FRIENDSWOOD, TEXAS

This Memorandum of Understanding (MOU) is by and between Clear Creek Community Church ("CCCC") and the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("the City").

WHEREAS, flooding in the Clear Creek watershed poses risks to property and residents in the City of Friendswood; and,

WHEREAS, addressing the risks and impacts of flooding requires cooperation between the City and multiple entities; and,

WHEREAS, flood infrastructure projects require sound engineering practices to have the greatest benefit; and,

WHEREAS, CCCC wishes to mitigate flooding of the fully developed Church property; and,

WHEREAS, the City wishes to have drainage modeling performed to determine the most optimal terracing project possible for property owned by CCCC along Clear Creek in Friendswood, Texas; and

WHEREAS, the results of the drainage modeling may warrant further efforts.

NOW, THEREFORE, CCCC and the City agree to and acknowledge the following in relation to drainage modeling to be performed on said property:

The City will at its sole cost and expense:

1. Conduct and or commission drainage modeling and engineering work to establish the optimal terracing project for the CCCC property.
2. Use the drainage model to establish a proposed easement by metes and bounds description.
3. Obtain partnerships with other entities to pursue terracing activities if necessary.
4. Be responsible for terracing activities including necessary engineering plans, surveys, infrastructure improvements, the possible mitigation of a gravesite on CCCC property, fill placement CCCC property to maximize the acreage of mitigated property.

Should results of the drainage modeling sufficiently conclude a viable flood mitigation project exists, CCCC shall convey an easement to the City once the project limits are defined, the project is fully approved, funded, engineered and planned; unless the easement is a prerequisite for the funding of this flood mitigation project. The form and substance of the easement shall be acceptable to CCCC in its sole discretion, CCCC shall retain the right to use the property within the easement for any purpose, including drainage, not inconsistent with the purpose of the easement.

A second MOU shall be drafted at a later date for Phase Two (2) of this project, which shall further outline the project parameters and construction methodology.

This MOU may be amended upon written agreement by the City and CCCC.

This MOU becomes effective upon execution by all parties and shall remain in effect for a period ending 3 years from the MOU effective date unless parties mutually agree in writing to extend it. Prior to the granting and recording of the easement either party may terminate this MOU at any time without liability by giving written notice to the other party.

Any notice shall be in writing and may be effected by personal delivery, by hand delivery through a courier or delivery service, or by registered or certified mail, postage prepaid, return receipt requested, addressed to the proper party.

City of Friendswood, Texas

Date: _____

Name: _____

Title: _____

Clear Creek Community Church

Mark Carden

Date: 1-16-2020

Name: Mark Carden

Title: Executive Pastor



Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. Gov. C. §2501.102. The user is encouraged to independently verify all information contained in this product. The City of Friendswood makes no representation or warranty as to the accuracy of this product or to its fitness for a particular purpose. The user: (1) accepts the product AS IS, WITH ALL FAULTS; (2) assumes all responsibility for the use thereof; and (3) releases the City of Friendswood from any damage, loss, or liability arising from such use.

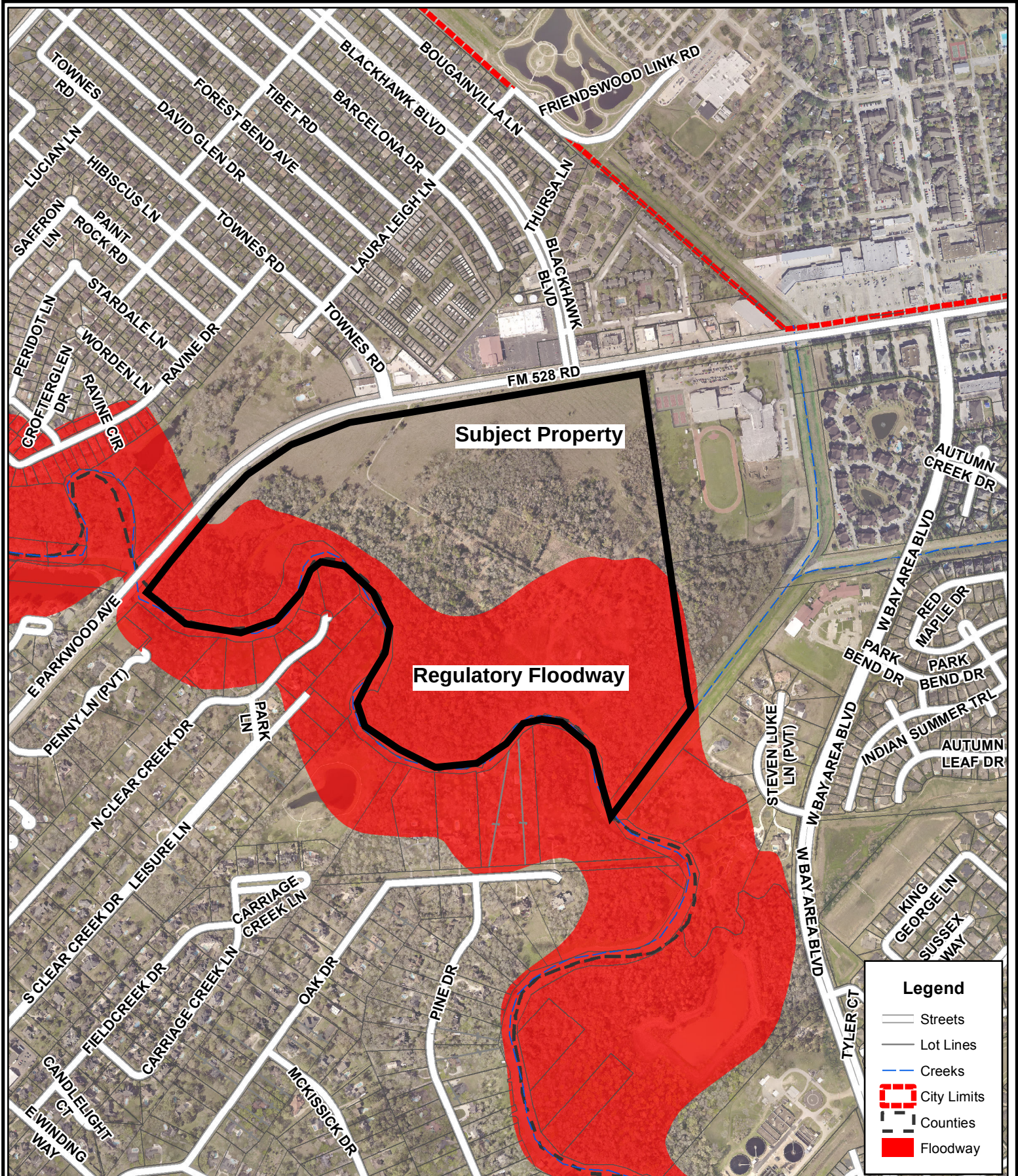


City of Friendswood
 910 South Friendswood Drive
 Friendswood, Texas 77546
 (281) 996-3200
www.ci.friendswood.tx.us

Friendswood GIS Mapping



1" = 844'
 Page 565 of 649



Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. Gov. C. §2501.102. The user is encouraged to independently verify all information contained in this product. The City of Friendswood makes no representation or warranty as to the accuracy of this product or to its fitness for a particular purpose. The user: (1) accepts the product AS IS, WITH ALL FAULTS; (2) assumes all responsibility for the use thereof; and (3) releases the City of Friendswood from any damage, loss, or liability arising from such use.



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Friendswood GIS Mapping



1" = 844'
 Page 566 of 649

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/21/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approving water line, sewer line, lift station, and drainage easements on FM 528 from Clear Creek Community Church

Originating Department: Engineering

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

Clear Creek Community Church, the property owner, wishes to grant easements for a water line, sewer line, lift station, and drainage. There are a combined 7 easements in all. The property owner is dedicating these easements outside the lot in which their future church will be built. Construction of these facilities are inspected by the City's Project Managers as well as members of the Public Works team. Acceptance of these completed facilities will come at a future date.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Approval of these easements will allow Clear Creek Community Church to move forward with its plans for construction of a new church near Townes Road on FM 528.

RECOMMENDATIONS

The easement document has been reviewed by city staff. Staff recommends acceptance of these easements.

ATTACHMENTS

1. CombinedEasements

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

SANITARY SEWER EASEMENT

That **CLEAR CREEK COMMUNITY CHURCH** ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid in hand to Grantor by the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("Grantee"), the receipt and sufficiency of which is hereby acknowledged and confessed, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey unto the said Grantee its successors, assigns and legal representatives, a perpetual easement for the purpose of constructing, reconstructing, altering and maintaining public underground sanitary sewer lines and facilities in, under, over, along, upon and across that certain 0.706 acre tract of land ("Easement") same being more particularly described in Exhibit A and shown in Exhibit B, both attached hereto and for all things made a part hereof.

Grantee may do and perform all acts necessary to construct, reconstruct, repair, relocate or maintain a public underground sanitary sewer line and facilities within said Easement and to operate thereon all necessary machinery and equipment to efficiently prosecute the work. Grantor retains, reserves and shall continue to enjoy the use of the surface of the Easement property for any and all purposes which do not interfere with or prevent the use by Grantee of the Easement for the purposes stated herein.

This conveyance is expressly made subject to any and all restrictions, mineral and/or royalty reservations, covenants, and easements appearing of record relative to the Easement, but only to the extent that the same are still in force and effect and enforceable against the same. The Easement, along with all rights and privileges relating thereto, shall terminate when the Easement, as described above, is abandoned by adoption of an Ordinance abandoning or vacating such by Grantee.

TO HAVE AND TO HOLD the above described Easement, together with all and singular the rights and appurtenances thereto in any wise belonging unto the said Grantee, its successors and assigns forever, and Grantor binds himself, his heirs, executors, administrators and assigns, to warrant and forever defend all and singular the said Easement unto Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, this instrument is executed this 15th day of January 2020

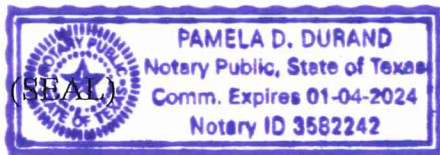
GRANTOR

**CLEAR CREEK COMMUNITY
CHURCH**

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Galveston §

This instrument was acknowledged before me on this 15th day of January,
2020 by Mark Carden Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

ACCEPTED BY GRANTEE:

ATTEST:

Mike Foreman, Mayor

Melinda Welsh, TRMC
City Secretary

ADDRESS OF GRANTEE:

City of Friendswood, Texas
910 South Friendswood Drive
Friendswood, Texas 77546

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-318

FIELD NOTES FOR 0.706 ACRE

Being a tract containing 0.706 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.706 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.706 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet, from which point a found 5/8 inch iron rod at the southwest corner of said 28.9270 acre tract bears South 08 degrees 47 minutes 23 seconds East, a distance of 1,289.36 feet;

THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, South 81 degrees 12 minutes 37 seconds West, a distance of 40.00 feet to the **POINT OF BEGINNING**;

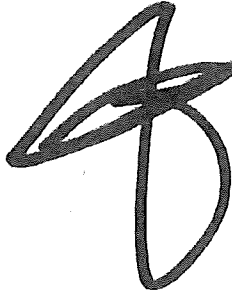
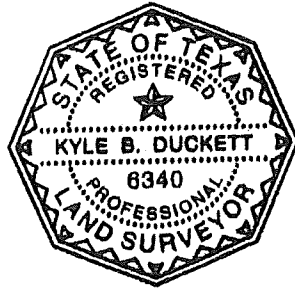
THENCE, through and across said 135.778 acre tract, the following four (4) courses:

- 1.) South 08 degrees 47 minutes 23 seconds East, a distance of 20.00 feet;
- 2.) South 81 degrees 12 minutes 37 seconds West, a distance of 1,549.58 feet;
- 3.) North 41 degrees 36 minutes 56 seconds East, a distance of 6.93 feet;
- 4.) North 41 degrees 34 minutes 56 seconds East, a distance of 24.43 feet to a point on the aforesaid south R.O.W. line of F.M. 528 and north line of said 135.778 acre tract, from which point a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 207.00 feet;

THENCE, with said south R.O.W. line and said north line, North 81 degrees 12 minutes 37 seconds East, a distance of 1,525.42 feet to the **POINT OF BEGINNING** and containing 0.706 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 25, 2019

A large, stylized handwritten signature in black ink, appearing to be 'KB' or similar, positioned to the left of the professional seal.

MATCH LINE - SEE PAGE 4 OF 4 PAGES

UNREST. RESERVE "A"
BLOCK 1
CALVARY CHAPEL
SOUTHEAST HOUSTON
F.C. NO. 604264 H.C.M.R.

PORION OF
RESERVE "G"
BLOCK 19
FOREST BEND SEC. 3
VOL. 180, PG. 73
H.C.M.R.

F.M. 528
(120' R.O.W.)

BLACKHAWK
BOULEVARD

0.706 ACRE

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

SCALE: 1" = 100'



SANITARY SEWER EASEMENT

0.706 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

Exhibit B Page 1 of 2 Pages

NOTES:
1.) Bearings are referenced to the
Texas Coordinate System of 1983
(NAD83), South Central Zone, based on
GPS observations. Distances are surface
values and may be converted to grid
by applying the combined adjustment
factor 0.9998715961.
2.) This is an exhibit only. Building
lines, easements, etc. have been
intentionally omitted. No abstracting
was performed by GBI except as shown.
3.) See Pages 1-2 of 3 Pages for
metes and bounds description.

LEGEND

B.B.	BEARING BASIS
C.I.R.	CAPPED IRON ROD
FND	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598260

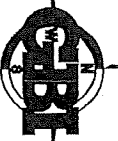
508°47'23"E 1,289.36'

FND. 5/8" I.R.

S81°12'37"W
40.00'

P.O.B.

P.O.C.
FND. 5/8" C.I.R.
"KREBS RPLS 3974"



GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBSurvey@GBISurvey.com

TBPELS FIRM #10130300 • www.GBISurvey.com

SCALE: 1" = 100'

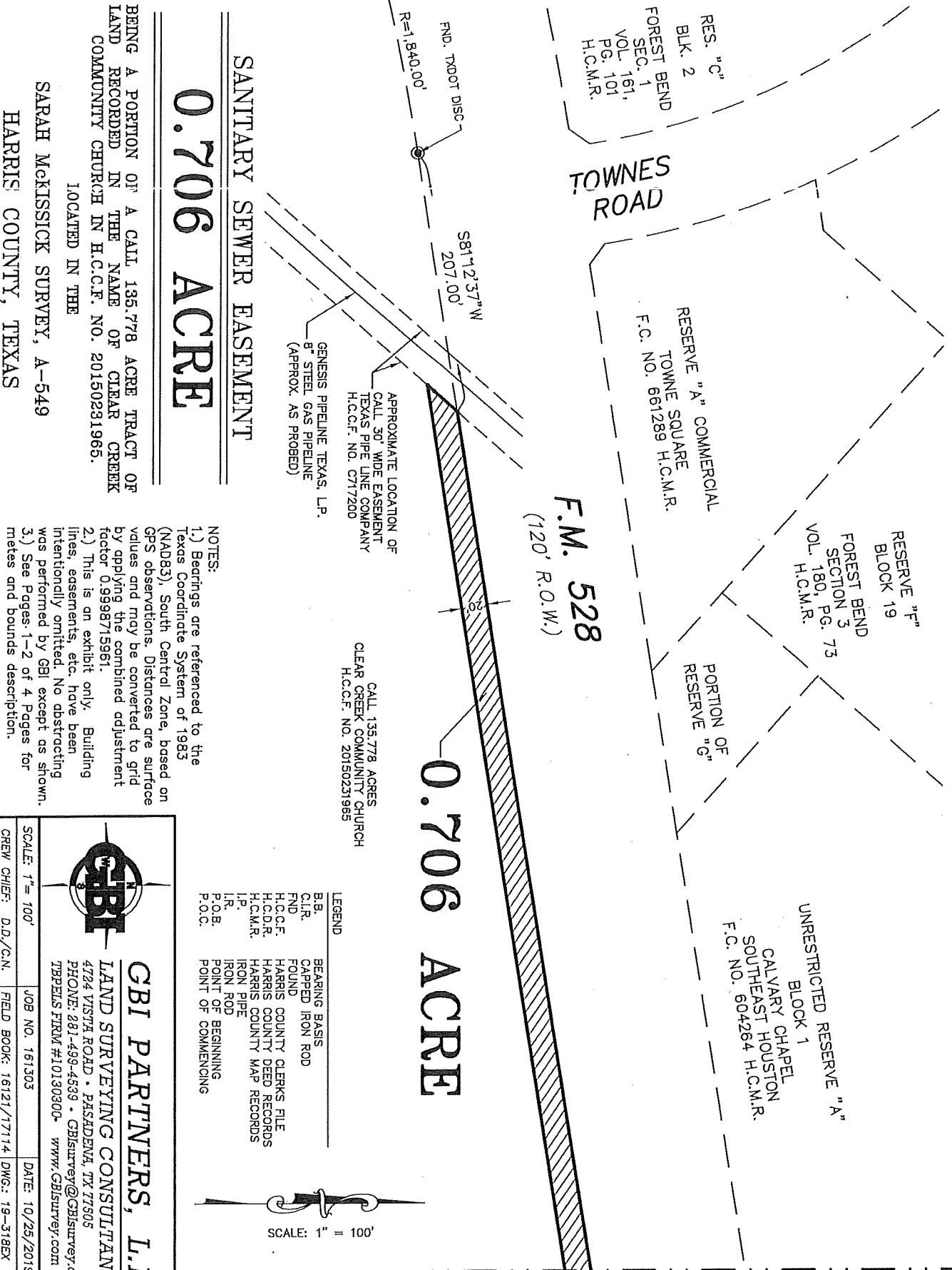
JOB NO. 161303

DATE: 10/25/2019

CREW CHIEF: D.D./C.N.

FIELD BOOK: 16121/17114

DWG.: 19-318EX



0.706 ACRE

SANITARY SEWER EASEMENT

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF LAND RECORDED IN THE NAME OF CLEAR CREEK COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

NOTES:

1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.

2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No abstracting was performed by GBI except as shown.

3.) See Pages 1-2 of 4 Pages for metes and bounds description.



GPI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBSurvey@GPIsurvey.com

7700 FIRM #10130300 • www.GPIsurvey.com

SCALE: 1" = 100'

CREW CHIEF: D.D./C.N.

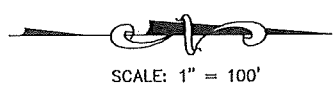
JOB NO. 161303

FIELD BOOK: 16121/17114

DATE: 10/25/2019

DWG: 19-318EX

LEGEND	
B.B.	BEARING BASIS
C.L.R.	CAPPED IRON ROD
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING



MATCH LINE - SEE PAGE 3 OF 4 PAGES

THE STATE OF TEXAS

§

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

**DECLARATION AND GRANT OF
SANITARY SEWER EASEMENT**

This **DECLARATION AND GRANT OF SANITARY SEWER EASEMENT** ("Easement") is made as of the ____ day of _____, 2019, by **CLEAR CREEK COMMUNITY CHURCH** ("Grantor").

WITNESSETH:

WHEREAS, Grantor is the owner of that certain 135.778 acre tract of land in Harris County, Texas more particularly described on Exhibit A attached hereto (the "Property"); and

WHEREAS, Grantor desires to declare and grant a sanitary sewer easement over and across the 0.094 acre portion of the Property described in Exhibit B attached hereto (the "Burdened Property") for the benefit of the portion of the Property described on Exhibit C attached hereto (the "Benefitted Property").

NOW THEREFORE, for Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby declares as follows:

1. Sanitary and Sewer Easement. Grantor hereby creates and grants a permanent and perpetual, non-exclusive easement (the "Easement") over, across and through the Burdened Property for the purpose of constructing, reconstructing, altering and maintaining an underground sanitary sewer line from the Benefitted Property under, over, along, upon and across the Burdened Property, for the purpose of facilitating development on the Benefitted Property.

2. Notices. For the purpose only of any notice hereunder, the address of Grantor to which all notices hereunder are to be sent is as follows:

Grantor:

Clear Creek Community Church
999 N. Egret Bay Boulevard
League City, Texas 77573

3. Benefits and Burden. The Easement granted herein shall benefit the Benefitted Property and the owner thereof and shall burden the Burdened Property and the owner thereof. The easement granted herein is appurtenant to and for the express benefit of the Benefitted Property.

4. Successors. The obligations contained in Paragraph 1 herein shall run with the title to the Burdened Property and shall bind the owners of the Burdened Property and their successors and assigns. The benefits contained herein shall run with the title to the Benefitted Property and inure to the benefit of the owners of the Benefitted Property and their successors and assigns.

5. Severability. In the event that any of the terms or conditions of this Easement shall be deemed invalid, illegal, or unenforceable in any respect, the validity of the remainder of this Easement shall in no way be affected and shall remain in full force and effect to the fullest extent permitted by law.

6. Governing Law. This Easement shall be governed by and interpreted under the laws of the State of Texas.

7. Counterparts. This Easement may be executed in multiple counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

8. Reserved Rights. Grantor reserves and retains the right to grant other rights and easements across, over or under the Burdened Property to such other persons as Grantor deems proper, provided such other grants do not interfere with the use of the Easement by the owner of the Benefitted Property for the purposes set forth herein.

9. No Public Dedication. This is a private Easement and does not establish or contemplate any dedication of any property or other rights or privileges to the public or any governmental entity.

10. Exhibits. Each exhibit attached to this Easement is hereby incorporated into and made a part of this Easement.

11. Entire Easement. This Easement embodies the complete agreement with respect to the matters contained herein and cannot be varied or terminated except by written agreement between the then owner of the Burdened Property and the then owner of the Benefitted Property.

IN WITNESS WHEREOF, Grantor has executed this instrument as of the day and year first above written.

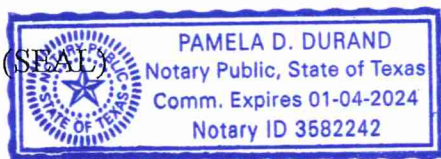
GRANTOR

CLEAR CREEK COMMUNITY
CHURCH

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Galveston §
§

This instrument was acknowledged before me on this 15th day of January,
2020 by Mark Carden, Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

EXHIBIT A

PROPERTY

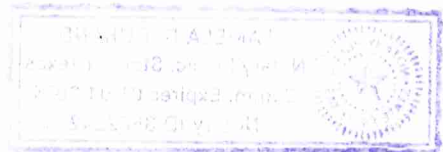


Exhibit A

DESCRIPTION OF A 135.778 ACRE TRACT OF LAND OUT OF THE SARAH McKISSICK SURVEY, ABSTRACT NO. 549, HARRIS COUNTY, TEXAS.

BEGINNING at the point of intersection of the Northerly Mean High Tide Meanders of Clear Creek with the Southeasterly right of way line of F.M. 528, variable width right of way, said point being located S 81°12'48" W 1772.42 feet, S 61°12'33" W 1258.94 feet, S 41°12'18" W 145.69 feet, S 37°54'56" W 601.55 feet and S 41°15'04" W 22.04 feet, along said F.M. 528 Southeasterly right of way from the Northwest corner of a 28.9270 acre tract of land recorded under Film Code 512-27-3525 in the Harris County Records;

THENCE from said Beginning Point along the Southeasterly right of way line of F.M. 528, right of way width varies, as follows:

N 41°15'04"E, 22.04 feet to a found 3/8" iron rod for corner;

N 37°54'56"E, 601.55 feet to a found TXDOT right of way monument for corner;

N 41°12'18"E, 145.69 feet to a found TXDOT right of way monument at the P.C. of a curve;

In a Northeasterly direction, around a curve to the right whose radius 1840.08 feet, whose chord bears N 61°12'33" E 1258.94 feet, a distance of 1284.29 feet to a found TXDOT right of way monument at the P.T. of said curve;

N 81°12'48"E, 1772.42 feet to a found 5/8" iron rod for corner at the Northwest corner of a 28.9270 acre tract of land recorded under Film Code 512-27-3525 in the Harris County Records;

THENCE S 08°47'13" E, along the Westerly line of said 28.9270 acre tract, a distance of 1289.36 feet to a found 5/8" iron rod at the Southwest corner of said 28.9270 acre tract, same being the Northwest corner of a 10.00 acre tract of land recorded under Film Code 512-27-3526 in the Harris County Records;

THENCE continuing S 08°47'13" E, along the Westerly line of said 10.00 acre tract, a distance of 901.28 feet to a point for corner from which a 5/8" iron rod bears S 86°58' W 0.64 feet at the South corner of said 10.00 acre tract, said point lying in the Northwesterly line of a Harris County Flood Control District Drainage right of way, 150 foot in width, described under File No. E449568 in the Harris County Records;

THENCE S 38°20'40" W, along the Northwesterly line of a Harris County Flood Control District Drainage right of way, 150 foot width, at a distance of 815.61 feet pass a found 2" iron pipe, at a distance of 867.00, pass a found 3/8" iron rod, in all, a distance of 878.00 feet to a point for corner in the Northerly Mean High Tide Meanders of Clear Creek;

THENCE in a Westerly direction along the Northerly Mean High Tide Meander of Clear Creek as follows:

N 21°17'53" W 80.86;
N 04°22'00" W 216.80;
N 32°41'45" W 184.39;
N 51°05'51" W 159.93;
N 74°02'56" W 164.71;
S 48°03'01" W 44.69;
N 73°53'01" W 47.50;
S 49°24'39" W 89.87;
N 75°14'28" W 40.66;
S 43°54'02" W 146.10;
S 25°05'34" W 134.50;

S 83°33'29" W 49.30;
S 21°22'39" W 73.69;
N 77°09'04" W 62.96;
S 59°48'54" W 48.72;
N 76°28'57" W 56.65;
N 88°56'26" W 120.31;
N 78°01'35" W 221.29;
N 67°13'18" W 112.00;
N 50°45'59" W 258.04;
N 16°00'29" W 99.00;
N 05°32'21" W 60.42;
N 23°27'42" E 67.18;
N 39°20'26" E 42.52;
N 59°56'12" E 35.59;
S 84°02'57" E 25.53;
S 63°21'37" E 25.66;
N 23°24'11" E 84.42;
N 27°29'42" E 63.48;
N 19°02'47" E 103.93;
N 01°37'07" E 85.86;
N 00°08'41" E 100.59;
N 29°30'14" W 47.60;
N 57°39'57" W 45.79;
N 17°42'29" W 57.03;
N 35°35'22" W 185.97;
N 53°40'24" W 62.94;
N 10°55'24" W 59.34;
N 34°35'23" W 55.34;
N 47°17'18" W 86.30;
N 53°56'07" W 75.03;
N 88°23'26" W 44.90;
N 83°36'23" W 40.51;
S 71°04'35" W 80.52;
S 82°32'42" W 38.81;
S 27°31'14" W 74.71;
S 26°55'51" W 77.74;
S 14°52'11" W 57.44;
S 02°40'58" E 67.89;
S 15°46'44" W 65.06;
S 27°21'44" W 76.82;
S 39°55'00" W 80.49;
S 58°05'12" W 113.84;
S 75°27'50" W 91.91;
N 83°57'56" W 90.47;
N 73°59'30" W 116.54;
S 89°58'35" W 38.09;
S 82°10'43" W 62.39;
N 80°06'14" W 103.42;
N 83°33'53" W 52.50;
N 77°46'46" W 41.29;
N 56°08'14" W 103.63;
N 43°58'12" W 60.56;
N 37°46'35" W 123.88

to the Place of Beginning and containing 135.778 acres (5,914,489.6 square feet) more or less.

NOTE: This Company does not represent that the above acreage or square footage calculations are correct.

EXHIBIT B
BURDENED PROPERTY

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-317

FIELD NOTES FOR 0.094 ACRE

Being a tract containing 0.094 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.094 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.094 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet;

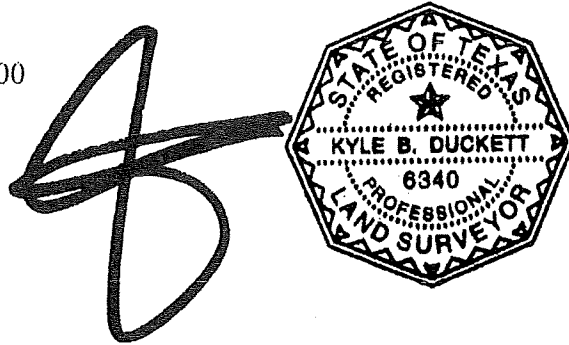
THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, South 81 degrees 12 minutes 37 seconds West, a distance of 1,565.42 feet to a point from which a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 207.00 feet;

THENCE, through and across said 135.778 acre tract, the following eight (8) courses:

- 1.) South 41 degrees 34 minutes 56 seconds West, a distance of 24.43 feet;
- 2.) South 41 degrees 36 minutes 56 seconds West, a distance of 6.93 feet to the **POINT OF BEGINNING**;
- 3.) North 81 degrees 12 minutes 37 seconds East, a distance of 15.69 feet;
- 4.) South 41 degrees 36 minutes 56 seconds West, a distance of 376.84 feet;
- 5.) North 48 degrees 23 minutes 04 seconds West, a distance of 50.00 feet;
- 6.) North 41 degrees 36 minutes 56 seconds East, a distance of 10.00 feet;
- 7.) South 48 degrees 23 minutes 04 seconds East, a distance of 40.00 feet;
- 8.) North 41 degrees 36 minutes 56 seconds East, a distance of 354.75 feet to the **POINT OF BEGINNING** and containing 0.094 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 23, 2019



TOWNES
ROAD

F.M. 528
(120' R.O.W.)

P.O.C.
FND. 5/8" C.I.R.
"KRE&S RPLS 3974"

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598260

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

GENESIS PIPELINE TEXAS, L.P.
8" STEEL GAS PIPELINE
(APPROX. AS PROBED)
APPROXIMATE LOCATION OF
CALL 30" WIDE EASEMENT
TEXAS PIPE LINE COMPANY
C.C.F. NO. C717200

0.094 ACRIE

SCALE: 1" = 100'

SANITARY SEWER EASEMENT

0.094 ACRE

BEING A PORTION OF A CALL 135.7778 ACRE TRACT OF LAND RECORDED IN THE NAME OF CLEAR CREEK COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

LEGEND	
B.B.	BEARING BASIS
C.I.R.	CAPPED IRON ROD
FND	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.I.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBISurvey@GBISurvey.com

TBPETS FIRM #10130300. www.GBIsurvey.com

SCALE: 1" = 100'

CREW CHIEF: D.D./C.N.	FIELD BOOK: 16121/17114	DWG.: 19-317EX
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NOTES:

- 1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.
- 2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No abstracting was performed by GBI except as shown.
- 3.) See Pages 1-2 of 3 Pages for metes and bounds description.

EXHIBIT C

BENEFITTED PROPERTY

County: Harris
Project: CCCCCF – Res B
Job No. 161303
MBS No. 19-367

FIELD NOTES FOR 15.23 ACRES

Being a tract containing 15.23 acres of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 15.23 acres being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 15.23 acres of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet;

THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, the following two (2) courses:

- 1.) South 81 degrees 12 minutes 37 seconds West, a distance of 1,772.42 feet to TXDOT disc found at a point of curvature to the left;
- 2.) 311.32 feet, along the arc of said curve having a radius of 1,840.08 feet, a central angle of 09 degrees 41 minutes 37 seconds and a chord which bears South 76 degrees 21 minutes 49 seconds West, a distance of 310.95 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set at the **POINT OF BEGINNING**;

THENCE, through and across said 135.778 acre tract, the following thirty two (32) courses:

- 1.) South 18 degrees 29 minutes 00 seconds East, a distance of 211.51 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 2.) North 81 degrees 13 minutes 21 seconds East, a distance of 185.80 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 3.) South 08 degrees 44 minutes 05 seconds East, a distance of 854.44 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;;
- 4.) North 47 degrees 50 minutes 54 seconds West, a distance of 74.87 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 5.) North 52 degrees 49 minutes 08 seconds West, a distance of 55.14 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 6.) North 55 degrees 59 minutes 59 seconds West, a distance of 4.92 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 7.) North 56 degrees 00 minutes 16 seconds West, a distance of 243.58 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;

- 8.) North 60 degrees 29 minutes 06 seconds West, a distance of 113.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 9.) North 65 degrees 59 minutes 46 seconds West, a distance of 121.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 10.) North 69 degrees 49 minutes 18 seconds West, a distance of 172.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 11.) North 69 degrees 49 minutes 31 seconds West, a distance of 6.16 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 12.) North 75 degrees 45 minutes 02 seconds West, a distance of 100.33 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 13.) North 70 degrees 29 minutes 36 seconds West, a distance of 39.60 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 14.) North 59 degrees 48 minutes 57 seconds West, a distance of 30.00 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 15.) North 59 degrees 49 minutes 10 seconds West, a distance of 3.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 16.) North 43 degrees 19 minutes 00 seconds West, a distance of 46.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 17.) North 56 degrees 11 minutes 53 seconds West, a distance of 17.85 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 18.) North 81 degrees 35 minutes 40 seconds West, a distance of 3.65 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 19.) North 81 degrees 35 minutes 06 seconds West, a distance of 13.14 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 20.) South 82 degrees 18 minutes 03 seconds West, a distance of 23.87 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 21.) South 77 degrees 00 minutes 39 seconds West, a distance of 33.43 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 22.) South 64 degrees 32 minutes 55 seconds West, a distance of 27.95 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 23.) South 51 degrees 44 minutes 28 seconds West, a distance of 46.64 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 24.) South 44 degrees 37 minutes 12 seconds West, a distance of 115.17 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;

- 25.) South 53 degrees 08 minutes 35 seconds West, a distance of 27.82 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 26.) South 63 degrees 07 minutes 05 seconds West, a distance of 23.77 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 27.) South 77 degrees 32 minutes 57 seconds West, a distance of 26.40 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 28.) North 87 degrees 34 minutes 23 seconds West, a distance of 38.71 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 29.) North 78 degrees 40 minutes 26 seconds West, a distance of 34.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 30.) North 64 degrees 38 minutes 45 seconds West, a distance of 10.16 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 31.) North 64 degrees 38 minutes 21 seconds West, a distance of 15.98 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 32.) North 43 degrees 58 minutes 52 seconds West, a distance of 21.12 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set on the northwest line of said 135.778 acres and the southeast R.O.W. line of aforesaid F.M. 528;

THENCE, with said northwest line and said R.O.W. line, the following three (3) courses:

- 1.) North 37 degrees 54 minutes 45 seconds East, a distance of 19.40 feet to a TXDOT disc found;
- 2.) North 41 degrees 12 minutes 07 seconds East, a distance of 145.69 feet to a TXDOT disc found at a point of curvature to the right;
- 3.) 973.57 feet, along the arc of said curve having a radius of 1,840.08 feet, a central angle of 30 degrees 18 minutes 53 seconds and a chord which bears North 56 degrees 21 minutes 34 seconds East, a distance of 962.25 feet to the **POINT OF BEGINNING** and containing 15.23 acres of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
November 14, 2019

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

SANITARY SEWER EASEMENT

That **CLEAR CREEK COMMUNITY CHURCH** ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid in hand to Grantor by the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("Grantee"), the receipt and sufficiency of which is hereby acknowledged and confessed, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey unto the said Grantee its successors, assigns and legal representatives, a perpetual easement for the purpose of constructing, reconstructing, altering and maintaining public underground sanitary sewer lines and facilities in, under, over, along, upon and across that certain 0.649 acre tract of land ("Easement") same being more particularly described in Exhibit A and shown in Exhibit B, both attached hereto and for all things made a part hereof.

Grantee may do and perform all acts necessary to construct, reconstruct, repair, relocate or maintain a public underground sanitary sewer line and facilities within said Easement and to operate thereon all necessary machinery and equipment to efficiently prosecute the work. Grantor retains, reserves and shall continue to enjoy the use of the surface of the Easement property for any and all purposes which do not interfere with or prevent the use by Grantee of the Easement for the purposes stated herein.

This conveyance is expressly made subject to any and all restrictions, mineral and/or royalty reservations, covenants, and easements appearing of record relative to the Easement, but only to the extent that the same are still in force and effect and enforceable against the same. The Easement, along with all rights and privileges relating thereto, shall terminate when the Easement, as described above, is abandoned by adoption of an Ordinance abandoning or vacating such by Grantee.

TO HAVE AND TO HOLD the above described Easement, together with all and singular the rights and appurtenances thereto in any wise belonging unto the said Grantee, its successors and assigns forever, and Grantor binds himself, his heirs, executors, administrators and assigns, to warrant and forever defend all and singular the said Easement unto Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, this instrument is executed this 5th day of January, 2020

GRANTOR

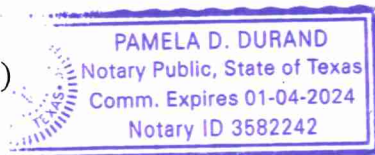
**CLEAR CREEK COMMUNITY
CHURCH**

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Chelveston §

This instrument was acknowledged before me on this 5th day of January,
2020 by Mark Carden, Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.

(SEAL)



Pamela D. Durand
Notary Public in and for the State of Texas

ACCEPTED BY GRANTEE:

ATTEST:

Mike Foreman, Mayor

Melinda Welsh, TRMC
City Secretary

ADDRESS OF GRANTEE:

City of Friendswood, Texas
910 South Friendswood Drive
Friendswood, Texas 77546

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-320

FIELD NOTES FOR 0.649 ACRE

Being a tract containing 0.649 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.649 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.649 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet, from which point a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 1,772.42 feet;

THENCE, with the east line of said 135.778 acre tract and west line of said 28.9270 acre tract, South 08 degrees 47 minutes 23 seconds East, a distance of 40.00 feet to the **POINT OF BEGINNING**;

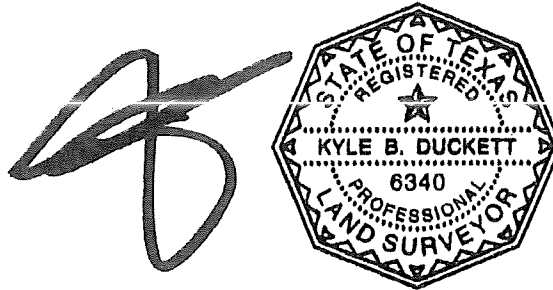
THENCE, with the east line of said 135.778 acre tract, South 08 degrees 47 minutes 23 seconds East, at a distance of 1,249.36 feet pass a 5/8 inch iron rod found at the southwest corner of said 28.9270 acre tract and northwest corner of a call 10.000 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598262, and continuing for a total distance of 1,420.89 feet;

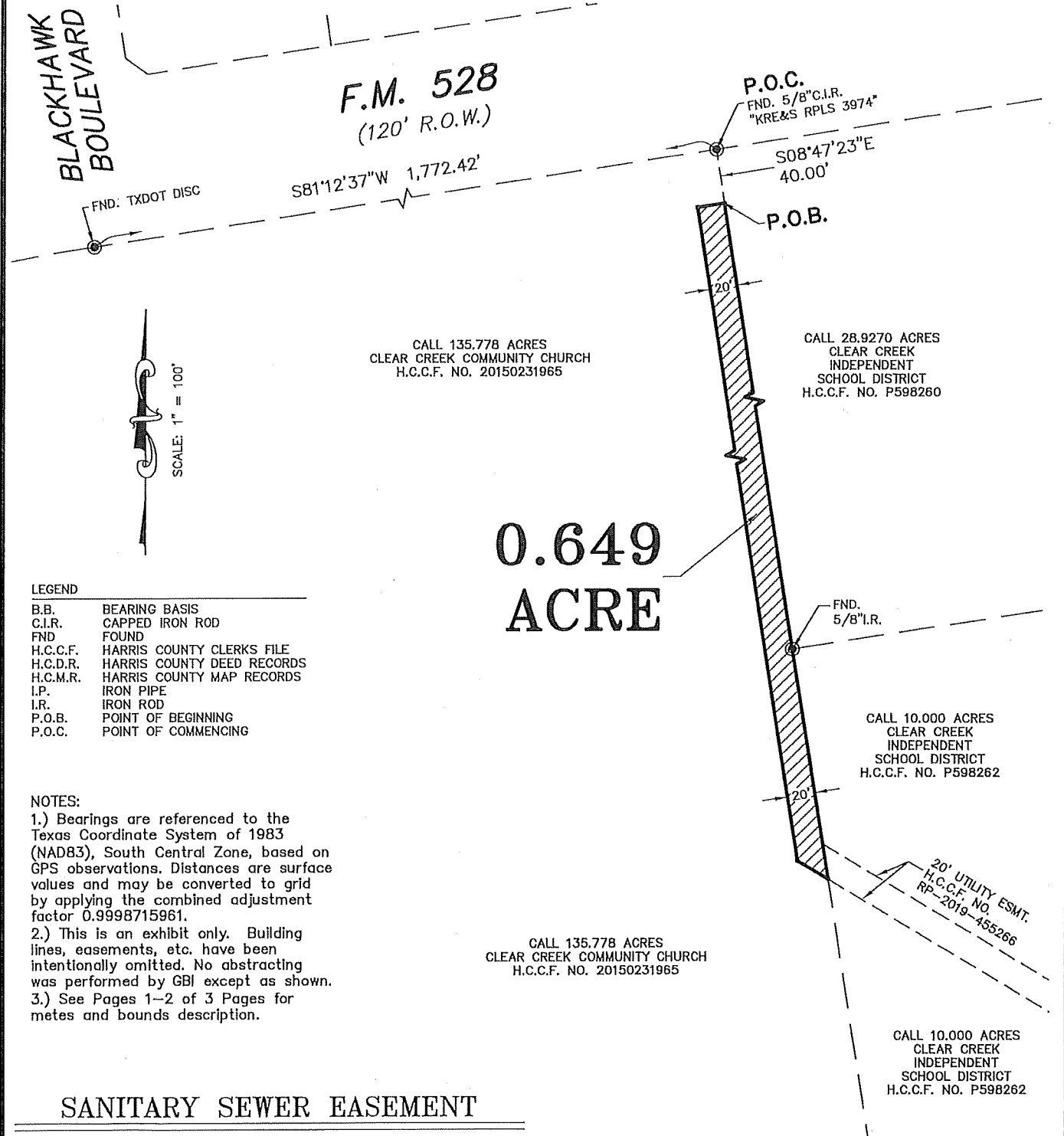
THENCE, through and across said 135.778 acre tract, the following three (3) courses:

- 1.) North 58 degrees 44 minutes 46 seconds West, a distance of 26.12 feet;
- 2.) North 08 degrees 47 minutes 23 seconds West, a distance of 1,404.08 feet;
- 3.) North 81 degrees 12 minutes 37 seconds East, a distance of 20.00 feet to the **POINT OF BEGINNING** and containing 0.649 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 25, 2019





SANITARY SEWER EASEMENT

0.649 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF LAND RECORDED IN THE NAME OF CLEAR CREEK COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH McKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS



GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBIsurvey@GBIsurvey.com

TBPELS FIRM #10130300 • www.GBIsurvey.com

SCALE: 1" = 100'

JOB NO. 161303

DATE: 10/25/2019

CREW CHIEF: D.D./C.N.

FIELD BOOK: 16121/17114

DWG.: 19-320EX

THE STATE OF TEXAS

§

COUNTY OF HARRIS

§

KNOW ALL MEN BY THESE PRESENTS

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

LIFT STATION AND SANITARY SEWER EASEMENT

That CLEAR CREEK COMMUNITY CHURCH ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid in hand to Grantor by the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("Grantee"), the receipt and sufficiency of which is hereby acknowledged and confessed, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey unto the said Grantee its successors, assigns and legal representatives, a perpetual easement for the purpose of constructing, reconstructing, altering and maintaining public underground sanitary sewer lines, a lift station and facilities in, under, over, along, upon and across that certain 0.037 acre tract of land ("Easement") same being more particularly described in Exhibit A and shown in Exhibit B, both attached hereto and for all things made a part hereof.

Grantee may do and perform all acts necessary to construct, reconstruct, repair, relocate or maintain a public underground sanitary sewer line and facilities within said Easement and to operate thereon all necessary machinery and equipment to efficiently prosecute the work. Grantor retains, reserves and shall continue to enjoy the use of the surface of the Easement property for any and all purposes which do not interfere with or prevent the use by Grantee of the Easement for the purposes stated herein.

This conveyance is expressly made subject to any and all restrictions, mineral and/or royalty reservations, covenants, and easements appearing of record relative to the Easement, but only to the extent that the same are still in force and effect and enforceable against the same. The Easement, along with all rights and privileges relating thereto, shall terminate when the Easement, as described above, is abandoned by adoption of an Ordinance abandoning or vacating such by Grantee.

TO HAVE AND TO HOLD the above described Easement, together with all and singular the rights and appurtenances thereto in any wise belonging unto the said Grantee, its successors and assigns forever, and Grantor binds himself, his heirs, executors, administrators and assigns, to warrant and forever defend all and singular the said Easement unto Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, this instrument is executed this 15th day of January, 2020

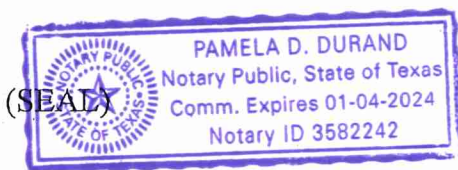
GRANTOR

**CLEAR CREEK COMMUNITY
CHURCH**

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Galveston §

This instrument was acknowledged before me on this 15th day of January,
2019 by Mark Carden, Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

ACCEPTED BY GRANTEE:

ATTEST:

Mike Foreman, Mayor

Melinda Welsh, TRMC
City Secretary

ADDRESS OF GRANTEE:

City of Friendswood, Texas
910 South Friendswood Drive
Friendswood, Texas 77546

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-319

FIELD NOTES FOR 0.037 ACRE

Being a tract containing 0.037 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.037 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.037 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

BEGINNING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet;

THENCE, with the east line of said 135.778 acre tract and west line of said 28.9270 acre tract, South 08 degrees 47 minutes 23 seconds East, a distance of 40.00 feet to a point from which a found 5/8 inch iron rod at the southwest corner of said 28.9270 acre tract bears South 08 degrees 47 minutes 23 seconds East, a distance of 1,249.36 feet;

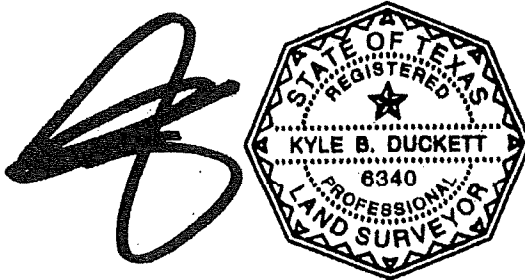
THENCE, through and across said 135.778 acre tract, the following two (2) courses:

- 1.) South 81 degrees 12 minutes 37 seconds West, a distance of 40.00 feet;
- 2.) North 08 degrees 47 minutes 23 seconds West, a distance of 40.00 feet to a point on the aforesaid south R.O.W. line of F.M. 528 and north line of said 135.778 acre tract, from which point a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 1,732.42 feet;

THENCE, with said south R.O.W. line and said north line, North 81 degrees 12 minutes 37 seconds East, a distance of 40.00 feet to the **POINT OF BEGINNING** and containing 0.037 acre of land.

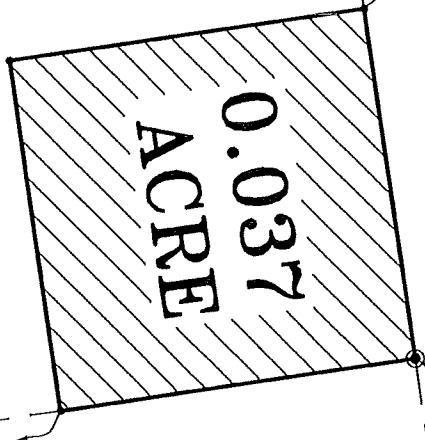
THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 25, 2019



F.M. 528
(120' R.O.W.)

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965



P.O.B.
FND. 5/8" C.I.R.
KREBS RPLS 3974"

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P596260



LEGEND
B.B. BEARING BASIS
C.I.R. CAPED IRON ROD
FND. FOUND
H.C.C.F. HARRIS COUNTY CLERK'S FILE
H.C.D.R. HARRIS COUNTY DEED RECORDS
H.C.M.R. HARRIS COUNTY MAP RECORDS
I.P. IRON PIPE
I.R. IRON ROD
P.O.B. POINT OF BEGINNING
P.O.C. POINT OF COMMENCING

LIFT STATION AND SANITARY SEWER EASEMENT

0.037 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

5/8" I.R. FND.
S08°47'23"E 1,249.36'

CALL 10.000 ACRES
CLEAR CREEK
INDEPENDENT SCHOOL DISTRICT
H.C.C.F. NO. P596262

NOTES:

- 1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.
- 2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No obstructing was performed by GBI except as shown.
- 3.) See Page 1 of 2 Pages for metes and bounds description.



GBI PARTNERS, L.P.
LAND SURVEYING CONSULTANTS
4724 VISTA ROAD • PASADENA, TX 77505
PHONE: 281-498-4539 • GBSurvey@GBISurvey.com
TBBELS FIRM #10130300 • www.GBISurvey.com

SCALE: 1" = 20' JOB NO. 161303 DATE: 10/25/2019
CREW CHIEF: D.D./C.N. FIELD BOOK: 16121/17114 DWG.: 19-319EX

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

WATER LINE EASEMENT

That **CLEAR CREEK COMMUNITY CHURCH** ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid in hand to Grantor by the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("Grantee"), the receipt and sufficiency of which is hereby acknowledged and confessed, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey unto the said Grantee its successors, assigns and legal representatives, a perpetual easement for the purpose of constructing, reconstructing, altering and maintaining public underground water lines and facilities in, under, over, along, upon and across that certain 0.026 acre tract of land ("Easement") same being more particularly described in Exhibit A and shown in Exhibit B, both attached hereto and for all things made a part hereof.

Grantee may do and perform all acts necessary to construct, reconstruct, repair, relocate or maintain a public underground water line and facilities within said Easement and to operate thereon all necessary machinery and equipment to efficiently prosecute the work. Grantor retains, reserves and shall continue to enjoy the use of the surface of the Easement property for any and all purposes which do not interfere with or prevent the use by Grantee of the Easement for the purposes stated herein.

This conveyance is expressly made subject to any and all restrictions, mineral and/or royalty reservations, covenants, and easements appearing of record relative to the Easement, but only to the extent that the same are still in force and effect and enforceable against the same. The Easement, along with all rights and privileges relating thereto, shall terminate when the Easement, as described above, is abandoned by adoption of an Ordinance abandoning or vacating such by Grantee.

TO HAVE AND TO HOLD the above described Easement, together with all and singular the rights and appurtenances thereto in any wise belonging unto the said Grantee, its successors and assigns forever, and Grantor binds himself, his heirs, executors, administrators and assigns, to warrant and forever defend all and singular the said Easement unto Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, this instrument is executed this 15th day of January, 2020

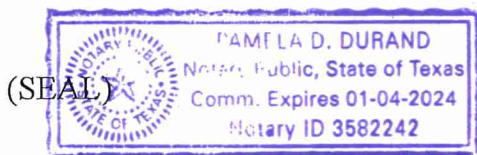
GRANTOR

**CLEAR CREEK COMMUNITY
CHURCH**

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Cherokee §

This instrument was acknowledged before me on this 15th day of January,
2020 by Mark Carden Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

ACCEPTED BY GRANTEE:

ATTEST:

Mike Foreman, Mayor

Melinda Welsh, TRMC
City Secretary

ADDRESS OF GRANTEE:

City of Friendswood, Texas
910 South Friendswood Drive
Friendswood, Texas 77546

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-321

FIELD NOTES FOR 0.026 ACRE

Being a tract containing 0.026 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.026 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.026 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet, from which point a found 5/8 inch iron rod at the southwest corner of said 28.9270 acres bears South 08 degrees 47 minutes 23 seconds East, a distance of 1,289.36 feet;

THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, South 81 degrees 12 minutes 37 seconds West, a distance of 1,612.47 feet to the **POINT OF BEGINNING**;

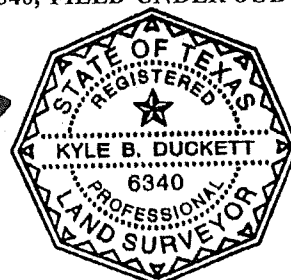
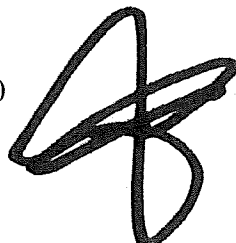
THENCE, through and across said 135.778 acre tract, the following three (3) courses:

- 1.) South 41 degrees 34 minutes 56 seconds West, a distance of 90.27 feet;
- 2.) North 08 degrees 47 minutes 23 seconds West, a distance of 19.47 feet;
- 3.) North 41 degrees 36 minutes 56 seconds East, a distance of 59.73 feet to a point on the aforesaid south R.O.W. line of F.M. 528 and north line of said 135.778 acres, from which a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 136.42 feet;

THENCE, with said south R.O.W. line and said north line, North 81 degrees 12 minutes 37 seconds East, a distance of 23.53 feet to the **POINT OF BEGINNING** and containing 0.026 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
November 06, 2019



TOWNES
ROAD

F.M. 528
(120' R.O.W.)

0.026 ACRE

WATER LINE EASEMENT

0.026 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

SCALE: 1" = 100'

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

GENESIS PIPELINE TEXAS, L.P.
8" STEEL GAS PIPELINE
(APPROX. AS PROBED)
APPROXIMATE LOCATION OF
CALL 30' WIDE EASEMENT
TEXAS PIPE LINE COMPANY
H.C.C.F. NO. C717200

FND. TxDOT DISC

S81°12'37"W
136.42'

P.O.B.

S81°12'37"W 1,612.47'

P.O.C.
FND. 5/8" C.I.R.
KREBS RPLS 3974"

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598280

1,289.36'

S08°47'23"E

FND.
5/8" C.I.R.

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

LEGEND

B.B.	BEARING BASIS
C.I.R.	CAPPED IRON ROD
FND	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

NOTES:

- 1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.
- 2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No abstracting was performed by GBI except as shown.
- 3.) See Page 1 of 2 Pages for metes and bounds description.



CBI PARTNERS, L.P.
LAND SURVEYING CONSULTANTS
4724 VISTA ROAD • PASADENA, TX 77505
PHONE: 281-493-4539 • CBIsurvey@CBIsurvey.com
TBEIS FIRM #10130300 • www.CBIsurvey.com

SCALE: 1" = 100'
CREW CHIEF: D.D./C.N. JOB NO. 161303 DATE: 11/06/2019
FIELD BOOK: 16121/17114 DWG: 19-321EX

THE STATE OF TEXAS

§

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

WATER LINE EASEMENT

That **CLEAR CREEK COMMUNITY CHURCH** ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid in hand to Grantor by the City of Friendswood, Texas, a home rule municipal corporation of the State of Texas ("Grantee"), the receipt and sufficiency of which is hereby acknowledged and confessed, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey unto the said Grantee its successors, assigns and legal representatives, a perpetual easement for the purpose of constructing, reconstructing, altering and maintaining public underground water lines and facilities in, under, over, along, upon and across that certain 0.736 acre tract of land ("Easement") same being more particularly described in Exhibit A and shown in Exhibit B, both attached hereto and for all things made a part hereof.

Grantee may do and perform all acts necessary to construct, reconstruct, repair, relocate or maintain a public underground water line and facilities within said Easement and to operate thereon all necessary machinery and equipment to efficiently prosecute the work. Grantor retains, reserves and shall continue to enjoy the use of the surface of the Easement property for any and all purposes which do not interfere with or prevent the use by Grantee of the Easement for the purposes stated herein.

This conveyance is expressly made subject to any and all restrictions, mineral and/or royalty reservations, covenants, and easements appearing of record relative to the Easement, but only to the extent that the same are still in force and effect and enforceable against the same. The Easement, along with all rights and privileges relating thereto, shall terminate when the Easement, as described above, is abandoned by adoption of an Ordinance abandoning or vacating such by Grantee.

TO HAVE AND TO HOLD the above described Easement, together with all and singular the rights and appurtenances thereto in any wise belonging unto the said Grantee, its successors and assigns forever, and Grantor binds himself, his heirs, executors, administrators and assigns, to warrant and forever defend all and singular the said Easement unto Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty, when the claim is by, through or under Grantor, but not otherwise.

IN WITNESS WHEREOF, this instrument is executed this 15th day of January 2020

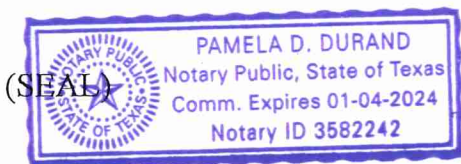
GRANTOR

**CLEAR CREEK COMMUNITY
CHURCH**

By: Mark Carden
Its: Executive Pastor

STATE OF Texas §
COUNTY OF Galveston §

This instrument was acknowledged before me on this 15th day of January,
2020 by Mark Carden, Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

ACCEPTED BY GRANTEE:

ATTEST:

Mike Foreman, Mayor

Melinda Welsh, TRMC
City Secretary

ADDRESS OF GRANTEE:

City of Friendswood, Texas
910 South Friendswood Drive
Friendswood, Texas 77546

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-322

FIELD NOTES FOR 0.736 ACRE

Being a tract containing 0.736 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.736 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.736 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet, from which point a found 5/8 inch iron rod at the southwest corner of said 28.9270 acre tract and northwest corner of a call 10.000 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598262 bears South 08 degrees 47 minutes 23 seconds East, a distance of 1,289.36 feet;

THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, South 81 degrees 12 minutes 37 seconds West, a distance of 417.61 feet to the **POINT OF BEGINNING**;

THENCE, through and across said 135.778 acre tract, the following seven (7) courses:

- 1.) South 08 degrees 47 minutes 23 seconds East, a distance of 215.09 feet to a point of curvature to the right;
- 2.) 43.63 feet, along the arc of said curve having a radius of 500.00 feet, a central angle of 05 degrees 00 minutes 00 seconds and a chord which bears South 06 degrees 17 minutes 23 seconds East, a distance of 43.62 feet to a point of tangency;
- 3.) South 03 degrees 47 minutes 23 seconds East, a distance of 71.08 feet to a point of curvature to the left;
- 4.) 43.63 feet, along the arc of said curve having a radius of 500.00 feet, a central angle of 05 degrees 00 minutes 00 seconds and a chord which bears South 06 degrees 17 minutes 23 seconds East, a distance of 43.62 feet to a point of tangency;
- 5.) South 08 degrees 47 minutes 23 seconds East, a distance of 329.67 feet to a point of curvature to the left;
- 6.) 697.52 feet, along the arc of said curve having a radius of 800.00 feet, a central angle of 49 degrees 57 minutes 23 seconds and a chord which bears South 33 degrees 46 minutes 04 seconds East, a distance of 675.64 feet to a point of tangency;

7.) South 58 degrees 44 minutes 46 seconds East, a distance of 185.88 feet to a point on the west line of aforesaid 10.000 acre tract, from which point the aforesaid northwest corner of said 10.000 acres and southwest corner of aforesaid 29.9270 acres bears North 08 degrees 47 minutes 23 seconds West, a distance of 145.40 feet;

THENCE, with said west line, South 08 degrees 47 minutes 23 seconds East, a distance of 26.12 feet;

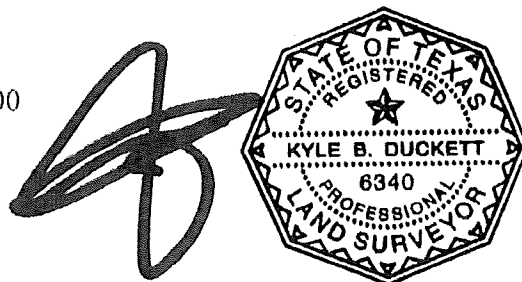
THENCE, through and across said 135.778 acre tract, the following seven (7) courses:

- 1.) North 58 degrees 44 minutes 46 seconds West, a distance of 202.69 feet to a point of curvature to the right;
- 2.) 714.96 feet, along the arc of said curve having a radius of 820.00 feet, a central angle of 49 degrees 57 minutes 23 seconds and a chord which bears North 33 degrees 46 minutes 04 seconds West, a distance of 692.53 feet to a point of tangency;
- 3.) North 08 degrees 47 minutes 23 seconds West, a distance of 329.67 feet to a point of curvature to the right;
- 4.) 45.38 feet, along the arc of said curve having a radius of 520.00 feet, a central angle of 05 degrees 00 minutes 00 seconds and a chord which bears North 06 degrees 17 minutes 23 seconds West, a distance of 45.36 feet to a point of tangency;
- 5.) North 03 degrees 47 minutes 23 seconds West, a distance of 71.08 feet to a point of curvature to the left;
- 6.) 41.89 feet, along the arc of said curve having a radius of 480.00 feet, a central angle of 05 degrees 00 minutes 00 seconds and a chord which bears North 06 degrees 17 minutes 23 seconds West, a distance of 41.87 feet to a point of tangency;
- 7.) North 08 degrees 47 minutes 23 seconds West, a distance of 215.09 feet to a point on the aforesaid south R.O.W. line of F.M. 528 and north line of said 135.778 acre tract, from which point a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 1,334.81 feet;

THENCE, with said south R.O.W. line and said north line, North 81 degrees 12 minutes 37 seconds East, a distance of 20.00 feet to the **POINT OF BEGINNING** and containing 0.736 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 25, 2019



MATCH LINE - SEE PAGE 3 OF 4 PAGES

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598260



**0.736
ACRE**

LEGEND

B.B.	BEARING BASIS
C.I.R.	CAPPED IRON ROD
FND	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

NOTES:

- 1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.
- 2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No abstracting was performed by GBI except as shown.
- 3.) See Pages 1-2 of 4 Pages for metes and bounds description.

CALL 10.000 ACRES
CLEAR CREEK INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598262

FND. 5/8" I.R.

S08°47'23"E
145.40'

20' UTILITY EASEMENT
H.C.C.F. NO. RP-2019-455266

WATER LINE EASEMENT

0.736 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH McKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS



GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBIsurvey@GBIsurvey.com

TBPELS FIRM #10130300 • www.GBIsurvey.com

SCALE: 1" = 100'

JOB NO. 161303

DATE: 10/25/2019

CREW CHIEF: D.D./C.N.

FIELD BOOK: 16121/17114

DWG.: 19-322EX

R:\Data\2016\161303\DWG\19-322EX.dwg

F.M. 528
(120' R.O.W.)

P.O.C.
FND. 5/8"C.I.R.
"KRE&S RPLS 3974"

BLACKHAWK
BOULEVARD

S81°12'37"W 1,334.81'

S81°12'37"W 417.61'

P.O.B.

FND.
TXDOT
DISC

20'

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598260

**0.736
ACRE**

SCALE: 1" = 100'

S08°47'23"E 1,289.36'

MATCH LINE - SEE PAGE 4 OF 4 PAGES

WATER LINE EASEMENT

0.736 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH McKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS



GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBIsurvey@GBIsurvey.com

TBPELS FIRM #10130300 • www.GBIsurvey.com

SCALE: 1" = 100'

JOB NO. 161303

DATE: 10/25/2019

CREW CHIEF: D.D./C.N.

FIELD BOOK: 16121/17114

DWG.: 19-322EX

R:\Data\2016\161303\DWG\19-322EX.dwg

THE STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF HARRIS

§

§

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

**DECLARATION AND GRANT OF
DRAINAGE EASEMENT**

This **DECLARATION AND GRANT OF DRAINAGE EASEMENT** ("Easement") is made as of the ____ day of _____, 2019, by **CLEAR CREEK COMMUNITY CHURCH** ("Grantor").

WITNESSETH:

WHEREAS, Grantor is the owner of that certain 135.778 acre tract of land in Harris County, Texas more particularly described on Exhibit A attached hereto (the "Property"); and

WHEREAS, Grantor desires to declare and grant a sanitary sewer easement over and across the 0.177 acre portion of the Property described in Exhibit B attached hereto (the "Burdened Property") for the benefit of the portion of the Property described on Exhibit C attached hereto (the "Benefitted Property").

NOW THEREFORE, for Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby declares as follows:

1. Drainage Easement. Grantor hereby creates and grants a permanent and perpetual, non-exclusive easement (the "Easement") over, across and through the Burdened Property for the purpose of constructing, reconstructing, altering and maintaining an underground drainage pipe line from the Benefitted Property under, over, along, upon and across the Burdened Property, for the purpose of facilitating development on the Benefitted Property.

2. Notices. For the purpose only of any notice hereunder, the address of Grantor to which all notices hereunder are to be sent is as follows:

Grantor:

Clear Creek Community Church
999 N. Egret Bay Boulevard
League City, Texas 77573

3. Benefits and Burden. The Easement granted herein shall benefit the Benefitted Property and the owner thereof and shall burden the Burdened Property and the owner thereof. The easement granted herein is appurtenant to and for the express benefit of the Benefitted Property.

4. Successors. The obligations contained in Paragraph 1 herein shall run with the title to the Burdened Property and shall bind the owners of the Burdened Property and their successors and assigns. The benefits contained herein shall run with the title to the Benefitted Property and inure to the benefit of the owners of the Benefitted Property and their successors and assigns.

5. Severability. In the event that any of the terms or conditions of this Easement shall be deemed invalid, illegal, or unenforceable in any respect, the validity of the remainder of this Easement shall in no way be affected and shall remain in full force and effect to the fullest extent permitted by law.

6. Governing Law. This Easement shall be governed by and interpreted under the laws of the State of Texas.

7. Counterparts. This Easement may be executed in multiple counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

8. Reserved Rights. Grantor reserves and retains the right to grant other rights and easements across, over or under the Burdened Property to such other persons as Grantor deems proper, provided such other grants do not interfere with the use of the Easement by the owner of the Benefitted Property for the purposes set forth herein.

9. No Public Dedication. This is a private Easement and does not establish or contemplate any dedication of any property or other rights or privileges to the public or any governmental entity.

10. Exhibits. Each exhibit attached to this Easement is hereby incorporated into and made a part of this Easement.

11. Entire Easement. This Easement embodies the complete agreement with respect to the matters contained herein and cannot be varied or terminated except by written agreement between the then owner of the Burdened Property and the then owner of the Benefitted Property.

IN WITNESS WHEREOF, Grantor has executed this instrument as of the day and year first above written.

GRANTOR

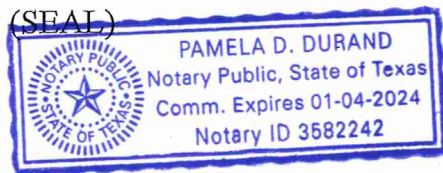
CLEAR CREEK COMMUNITY
CHURCH

By: Mark Carden

Its: Executive Pastor

STATE OF Texas §
COUNTY OF Galveston §

This instrument was acknowledged before me on this 15th day of January
2020 by Mark Carden Executive Pastor of
CLEAR CREEK COMMUNITY CHURCH.



Pamela D. Durand
Notary Public in and for the State of Texas

EXHIBIT A

PROPERTY

Exhibit A

DESCRIPTION OF A 135.778 ACRE TRACT OF LAND OUT OF THE SARAH McKISSICK SURVEY, ABSTRACT NO. 549, HARRIS COUNTY, TEXAS.

BEGINNING at the point of intersection of the Northerly Mean High Tide Meanders of Clear Creek with the Southeasterly right of way line of F.M. 528, variable width right of way, said point being located S 81°12'48" W 1772.42 feet, S 61°12'33" W 1258.94 feet, S 41°12'18" W 145.69 feet, S 37°54'56" W 601.55 feet and S 41°15'04" W 22.04 feet, along said F.M. 528 Southeasterly right of way from the Northwest corner of a 28.9270 acre tract of land recorded under Film Code 512-27-3525 in the Harris County Records;

THENCE from said Beginning Point along the Southeasterly right of way line of F.M. 528, right of way width varies, as follows:

N 41°15'04"E, 22.04 feet to a found 3/8" iron rod for corner;

N 37°54'56"E, 601.55 feet to a found TXDOT right of way monument for corner;

N 41°12'18"E, 145.69 feet to a found TXDOT right of way monument at the P.C. of a curve;

In a Northeasterly direction, around a curve to the right whose radius 1840.08 feet, whose chord bears N 61°12'33" E 1258.94 feet, a distance of 1284.29 feet to a found TXDOT right of way monument at the P.T. of said curve;

N 81°12'48"E, 1772.42 feet to a found 5/8" iron rod for corner at the Northwest corner of a 28.9270 acre tract of land recorded under Film Code 512-27-3525 in the Harris County Records;

THENCE S 08°47'13" E, along the Westerly line of said 28.9270 acre tract, a distance of 1289.36 feet to a found 5/8" iron rod at the Southwest corner of said 28.9270 acre tract, same being the Northwest corner of a 10.00 acre tract of land recorded under Film Code 512-27-3526 in the Harris County Records;

THENCE continuing S 08°47'13" E, along the Westerly line of said 10.00 acre tract, a distance of 901.28 feet to a point for corner from which a 5/8" iron rod bears S 86°58' W 0.64 feet at the South corner of said 10.00 acre tract, said point lying in the Northwesternly line of a Harris County Flood Control District Drainage right of way, 150 foot in width, described under File No. E449668 in the Harris County Records;

THENCE S 38°20'40" W, along the Northwesternly line of a Harris County Flood Control District Drainage right of way, 150 foot width, at a distance of 815.61 feet pass a found 2" iron pipe, at a distance of 867.00, pass a found 3/8" iron rod, in all, a distance of 878.00 feet to a point for corner in the Northerly Mean High Tide Meanders of Clear Creek;

THENCE in a Westerly direction along the Northerly Mean High Tide Meander of Clear Creek as follows:

N 21°17'53" W 80.86;
N 04°22'00" W 216.80;
N 32°41'45" W 184.39;
N 51°05'51" W 159.93;
N 74°02'56" W 164.71;
S 48°03'01" W 44.69;
N 73°53'01" W 47.50;
S 49°24'39" W 89.87;
N 75°14'28" W 40.66;
S 43°54'02" W 146.10;
S 25°05'34" W 134.50;

S 83°33'29" W 49.30;
S 21°22'39" W 73.69;
N 77°09'04" W 62.96;
S 59°48'54" W 48.72;
N 76°28'57" W 56.65;
N 88°56'26" W 120.31;
N 78°01'35" W 221.29;
N 67°13'18" W 112.00;
N 50°45'59" W 258.04;
N 16°00'29" W 99.00;
N 05°32'21" W 60.42;
N 23°27'42" E 67.18;
N 39°20'26" E 42.52;
N 59°56'12" E 35.59;
S 84°02'57" E 25.53;
S 63°21'37" E 25.66;
N 23°24'11" E 84.42;
N 27°29'42" E 63.48;
N 19°02'47" E 103.93;
N 01°37'07" E 85.86;
N 00°08'41" E 100.59;
N 29°30'14" W 47.60;
N 57°39'57" W 45.79;
N 17°42'29" W 57.03;
N 35°35'22" W 185.97;
N 53°40'24" W 62.94;
N 10°55'24" W 59.34;
N 34°35'23" W 55.34;
N 47°17'18" W 86.30;
N 53°56'07" W 75.03;
N 88°23'26" W 44.90;
N 83°36'23" W 40.51;
S 71°04'35" W 80.52;
S 82°32'42" W 38.81;
S 27°31'14" W 74.71;
S 26°55'51" W 77.74;
S 14°52'11" W 57.44;
S 02°40'58" E 67.89;
S 15°46'44" W 65.06;
S 27°21'44" W 76.82;
S 39°55'00" W 80.49;
S 58°05'12" W 113.84;
S 75°27'50" W 91.91;
N 83°57'56" W 90.47;
N 73°59'30" W 116.54;
S 89°58'35" W 38.09;
S 82°10'43" W 62.39;
N 80°06'14" W 103.42;
N 83°33'53" W 52.50;
N 77°46'46" W 41.29;
N 56°08'14" W 103.63;
N 43°58'12" W 60.56;
N 37°46'35" W 123.88

to the Place of Beginning and containing 135.778 acres (5,914,489.6 square feet) more or less.

NOTE: This Company does not represent that the above acreage or square footage calculations are correct.

EXHIBIT B

BURDENED PROPERTY

County: Harris
Project: CCCC Friendswood
Job No. 161303
MBS No. 19-323

FIELD NOTES FOR 0.177 ACRE

Being a tract containing 0.177 acre of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 0.177 acre being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 0.177 acre of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

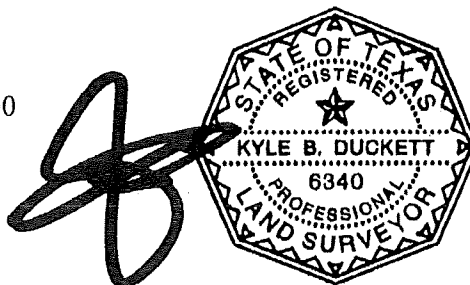
COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet, from which point a found 5/8 inch iron rod at the southwest corner of said 28.9270 acre tract bears South 08 degrees 47 minutes 23 seconds East, a distance of 1,289.36 feet, and a found TXDOT disc at a point of curvature in said south R.O.W. line bears South 81 degrees 12 minutes 37 seconds West, a distance of 1,772.42 feet;

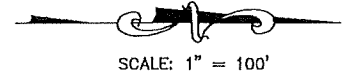
THENCE, through and across said 135.778 acre tract, the following nine (9) courses:

- 1.) South 56 degrees 35 minutes 29 seconds West, a distance of 1,611.20 feet to the **POINT OF BEGINNING**;
- 2.) South 08 degrees 47 minutes 23 seconds East, a distance of 136.96 feet;
- 3.) South 51 degrees 12 minutes 37 seconds West, a distance of 181.09 feet;
- 4.) South 14 degrees 35 minutes 21 seconds East, a distance of 65.31 feet;
- 5.) South 75 degrees 24 minutes 39 seconds West, a distance of 20.00 feet;
- 6.) North 14 degrees 35 minutes 21 seconds West, a distance of 78.25 feet;
- 7.) North 51 degrees 12 minutes 37 seconds East, a distance of 182.49 feet;
- 8.) North 08 degrees 47 minutes 23 seconds West, a distance of 125.43 feet;
- 9.) North 81 degrees 15 minutes 55 seconds East, a distance of 20.00 feet to the **POINT OF BEGINNING** and containing 0.177 acre of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
October 25, 2019





SCALE: 1" = 100'

TOWNES ROAD

F.M. 528
(120' R.O.W.)

FND. TxDOT DISC

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

P.O.B.

S81°12'37"W 1,772.42'

S56°35'29"W 1,611.20'
(THE LINE ONLY)

P.O.C.
FND. 5/8" C.I.R.
KREAS RPLS 3974'

CALL 28.9270 ACRES
CLEAR CREEK
INDEPENDENT
SCHOOL DISTRICT
H.C.C.F. NO. P598260

S08°47'23"E 1,289.36'

FND. 5/8" I.R.

CALL 10.000 ACRES
CLEAR CREEK
INDEPENDENT SCHOOL DISTRICT
H.C.C.F. NO. P598262

CALL 135.778 ACRES
CLEAR CREEK COMMUNITY CHURCH
H.C.C.F. NO. 20150231965

LEGEND

B.B.	BEARING BASIS
C.I.R.	CAPPED IRON ROD
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERKS FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
I.P.	IRON PIPE
I.R.	IRON ROD
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

DRAINAGE EASEMENT

0.1777 ACRE

0.1777 ACRE

BEING A PORTION OF A CALL 135.778 ACRE TRACT OF
LAND RECORDED IN THE NAME OF CLEAR CREEK
COMMUNITY CHURCH IN H.C.C.F. NO. 20150231965.

LOCATED IN THE

SARAH MCKISSICK SURVEY, A-549

HARRIS COUNTY, TEXAS

NOTES:

- 1.) Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), South Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor 0.9998715961.
- 2.) This is an exhibit only. Building lines, easements, etc. have been intentionally omitted. No abstracting was performed by GBI except as shown.
- 3.) See Page 1 of 2 Pages for metes and bounds description.



GBI PARTNERS, L.P.

LAND SURVEYING CONSULTANTS

4724 VISTA ROAD • PASADENA, TX 77505

PHONE: 281-499-4539 • GBI@gsurvey.com

TIRELLS FIRM #10130300 • www.GBIsurvey.com

SCALE: 1" = 100'

CREW CHIEF: D.D./C.N.

JOB NO. 161303

DATE: 10/25/2019

FIELD BOOK: 16121/17114 DWG: 19-323EX

EXHIBIT C

BENEFITTED PROPERTY

County: Harris
Project: CCCCCF – Res B
Job No. 161303
MBS No. 19-367

FIELD NOTES FOR 15.23 ACRES

Being a tract containing 15.23 acres of land located in the Sarah McKissick Survey, Abstract No. 549, in Harris County, Texas. Said 15.23 acres being a portion of a call 135.778 acre tract of land recorded in the name of Clear Creek Community Church under Harris County Clerk's File (H.C.C.F.) No. 20150231965. Said 15.23 acres of land being more particularly described by metes and bounds as follows (Bearings are referenced to the Texas Coordinate System of 1983, South Central Zone, as derived from GPS observations):

COMMENCING at a 5/8 inch capped iron rod stamped "KRE&S RPLS 3974" found at the northeast corner of said 135.778 acre tract, the northwest corner of a call 28.9270 acre tract of land recorded in the name of Clear Creek Independent School District under H.C.C.F. No. P598260, and being on the south Right-of-Way (R.O.W.) line of E. Parkwood Avenue (F.M. 528) based on a width of 120 feet;

THENCE, with said south R.O.W. line and the north line of said 135.778 acre tract, the following two (2) courses:

- 1.) South 81 degrees 12 minutes 37 seconds West, a distance of 1,772.42 feet to TXDOT disc found at a point of curvature to the left;
- 2.) 311.32 feet, along the arc of said curve having a radius of 1,840.08 feet, a central angle of 09 degrees 41 minutes 37 seconds and a chord which bears South 76 degrees 21 minutes 49 seconds West, a distance of 310.95 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set at the **POINT OF BEGINNING**;

THENCE, through and across said 135.778 acre tract, the following thirty two (32) courses:

- 1.) South 18 degrees 29 minutes 00 seconds East, a distance of 211.51 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 2.) North 81 degrees 13 minutes 21 seconds East, a distance of 185.80 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 3.) South 08 degrees 44 minutes 05 seconds East, a distance of 854.44 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;;
- 4.) North 47 degrees 50 minutes 54 seconds West, a distance of 74.87 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 5.) North 52 degrees 49 minutes 08 seconds West, a distance of 55.14 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 6.) North 55 degrees 59 minutes 59 seconds West, a distance of 4.92 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 7.) North 56 degrees 00 minutes 16 seconds West, a distance of 243.58 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;

- 8.) North 60 degrees 29 minutes 06 seconds West, a distance of 113.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 9.) North 65 degrees 59 minutes 46 seconds West, a distance of 121.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 10.) North 69 degrees 49 minutes 18 seconds West, a distance of 172.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 11.) North 69 degrees 49 minutes 31 seconds West, a distance of 6.16 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 12.) North 75 degrees 45 minutes 02 seconds West, a distance of 100.33 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 13.) North 70 degrees 29 minutes 36 seconds West, a distance of 39.60 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 14.) North 59 degrees 48 minutes 57 seconds West, a distance of 30.00 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 15.) North 59 degrees 49 minutes 10 seconds West, a distance of 3.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 16.) North 43 degrees 19 minutes 00 seconds West, a distance of 46.48 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 17.) North 56 degrees 11 minutes 53 seconds West, a distance of 17.85 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 18.) North 81 degrees 35 minutes 40 seconds West, a distance of 3.65 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 19.) North 81 degrees 35 minutes 06 seconds West, a distance of 13.14 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 20.) South 82 degrees 18 minutes 03 seconds West, a distance of 23.87 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 21.) South 77 degrees 00 minutes 39 seconds West, a distance of 33.43 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 22.) South 64 degrees 32 minutes 55 seconds West, a distance of 27.95 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 23.) South 51 degrees 44 minutes 28 seconds West, a distance of 46.64 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 24.) South 44 degrees 37 minutes 12 seconds West, a distance of 115.17 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;

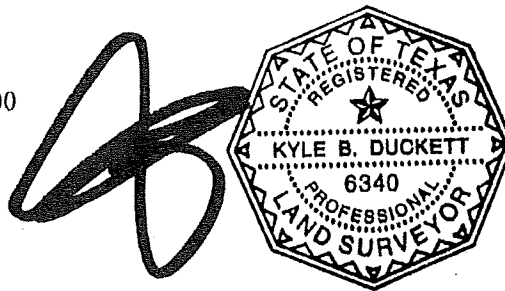
- 25.) South 53 degrees 08 minutes 35 seconds West, a distance of 27.82 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 26.) South 63 degrees 07 minutes 05 seconds West, a distance of 23.77 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 27.) South 77 degrees 32 minutes 57 seconds West, a distance of 26.40 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 28.) North 87 degrees 34 minutes 23 seconds West, a distance of 38.71 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 29.) North 78 degrees 40 minutes 26 seconds West, a distance of 34.74 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 30.) North 64 degrees 38 minutes 45 seconds West, a distance of 10.16 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 31.) North 64 degrees 38 minutes 21 seconds West, a distance of 15.98 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set;
- 32.) North 43 degrees 58 minutes 52 seconds West, a distance of 21.12 feet to a 5/8 inch capped iron rod stamped "GBI Partners" set on the northwest line of said 135.778 acres and the southeast R.O.W. line of aforesaid F.M. 528;

THENCE, with said northwest line and said R.O.W. line, the following three (3) courses:

- 1.) North 37 degrees 54 minutes 45 seconds East, a distance of 19.40 feet to a TXDOT disc found;
- 2.) North 41 degrees 12 minutes 07 seconds East, a distance of 145.69 feet to a TXDOT disc found at a point of curvature to the right;
- 3.) 973.57 feet, along the arc of said curve having a radius of 1,840.08 feet, a central angle of 30 degrees 18 minutes 53 seconds and a chord which bears North 56 degrees 21 minutes 34 seconds East, a distance of 962.25 feet to the **POINT OF BEGINNING** and containing 15.23 acres of land.

THIS DESCRIPTION WAS PREPARED BASED ON A SURVEY MADE ON THE GROUND UNDER THE DIRECTION OF KYLE B. DUCKETT, RPLS 6340, FILED UNDER JOB NO. 161301 IN THE OFFICES OF GBI PARTNERS, L.P.

GBI Partners, L.P.
TBPELS Firm #10130300
Ph: 281.499.4539
November 14, 2019



FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/8/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approving the disposal of two decommissioned police vehicles through Houston Auto Auction

Originating Department: Police Department

Degree of importance: Elective

SUMMARY / ORIGINATING CAUSE

The police department has two decommissioned police vehicles (P285, 2013 Dodge Charger and P291, 2015 Chevrolet Tahoe) that it presents for disposal. The department will dispose of the vehicles through services provided by Houston Auto Auction. Costs associated with keeping the vehicles suitable for service are high, making the most cost effective solution to auction the vehicles. P291 is being replaced this fiscal year and P285 is set for replacement next year but has costly maintenance issues requiring it to go off-line. The vehicles will be decommissioned per the standards set by Local Government Code, Section 272.006 Sale or Transfer of Law Enforcement Vehicle, which includes the removal of any equipment or insignia that could mislead a reasonable person to believe that the vehicles are law enforcement motor vehicles.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Proceeds from the sale of this vehicle will be deposited into the Vehicle Replacement Fund (VRF).

RECOMMENDATIONS

Staff recommends Mayor and Council consent to disposal of these assets in the manner described above.

ATTACHMENTS

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 12/27/2019

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approve the December 2019 Tax Report

Originating Department: City Manager

Degree of importance: Choose an Option

SUMMARY / ORIGINATING CAUSE

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

RECOMMENDATIONS

ATTACHMENTS

1. GalCo Dec 18



Cheryl E. Johnson, RTA

Assessor and Collector of Taxes

Galveston County

Galveston County Courthouse

722 Moody Avenue, Galveston, Texas 77550

Toll Free: 877-766-2284 Fax: 409-766-2479 Office: 409-765-3277

Cheryl.E.Johnson@co.galveston.tx.us



January 13, 2020

The Governmental Entities of the Galveston County Tax Assessor/Collector's Office:

I, Cheryl E. Johnson, Tax Assessor and Collector of the County of Galveston do solemnly swear that this statement of collections made by me and the disposition thereof during the month of December, 2019 is true and correct.

Under my hand and seal this 13th day of January, 2020.

Cheryl E. Johnson, PCC
Galveston County Tax Assessor/Collector

cc: Randall Rice, County Auditor
Linebarger, Goggan, Blair, & Simpson
Perdue, Brandon, Fielder, Collins, & Mott
Assessment & Collection Partners:

City of Bayou Vista
City of Clear Lake Shores (delinquent)
City of Dickinson
City of Friendswood
City of Galveston
City of Hitchcock
City of Jamaica Beach
City of Kemah
City La Marque
City of League City
City of Santa Fe
City of Texas City
City of Tiki Island
Dickinson Independent School District
Galveston Independent School District
High Island Independent School District
Hitchcock Independent School District
College of the Mainland

Galveston Community College
GC Drainage District No. 1
GC Drainage District No. 2
GC Emergency Services Dist. No. 1
GC Emergency Services Dist. No. 2
GC Fresh Water Supply Dist. No. 6
Bacliff MUD
Bayview MUD
Galveston County MUD No. 12
Galveston County MUD No. 13
San Leon MUD
Tara Glen MUD
GC Navigation District No. 1
WCID No. 1
WCID No. 12
WCID No. 19
Westwood Management District

01/06/2020 08:46:02 3376643
 TC298-D SELECTION: DEPOSIT
 RECEIPT DATE: ALL
 LOCATION: ALL

TAX COLLECTION SYSTEM
 DEPOSIT DISTRIBUTION
 FROM: 12/01/2019 THRU 12/31/2019
 JURISDICTION: 0337 FRIENDWD CITY

PAGE: 34
 INCLUDES AG ROLLBACK

YEAR	FUND	TAX RATE	LEVY PAID	DISCOUNT GIVEN	PENALTY INTEREST	TIF AMOUNT	DISBURSE TOTAL	ATTORNEY	OTHER FEES	REFUND AMOUNT	PAYMENT AMOUNT
2019	M & O	.432160	7,086,251.83	.00	.00	.00	7,086,251.83	.00	.00	.00	7,086,251.83
	I & S	.089279	1,463,933.01	.00	.00	.00	1,463,933.01	.00	.00	.00	1,463,933.01
	TOTAL	.521439	8,550,184.84	.00	.00	.00	8,550,184.84	.00	.00	.00	8,550,184.84
2018	M & O	.437173	4,450.79	.00	1,144.01	.00	5,574.80	1,534.09	.00	.00	7,108.89
	I & S	.095218	965.38	.00	244.82	.00	1,214.20	.00	.00	.00	1,214.20
	TOTAL	.532391	5,420.17	.00	1,388.83	.00	6,789.00	1,534.09	.00	.00	8,323.09
2017	M & O	.432349	583.72	.00	90.54	.00	674.26	43.25	.00	.00	717.51
	I & S	.095000	128.28	.00	19.89	.00	148.17	.00	.00	.00	148.17
	TOTAL	.527349	712.00	.00	110.43	.00	822.43	43.25	.00	.00	865.68
2016	M & O	.462000	874.17	.00	194.65	.00	1,068.82	100.04	.00	.00	1,168.86
	I & S	.084000	158.92	.00	35.39	.00	194.31	.00	.00	.00	194.31
	TOTAL	.546000	1,033.09	.00	230.04	.00	1,263.13	100.04	.00	.00	1,363.17
2015	M & O	.497200	685.92	.00	164.40	.00	850.32	26.30	.00	.00	876.62
	I & S	.071500	98.65	.00	23.63	.00	122.28	.00	.00	.00	122.28
	TOTAL	.568700	784.57	.00	188.03	.00	972.60	26.30	.00	.00	998.90
2014	M & O	.530300	680.44	.00	227.13	.00	907.57	39.02	.00	.00	946.59
	I & S	.061100	78.39	.00	26.17	.00	104.56	.00	.00	.00	104.56
	TOTAL	.591400	758.83	.00	253.30	.00	1,012.13	39.02	.00	.00	1,051.15
2013	M & O	.530300	566.97	.00	241.34	.00	808.31	5.90	.00	.00	814.21
	I & S	.061100	65.32	.00	27.80	.00	93.12	.00	.00	.00	93.12
	TOTAL	.591400	632.29	.00	269.14	.00	901.43	5.90	.00	.00	907.33
2012	M & O	.530700	582.03	.00	303.84	.00	885.87	16.30	.00	.00	902.17
	I & S	.065300	72.71	.00	37.96	.00	110.67	.00	.00	.00	110.67
	TOTAL	.597000	654.74	.00	341.80	.00	996.54	16.30	.00	.00	1,012.84
2011	M & O	.521800	582.07	.00	353.95	.00	936.02	18.81	.00	.00	954.83
	I & S	.068400	76.31	.00	46.39	.00	122.70	.00	.00	.00	122.70
	TOTAL	.590200	658.38	.00	400.34	.00	1,058.72	18.81	.00	.00	1,077.53
2010	M & O	.519800	544.53	.00	435.22	.00	979.75	146.96	.00	.00	1,126.71
	I & S	.065300	68.41	.00	54.67	.00	123.08	.00	.00	.00	123.08
	TOTAL	.585100	612.94	.00	489.89	.00	1,102.83	146.96	.00	.00	1,249.79
2009	M & O	.499700	365.14	.00	335.47	.00	700.61	111.68	.00	.00	812.29
	I & S	.080000	58.46	.00	53.71	.00	112.17	.00	.00	.00	112.17
	TOTAL	.579700	423.60	.00	389.18	.00	812.78	111.68	.00	.00	924.46
2008	M & O	.509700	.51	.00	.00	.00	.51	.00	.00	.00	.51
	I & S	.070000	.07	.00	.00	.00	.07	.00	.00	.00	.07
	TOTAL	.579700	.58	.00	.00	.00	.58	.00	.00	.00	.58

01/06/2020 08:46:02 3376643
 TC298-D SELECTION: DEPOSIT
 RECEIPT DATE: ALL
 LOCATION: ALL

TAX COLLECTION SYSTEM
 DEPOSIT DISTRIBUTION
 FROM: 12/01/2019 THRU 12/31/2019
 JURISDICTION: 0337 FRIENDMD CITY

PAGE: 35
 INCLUDES AG ROLLBACK

YEAR	FUND	TAX RATE	LEVY PAID	DISCOUNT GIVEN	PENALTY INTEREST	TIF AMOUNT	DISBURSE TOTAL	ATTORNEY	OTHER FEES	REFUND AMOUNT	PAYMENT AMOUNT
2007	M & O	.501600	.50	.00	.71	.00	1.21	.00	.00	.00	1.21
	I & S	.074800	.08	.00	.11	.00	.19	.00	.00	.00	.19
	TOTAL	.576400	.58	.00	.82	.00	1.40	.00	.00	.00	1.40
ALL	M & O		7,096,168.62	.00	3,471.26	.00	7,099,639.88	2,042.35	.00	.00	7,101,682.23
ALL	I & S		1,465,707.99	.00	570.54	.00	1,466,278.53	.00	.00	.00	1,466,278.53
ALL	TOTAL		8,561,876.61	.00	4,041.80	.00	8,565,918.41	2,042.35	.00	.00	8,567,960.76
DLQ	M & O		9,916.79	.00	3,471.26	.00	13,388.05	2,042.35	.00	.00	15,430.40
DLQ	I & S		1,774.98	.00	570.54	.00	2,345.52	.00	.00	.00	2,345.52
DLQ	TOTAL		11,691.77	.00	4,041.80	.00	15,733.57	2,042.35	.00	.00	17,775.92
CURR	M & O		7,086,251.83	.00	.00	.00	7,086,251.83	.00	.00	.00	7,086,251.83
CURR	I & S		1,463,933.01	.00	.00	.00	1,463,933.01	.00	.00	.00	1,463,933.01
CURR	TOTAL		8,550,184.84	.00	.00	.00	8,550,184.84	.00	.00	.00	8,550,184.84

01/06/2020 08:37:54
TC298-M SELECTION: DEPOSIT

3376643

TAX COLLECTION SYSTEM
DEPOSIT DISTRIBUTION
REVERSALS DETAIL SCHEDULE
FROM: 12/01/2019 THRU 12/31/2019
JURISDICTION: 337 FRIENDMD CITY

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INCLUDES AG ROLLEBACK

YEAR	DEPOSIT	ACCOUNT NUMBER	EFF YR/MO	LEVY PAID	DISCOUNT GIVEN	PENALTY INTEREST	ATTORNEY CAUSE /REV	REFUND AMOUNT	PAYMENT AMOUNT CAT
2017	RF191218	1022350000007	201809	0.00	0.00	0.00	0.00 HK26	242.72-	242.72-RF
2017	RF191218	1022350000007	201809	168.55-	0.00	33.72-	40.45-HK26	242.72-	0.00 RF
2017	RF191216	168670	201712	0.00	0.00	0.00	0.00 17S2	111.38-	111.38-RF
2017	RF191216	168670	201712	111.38-	0.00	0.00	0.00 17S2	111.38	0.00 RF
2017	TOTAL			279.93-	0.00	33.72-	40.45-	0.00	354.10-
2018	RF191218	1043990010070	201907	0.00	0.00	0.00	0.00 HK15	188.45-	188.45-RF
2018	RF191218	1043990010070	201907	133.09-	0.00	23.95-	31.41-HK15	188.45	0.00 RF
2018	RF191216	146584	201812	0.00	0.00	0.00	0.00 18S1	133.09-	133.09-RF
2018	RF191216	146584	201812	133.09-	0.00	0.00	0.00 18S1	133.09	0.00 RF
2018	RF191216	168516	201812	0.00	0.00	0.00	0.00 18S1	123.07-	123.07-RF
2018	RF191216	168516	201812	123.07-	0.00	0.00	0.00 18S1	123.07	0.00 RF
2018	RF191216	168516	201812	111.15-	0.00	0.00	0.00 18S1	111.15	0.00 RF
2018	RF191216	168670	201812	0.00	0.00	0.00	0.00 18S1	141.16-	141.16-RF
2018	RF191216	168670	201812	0.00	0.00	0.00	0.00 18S1	141.16	0.00 RF
2018	RF191216	168695	201812	0.00	0.00	0.00	0.00 18S1	141.21	0.00 RF
2018	RF191216	168695	201812	141.16-	0.00	0.00	0.00 18S1	141.21	0.00 RF
2018	RF191216	200365	201812	0.00	0.00	0.00	0.00 18S1	133.10	133.10-RF
2018	RF191216	200365	201812	133.10-	0.00	0.00	0.00 18S1	133.10	0.00 RF
2018	RF191216	202767	201901	0.00	0.00	0.00	0.00 18S1	238.58-	238.58-RF
2018	RF191216	202767	201901	0.00	0.00	0.00	0.00 18S1	238.58	0.00 RF
2018	RF191216	292274	201812	0.00	0.00	0.00	0.00 18S1	133.10-	133.10-RF
2018	RF191216	292274	201812	238.58-	0.00	0.00	0.00 18S1	133.10	0.00 RF
2018	RF191216	306849	201901	133.10-	0.00	0.00	0.00 18S1	261.61-	261.61-RF
2018	RF191216	306849	201901	0.00	0.00	0.00	0.00 18S1	261.61	0.00 RF
2018	RF191216	306849	201811	0.00	0.00	0.00	0.00 18S1	133.10-	133.10-RF
2018	RF191216	306849	201811	0.00	0.00	0.00	0.00 18S1	133.10	0.00 RF
2018	RF191216	363045	201811	261.61-	0.00	0.00	0.00 18S1	261.61	0.00 RF
2018	RF191216	363045	201811	0.00	0.00	0.00	0.00 18S1	133.10-	133.10-RF
2018	RF191216	394349	201811	0.00	0.00	0.00	0.00 18S1	133.10	0.00 RF
2018	RF191216	394349	201811	133.10-	0.00	0.00	0.00 18S1	133.10	0.00 RF
2018	RF191216	420114	201812	0.00	0.00	0.00	0.00 18S1	510.67-	510.67-RF
2018	RF191216	420114	201812	510.67-	0.00	0.00	0.00 18S1	510.67	0.00 RF
2018	RF191216	612884	201812	0.00	0.00	0.00	0.00 18S1	0.00	0.00 RF
2018	RF191216	612884	201812	0.00	0.00	0.00	0.00 18S1	0.00	0.00 RF
2018	TOTAL			2,326.03-	0.00	23.95-	31.41-	0.00	2,381.39-
2019	86412131CHC	1063270000004	201912	926.87-	0.00	0.00	0.00 CERT	0.00	926.87-TR
2019	76212191RV	1224680040001	201912	1,870.97-	0.00	0.00	0.00 CERT	0.00	1,870.97-TR
2019	RF191219	1277950090012	201912	130.36-	0.00	0.00	0.00 HK04	130.36	0.00 RF
2019	RF191219	1277950090012	201912	0.00	0.00	0.00	0.00 HK04	130.36-	130.36-RF
2019	76212191RV	167844	201912	1,689.46-	0.00	0.00	0.00 CERT	0.00	1,689.46-TR
2019	76212191RV	168743	201912	598.69-	0.00	0.00	0.00 CERT	0.00	598.69-TR
2019	RF191216	201076	201911	0.00	0.00	0.00	0.00 19S0	14.24-	14.24-RF

01/06/2020 08:37:54
TC298-M SELECTION: DEPOSIT

3376643

TAX COLLECTION SYSTEM
DEPOSIT DISTRIBUTION
REVERSALS DETAIL SCHEDULE
FROM: 12/01/2019 THRU 12/31/2019
JURISDICTION: 337 FRIENDMD CITY

PAGE: 92
INCLUDES AG ROLLBACK

YEAR	DEPOSIT	ACCOUNT NUMBER	EFF YR/MO	LEVY PAID	DISCOUNT GIVEN	PENALTY INTEREST	ATTORNEY CAUSE /REV	REFUND AMOUNT	PAYMENT AMOUNT CAT
2019	RF191216	201076	201911	14.24-	0.00	0.00	0.00 1950	14.24	0.00 RF
2019	864121619CHC	202149	201912	410.77-	0.00	0.00	0.00 CERT	0.00	410.77-TR
2019	762121919RV	218850	201912	888.99-	0.00	0.00	0.00 CERT	0.00	888.99-TR
2019	762121919RV	219156	201912	822.99-	0.00	0.00	0.00 CERT	0.00	822.99-TR
2019	RF191216	293540	201911	304.35-	0.00	0.00	0.00 1950	304.35	0.00 RF
2019	RF191216	293540	201911	0.00	0.00	0.00	0.00 1950	304.35-	304.35-RF
2019	762121919RV	310402	201912	1,084.59-	0.00	0.00	0.00 CERT	0.00	1,084.59-TR
2019	RF191216	363045	201912	0.00	0.00	0.00	0.00 1950	274.51-	274.51-RF
2019	RF191216	363045	201912	274.51-	0.00	0.00	0.00 1950	52.13-	0.00 RF
2019	RF191216	366843	201911	0.00	0.00	0.00	0.00 1950	52.13	0.00 RF
2019	RF191216	366843	201911	52.13-	0.00	0.00	0.00 1950	213.48	0.00 RF
2019	RF191216	370986	201911	213.48-	0.00	0.00	0.00 1950	213.48-	213.48-RF
2019	RF191216	370986	201911	0.00	0.00	0.00	0.00 1950	219.64-	219.64-RF
2019	RF191216	370992	201911	0.00	0.00	0.00	0.00 1950	219.64	0.00 RF
2019	RF191216	387522	201910	219.64-	0.00	0.00	0.00 1950	38.46-	0.00 RF
2019	RF191216	387522	201910	38.46-	0.00	0.00	0.00 1950	38.46-	38.46-RF
2019	RF191216	398422	201912	0.00	0.00	0.00	0.00 CERT	0.00	2,382.62-TR
2019	762121919RV	398422	201912	2,382.62-	0.00	0.00	0.00 CERT	0.00	94.64-TR
2019	762121919RV	404573	201912	94.64-	0.00	0.00	0.00 1950	132.69-	0.00 RF
2019	RF191216	407368	201911	0.00	0.00	0.00	0.00 1950	132.69	2,096.66-TR
2019	RF191216	407368	201911	132.69-	0.00	0.00	0.00 CERT	0.00	259.37-RI
2019	762121919RV	413136	201912	2,096.66-	0.00	0.00	0.00 CERT	0.00	1,895.74-TR
2019	864121319PHC	504721	201912	259.37-	0.00	0.00	0.00 CERT	0.00	2,214.82-TR
2019	762121919RV	511182	201912	1,895.74-	0.00	0.00	0.00 CERT	0.00	883.38-TR
2019	864122319CHC	610606	201912	2,214.82-	0.00	0.00	0.00 CERT	0.00	78.75-RF
2019	762121919RV	711428	201912	883.38-	0.00	0.00	0.00 1950	78.75-	78.75-RF
2019	RF191216	711450	201911	0.00	0.00	0.00	0.00 1950	78.75	0.00 RF
2019	RF191216	711450	201911	78.75-	0.00	0.00	0.00 1950	0.00	19,579.17-
2019	TOTAL			19,579.17-	0.00	0.00	0.00	0.00	22,314.66-

TOTAL REVERSALS

22,185.13-

0.00

57.67-

71.86-

0.00

22,314.66-

TAX COLLECTION SYSTEM
DEPOSIT DISTRIBUTION
SUMMARY OF PAYMENTS AND REVERSALS
FROM: 12/01/2019 THRU 12/31/2019
JURISDICTION: 337 FRIENDMD CITY

YEAR DEPOSIT	ACCOUNT NUMBER	EFF YR/MO	LEVY PAID	DISCOUNT GIVEN	PENALTY INTEREST	ATTORNEY CAUSE / REV	REFUND AMOUNT	PAYMENT AMOUNT
	2007 TOTAL		0.58	0.00	0.82	0.00	0.00	1.40
	2008 TOTAL		0.58	0.00	0.00	0.00	0.00	0.58
	2009 TOTAL		423.60	0.00	389.18	111.68	0.00	924.46
	2010 TOTAL		612.94	0.00	489.89	146.96	0.00	1,249.79
	2011 TOTAL		658.38	0.00	400.34	18.81	0.00	1,077.53
	2012 TOTAL		654.74	0.00	341.80	16.30	0.00	1,012.84
	2013 TOTAL		632.29	0.00	269.14	5.90	0.00	907.33
	2014 TOTAL		758.83	0.00	188.03	39.02	0.00	1,051.15
	2015 TOTAL		784.57	0.00	230.04	26.30	0.00	998.90
	2016 TOTAL		1,033.09	0.00	144.15	100.04	0.00	1,363.17
	2017 TOTAL		991.93	0.00	144.15	83.70	0.00	1,219.78
	2018 TOTAL		7,746.20	0.00	1,392.78	1,565.50	0.00	10,704.48
	2019 TOTAL		8,569,764.01	0.00	0.00	0.00	0.00	8,569,764.01
	TOTAL PAYMENTS		8,584,061.74	0.00	4,099.47	2,114.21	0.00	8,590,275.42
	2017 TOTAL		279.93-	0.00	33.72-	40.45-	0.00	354.10-
	2018 TOTAL		2,326.03-	0.00	23.95-	31.41-	0.00	2,381.39-
	2019 TOTAL		19,579.17-	0.00	0.00	0.00	0.00	19,579.17-
	TOTAL REVERSALS		22,185.13-	0.00	57.67-	71.86-	0.00	22,314.66-
	TOTAL FOR UNIT		8,561,876.61	0.00	4,041.80	2,042.35	0.00	8,567,960.76

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TAX COLLECTION SYSTEM
TAX COLLECTOR MONTHLY REPORT
FROM 08/01/2019 TO 12/31/2019

PAGE: 20
INCLUDES AG ROLLBACK

FISCAL START: 08/01/2019 END: 07/31/2020 JURISDICTION: 0337 FRIENDWD CITY

CERT TAXABLE VALUE	ADJUSTMENTS	ADJ TAX VALUE	TAX RATE	TAX LEVY	PAID ACCTS
3,494,315.010	182,470.009	3,676,785.019	00.521439	18,723,631.87	9,066

YEAR	TAXES DUE	MONTH ADJ	ADJUSTMENT YTD	LEVY PAID	PAID YTD	BALANCE	COLL %	YTD UNCOLL
2019	17,783,517.63	940,114.24	940,114.24	9,984,483.63	9,984,483.63	8,739,148.24	53.33	0.00
2018	207,273.10	23,261.23-	23,261.23-	86,817.62	86,817.62	97,194.25	47.18	0.00
2017	45,549.62	3,568.91-	3,568.91-	9,456.64	9,456.64	32,524.07	22.53	0.00
2016	24,040.73	211.93-	211.93-	2,446.69	2,446.69	21,382.11	10.27	0.00
2015	18,497.82	381.51-	381.51-	1,203.58	1,203.58	16,912.73	6.64	0.00
2014	18,649.85	132.42-	132.42-	1,515.84	1,515.84	17,001.59	8.19	0.00
2013	13,872.95	.00	.00	664.49	664.49	13,208.46	4.79	0.00
2012	12,039.45	.00	.00	671.34	671.34	11,368.11	5.58	0.00
2011	11,426.47	.00	.00	669.16	669.16	10,757.31	5.86	0.00
2010	10,591.35	.00	.00	625.36	625.36	9,965.99	5.90	0.00
2009	12,161.61	.00	.00	423.60	423.60	11,738.01	3.48	0.00
2008	6,351.51	.00	.00	0.58	0.58	6,350.93	.01	0.00
2007	2,435.78	.00	.00	0.58	0.58	2,435.20	.02	0.00
2006	2,787.78	.00	.00	0.00	0.00	2,787.78		0.00
2005	1,428.40	.00	.00	0.00	0.00	1,428.40		0.00
2004	650.49	.00	.00	0.00	0.00	650.49		0.00
2003	647.12	.00	.00	0.00	0.00	647.12		0.00
2002	924.85	.00	.00	0.00	0.00	924.85		0.00
2001	941.66	.00	.00	0.00	0.00	941.66		0.00
2000	996.69	.00	.00	0.00	0.00	996.69		0.00
1999	481.49	.00	.00	0.00	0.00	481.49		0.00
1998	0.00	.00	.00	0.00	0.00	0.00		0.00
****	18,175,266.35	912,558.24	912,558.24	10,088,979.11	10,088,979.11	8,998,845.48		0.00

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2019
JURISDICTION: 0337 FRIENDWD CITY

PAGE: 194
INCLUDES AG ROLLBACK

	CERTIFIED ROLL	ROLL AS OF 08/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	4,537,437,822	3,891,505,950	51,849,596	3,840	51,853,436	3,943,359,386
AG EXCLUSION	24,683,691	24,683,691	613,872	0	613,872	25,297,563
IMPROVEMENTS	645,931,872	645,931,872	174,867,761	356,559-	174,511,202	820,443,074
APPRAISED VALUE	4,537,437,822	4,537,437,822	226,717,357	352,719-	226,364,638	4,763,802,460
EXEMPTIONS	1,018,439,121	1,018,439,121	37,116,451	6,164,306	43,894,629	1,062,333,750
TAXABLE VALUE	3,494,315,010	3,494,315,010	188,987,034	6,517,025-	182,470,009	3,676,785,019
LEVY	17,783,517.63	17,783,517.63	973,291.25	33,177.01-	940,114.24	18,723,631.87
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE						
EXEMPTION COUNTS:						
HOMESTEADS	10,000	10,000	475	51	53	10,053
OVER 65	2,975	2,975	128	39	41	3,016
DISABLED	181	181	5	8	8	189
VETERAN	205	205	12	2	2	207
TOTAL EXEMPT	74	74	0	0	0	74

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2018
JURISDICTION: 0337 FRIENDMD CITY

PAGE: 195
INCLUDES AG ROLIBACK

	CERTIFIED ROLL	ROLL AS OF 06/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	4,207,374,518	3,589,474,109	0	616,407-	616,407-	3,589,857,702
AG EXCLUSION	23,842,910	23,842,910	0	0	0	23,842,910
IMPROVEMENTS	617,900,409	617,900,409	0	2,148,027-	2,148,027-	615,752,382
APPRAISED VALUE	4,207,374,518	4,207,374,518	0	2,764,434-	2,764,434-	4,204,610,084
EXEMPTIONS	891,117,422	891,117,422	0	2,101,910	2,101,910	893,219,332
TAXABLE VALUE	3,292,414,186	3,292,414,186	0	4,866,344-	4,866,344-	3,287,547,842
LEVY	207,273.10	207,273.10	.00	23,261.23-	23,261.23-	184,011.87
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE					.00	
EXEMPTION COUNTS:						
HOMESTEADS	10,001	10,001	0	26	26	10,027
OVER 65	2,897	2,897	0	12	12	2,909
DISABLED	0	0	0	5	5	5
VETERAN	204	204	0	1	1	205
TOTAL EXEMPT	0	0	0	0	0	0

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2017
JURISDICTION: 0337 FRIENDMD CITY

PAGE: 196
INCLUDES AG ROLLBACK

	CERTIFIED ROLL	ROLL AS OF 08/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	4,271,816,787	3,655,904,976	0	0	0	3,655,904,976
AG EXCLUSION	18,989,755	18,989,755	0	0	0	18,989,755
IMPROVEMENTS	615,911,811	615,911,811	542,834	43,070-	499,764	616,411,575
APPRAISED VALUE	4,271,816,787	4,271,816,787	542,834	43,070-	499,764	4,272,316,551
EXEMPTIONS	988,826,434	988,826,434	542,834	631,296	1,174,130	990,000,564
TAXABLE VALUE	3,264,000,598	3,264,000,598	0	674,366-	674,366-	3,263,326,232
LEVY	45,549.62	45,549.62	.00	3,568.91-	3,568.91-	41,980.71
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE					.00	
EXEMPTION COUNTS:						
HOMESTEADS	10,005	10,005	0	12	12	10,017
OVER 65	2,854	2,854	0	1	1	2,855
DISABLED	0	0	0	0	0	0
VETERAN	207	207	0	1	1	208
TOTAL EXEMPT	647	647	0	0	0	647

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2016
JURISDICTION: 0337 FRIENDMD CITY

PAGE: 197
INCLUDES AG ROLLBACK

	CERTIFIED ROLL	ROLL AS OF 08/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	3,999,127,118	3,429,239,107	0	0	0	3,429,239,107
AG EXCLUSION	13,436,213	13,436,213	0	0	0	13,436,213
IMPROVEMENTS	569,888,011	569,888,011	0	32,540-	32,540-	569,855,471
APPRAISED VALUE	3,999,127,118	3,999,127,118	0	32,540-	32,540-	3,999,094,578
EXEMPTIONS	968,850,710	968,850,710	0	5,143	5,143	968,855,853
TAXABLE VALUE	3,016,840,195	3,016,840,195	0	37,683-	37,683-	3,016,802,512
LEVY	24,040.73	24,040.73	.00	211.93-	211.93-	23,828.80
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE					.00	
EXEMPTION COUNTS:						
HOMESTEADS	9,913	9,913	0	0	0	9,913
OVER 65	2,721	2,721	0	0	0	2,721
DISABLED	0	0	0	0	0	0
VETERAN	242	242	0	1	1	243
TOTAL EXEMPT	642	642	0	0	0	642

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2015
JURISDICTION: 0337 FRIENDMD CITY

PAGE: 198
INCLUDES AG ROLLBACK

	CERTIFIED ROLL	ROLL AS OF 08/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	3,624,772,568	3,125,559,710	0	0	0	3,125,559,710
AG EXCLUSION	17,997,504	17,997,504	0	0	0	17,997,504
IMPROVEMENTS	499,212,858	499,212,858	0	23,010-	23,010-	499,189,848
APPRAISED VALUE	3,624,772,568	3,624,772,568	0	23,010-	23,010-	3,624,749,558
EXEMPTIONS	906,250,004	906,250,004	0	44,075	44,075	906,294,079
TAXABLE VALUE	2,700,525,060	2,700,525,060	0	67,085-	67,085-	2,700,457,975
LEVY	18,497.82	18,497.82	.00	381.51-	381.51-	18,116.31
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE					.00	
EXEMPTION COUNTS:						
HOMESTEADS	9,425	9,425	0	1	1	9,426
OVER 65	2,517	2,517	0	0	0	2,517
DISABLED	170	170	0	0	0	170
VETERAN	231	231	0	1	1	232
TOTAL EXEMPT	632	632	0	0	0	632

ALL PROPERTY

TAX COLLECTION SYSTEM
SUPPLEMENTAL / ADJUSTMENT CONTROL TOTALS
FOR TAX YEAR: 2014
JURISDICTION: 0337 FRIENDWD CITY

PAGE: 199
INCLUDES AG ROLLBACK

	CERTIFIED ROLL	ROLL AS OF 08/01/2019	SUPPLEMENTALS THIS PERIOD	ADJUSTMENTS THIS PERIOD	NET CHANGE THIS PERIOD	ROLL AS OF 12/31/2019
LAND VALUE	3,220,611,338	2,761,917,896	0	0	0	2,761,917,896
AG EXCLUSION	22,656,763	22,656,763	0	0	0	22,656,763
IMPROVEMENTS	458,693,442	458,693,442	0	0	0	458,693,442
APPRAISED VALUE	3,220,611,338	3,220,611,338	0	0	0	3,220,611,338
EXEMPTIONS	739,118,459	739,118,459	0	22,392	22,392	739,140,851
TAXABLE VALUE	2,458,836,116	2,458,836,116	0	22,392	22,392	2,458,813,724
LEVY	18,649.85	18,649.85	.00	132.42	132.42	18,517.43
UNCOLLECTIBLE	.00	.00	.00	.00	.00	.00
RECEIVABLE					.00	
EXEMPTION COUNTS:						
HOMESTEADS	9,648	9,648	0	1	1	9,649
OVER 65	2,524	2,524	0	0	0	2,524
DISABLED	176	176	0	0	0	176
VETERAN	220	220	0	0	0	220
TOTAL EXEMPT	624	624	0	0	0	624

Summary of Jurisdiction Remittances Processed

Report run on: January 7, 2020 11:09 AM

For Remitted Deposit Dates 12/01/2019 thru 12/31/2019 as of 01/07/2020

Version 1.50

Tax Unit		M & O Total	I & S Total	TIF Levy	TIF Interest	Fee Total	Total
337 FRIENDWD CITY							
ACH 53824	Print Date:12/05/2019						
	Current	156,853.55	32,403.98	0.00	0.00	0.00	189,257.53
	Delq	203.14	38.96	0.00	0.00	0.00	242.10
Last Deposit Date	12/02/2019	\$157,056.69	\$32,442.94	\$0.00	\$0.00	\$0.00	\$189,499.63
ACH 53865	Print Date:12/09/2019						
	Current	47,343.16	9,780.49	0.00	0.00	0.00	57,123.65
	Delq	2,361.61	514.49	0.00	0.00	0.00	2,876.10
Last Deposit Date	12/03/2019	\$49,704.77	\$10,294.98	\$0.00	\$0.00	\$0.00	\$59,999.75
ACH 53910	Print Date:12/09/2019						
	Current	59,634.39	12,319.78	0.00	0.00	0.00	71,954.17
	Delq	312.27	68.02	0.00	0.00	0.00	380.29
Last Deposit Date	12/04/2019	\$59,946.66	\$12,387.80	\$0.00	\$0.00	\$0.00	\$72,334.46
ACH 53954	Print Date:12/11/2019						
	Current	183,978.03	38,007.62	0.00	0.00	0.00	221,985.65
	Delq	7,632.65	1,156.16	0.00	0.00	0.00	8,788.81
Last Deposit Date	12/05/2019	\$191,610.68	\$39,163.78	\$0.00	\$0.00	\$0.00	\$230,774.46
ACH 53997	Print Date:12/12/2019						
	Current	123,223.31	25,456.44	0.00	0.00	0.00	148,679.75
	Delq	251.66	48.64	0.00	0.00	0.00	300.30
Last Deposit Date	12/09/2019	\$123,474.97	\$25,505.08	\$0.00	\$0.00	\$0.00	\$148,980.05
ACH 54039	Print Date:12/13/2019						
	Current	92,388.88	19,086.38	0.00	0.00	0.00	111,475.26
Last Deposit Date	12/10/2019	\$92,388.88	\$19,086.38	\$0.00	\$0.00	\$0.00	\$111,475.26
ACH 54084	Print Date:12/16/2019						
	Current	136,062.83	28,108.99	0.00	0.00	0.00	164,171.82
	Delq	295.50	64.35	0.00	0.00	0.00	359.85
Last Deposit Date	12/11/2019	\$136,358.33	\$28,173.34	\$0.00	\$0.00	\$0.00	\$164,531.67
ACH 54127	Print Date:12/16/2019						
	Current	61,516.57	12,708.54	0.00	0.00	0.00	74,225.11
	Delq	195.54	39.15	0.00	0.00	0.00	234.69
Last Deposit Date	12/12/2019	\$61,712.11	\$12,747.69	\$0.00	\$0.00	\$0.00	\$74,459.80
ACH 54170	Print Date:12/17/2019						
	Current	241,500.67	49,891.12	0.00	0.00	0.00	291,391.79
	Delq	872.42	168.51	0.00	0.00	0.00	1,040.93
Last Deposit Date	12/13/2019	\$242,373.09	\$50,059.63	\$0.00	\$0.00	\$0.00	\$292,432.72
ACH 54214	Print Date:12/19/2019						
	Current	120,439.61	24,881.41	0.00	0.00	0.00	145,321.02
	Delq	(771.27)	(168.18)	0.00	0.00	0.00	(939.45)
Last Deposit Date	12/16/2019	\$119,668.34	\$24,713.23	\$0.00	\$0.00	\$0.00	\$144,381.57
ACH 54258	Print Date:12/20/2019						
	Current	122,632.62	25,334.36	0.00	0.00	0.00	147,966.98
	Delq	6.53	1.42	0.00	0.00	0.00	7.95
Last Deposit Date	12/17/2019	\$122,639.15	\$25,335.78	\$0.00	\$0.00	\$0.00	\$147,974.93

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Summary of Jurisdiction Remittances Processed

Report run on: January 7, 2020 11:09 AM

For Remitted Deposit Dates 12/01/2019 thru 12/31/2019 as of 01/07/2020

Version 1.50

Tax Unit		M & O Total	I & S Total	TIF Levy	TIF Interest	Fee Total	Total
337 FRIENDWD CITY							
ACH 54302	Print Date:12/23/2019						
	Current	143,210.50	29,585.58	0.00	0.00	0.00	172,796.08
	Delq	393.05	85.04	0.00	0.00	0.00	478.09
Last Deposit Date	12/18/2019	\$143,603.55	\$29,670.62	\$0.00	\$0.00	\$0.00	\$173,274.17
ACH 54345	Print Date:12/26/2019						
	Current	128,275.28	26,500.04	0.00	0.00	0.00	154,775.32
	Delq	3.10	0.68	0.00	0.00	0.00	3.78
Last Deposit Date	12/19/2019	\$128,278.38	\$26,500.72	\$0.00	\$0.00	\$0.00	\$154,779.10
ACH 54389	Print Date:12/27/2019						
	Current	1,640,146.49	338,834.21	0.00	0.00	0.00	1,978,980.70
	Delq	199.31	43.41	0.00	0.00	0.00	242.72
Last Deposit Date	12/20/2019	\$1,640,345.80	\$338,877.62	\$0.00	\$0.00	\$0.00	\$1,979,223.42
ACH 54432	Print Date:12/30/2019						
	Current	61,365.63	12,677.38	0.00	0.00	0.00	74,043.01
	Delq	445.01	96.92	0.00	0.00	0.00	541.93
Last Deposit Date	12/23/2019	\$61,810.64	\$12,774.30	\$0.00	\$0.00	\$0.00	\$74,584.94
ACH 54476	Print Date:12/31/2019						
	Current	267,796.72	55,323.53	0.00	0.00	0.00	323,120.25
	Delq	554.21	94.00	0.00	0.00	0.00	648.21
Last Deposit Date	12/26/2019	\$268,350.93	\$55,417.53	\$0.00	\$0.00	\$0.00	\$323,768.46
ACH 54519	Print Date:01/02/2020						
	Current	93,086.34	19,230.46	0.00	0.00	0.00	112,316.80
Last Deposit Date	12/27/2019	\$93,086.34	\$19,230.46	\$0.00	\$0.00	\$0.00	\$112,316.80
ACH 54563	Print Date:01/03/2020						
	Current	161,389.76	33,341.15	0.00	0.00	0.00	194,730.91
	Delq	13.44	2.93	0.00	0.00	0.00	16.37
Last Deposit Date	12/30/2019	\$161,403.20	\$33,344.08	\$0.00	\$0.00	\$0.00	\$194,747.28
ACH 54608	Print Date:01/06/2020						
	Current	3,245,407.49	670,461.55	0.00	0.00	0.00	3,915,869.04
	Delq	419.88	91.02	0.00	0.00	0.00	510.90
Last Deposit Date	12/31/2019	\$3,245,827.37	\$670,552.57	\$0.00	\$0.00	\$0.00	\$3,916,379.94
Total:		\$7,099,639.88	\$1,466,278.53	\$0.00	\$0.00	\$0.00	\$8,565,918.41

FRIENDSWOOD CITY COUNCIL AGENDA ITEM FORM

This form should be completed and forwarded to the City Manager's Office as soon as possible prior to the first date that the item is expected to be placed on the Friendswood City Council agenda.

Date requested for City Council consideration: February 3, 2020

Date submitted: 1/16/2020

Prepared by: Glenda Faulkner, Executive Secretary

Subject: Approving the minutes of the January 6, 2020, Council Meeting

Originating Department: City Secretary

Degree of importance: Significant

SUMMARY / ORIGINATING CAUSE

The Council Meeting minutes of January 06, 2020, are submitted for Council's review and consideration.

IMMINENT CONSEQUENCES / BENEFIT TO COMMUNITY

Approval of the Council Meeting minutes provides a historical document of actions taken by City Council as provided for in the Local Government Code and in the City Charter.

RECOMMENDATIONS

The City Secretary recommends that Council approve the Council meeting minutes as presented.

ATTACHMENTS

1. 01-06-20 Minutes

STATE OF TEXAS
CITY OF FRIENDSWOOD
COUNTIES OF GALVESTON/HARRIS
JANUARY 6, 2020

5:30 PM – REGULAR MEETING

MINUTES OF A REGULAR MEETING OF THE FRIENDSWOOD CITY COUNCIL THAT WAS HELD ON MONDAY, JANUARY 6, 2020, AT 05:30 PM AT FRIENDSWOOD CITY HALL COUNCIL CHAMBERS, 910 S. FRIENDSWOOD DRIVE, FRIENDSWOOD, TEXAS, WITH THE FOLLOWING PRESENT CONSTITUTING A QUORUM:

MAYOR MIKE FOREMAN
MAYOR PRO-TEM SALLY BRANSON
COUNCILMEMBER STEVE ROCKEY
COUNCILMEMBER TRISH HANKS
COUNCILMEMBER ROBERT J. GRIFFON
COUNCILMEMBER JOHN SCOTT
COUNCILMEMBER BRENT ERENWERT
CITY ATTORNEY MARY KAY FISCHER
CITY MANAGER MORAD KABIRI
CITY SECRETARY MELINDA WELSH

1. Call to order

Mayor Foreman called the meeting to order.

2. Invocation – Pastor Dr. David Lorenz, First Baptist Church

The invocation was given by Pastor Dr. David Lorenz with First Baptist Church.

3. Pledge of Allegiance to the United States and Texas Flags – McKenna Robey and Nevaeh Billups with Daisy Troop #143158

(HONOR THE TEXAS FLAG; I PLEDGE ALLEGIANCE TO THEE, TEXAS, ONE STATE UNDER GOD, ONE AND INDIVISIBLE)

Daisy Scouts McKenna Robey and Nevaeh Billups with Girl Scout Troop #143158 led the Pledge of Allegiance to the United States and to the State of Texas.

4. Communications from the Public

Communications from the Public (To comply with provisions of the Open Meetings Act, the City Council may not deliberate on items discussed under this agenda item. The Council may refer this item to the City Manager or direct this item to be placed on the next regular Council agenda. PowerPoint presentations are not conducted during the citizen comment period. Out of respect for those speaking during public comment, please refrain from any outbursts or interjections to include, but not limited to, applause and/or disparaging noises from the audience. Doing so discourages others from voicing their thoughts and

opinions, and disrupts the meeting. Furthermore, any personnel complaints against a City employee aside from the City Manager, City Secretary, City Attorney or Municipal Judge cannot be discussed under this section. Please contact the City Manager's office for concerns involving a City employee.)

Don Scott, Friendswood resident, addressed Council and stated the intersection at Hunters Lane and FM 518 is dangerous, a stop light is needed, location of the new shopping center makes it impossible to get out of his subdivision, Chick-Fil-A opening will worsen the intersection, needs to be addressed with Texas Department of Transportation, and is an accident waiting to happen.

5. WORK SESSION

A. Friendswood Police Department's mandatory transition to the National Incident Based Report System (NIBRS)

Mayor Mike Foreman opened the discussion regarding Friendswood Police Department's mandatory transition to the National Incident Based Report System. Deputy Police Chief Josh Rogers presented a PowerPoint presentation regarding National Incident Based Report System (NIBRS). Deputy Police Chief Rogers discussed crime reporting of yesterday, history of Uniform Crime Reporting (UCR), UCR crime reporting usefulness, UCR crime reporting limitations, NIBRS explained, is more detailed to help with crime analysis, comparison of UCR and NIBRS was given, NIBRS future integration, and what does NIBRS integration mean for the City of Friendswood. NIBRS will have an effect on the way the crime rate is viewed.

Discussion took place between Mayor, Council, and Staff regarding that the National Incident Based Report System may initially look like there is an increase in crime rate, public education of the new system will be important, and there should be no effect on organizations that designate safest cities based off Federal Bureau of Investigation (FBI) crime data.

With concurrence of Council, Mayor Foreman moved to Agenda Item 8, Special Recognition and Acknowledgements.

6. CLOSED EXECUTIVE SESSION

A. Communications from the Public regarding Executive Session topics.

Mayor Foreman asked if anyone would like to speak regarding the Executive Session. No one spoke.

B. Council may convene into Executive Session in accordance with the Texas Government Code, pursuant to Section 551.071 – Consultation with Attorney, to seek advice of its attorney on legal matters subject to the attorney-client privilege, with possible discussion and action related thereto in open session.

Council convened into Executive Session in accordance with Texas Government Code, pursuant to Section 551.071– Consultation with Attorney, to seek advice of its attorney on legal matters subject to the attorney-client privilege.

7. RECONVENE INTO OPEN SESSION

Council reconvened into Open Session with no action taken later in the meeting.

With concurrence of Council, Mayor Foreman moved to Agenda Item 9, Public Hearing.

8. Special Recognition and Acknowledgements

A. Presentation of the 32nd Consecutive Certificate of Achievement for Excellence in Financial Reporting for Fiscal Year 2017-2018 by Roger Roecker

Roger Roecker, former Friendswood City Manager, Past President of the Government Finance Officers Association of Texas (GFOAT) and GFOAT representative to the Government Finance Officers Association presented a Certificate of Achievement for Excellence in Financial Reporting for Fiscal Year 2017-2018 to Administrative Services Director Katina Hampton. This is the 32nd consecutive year for the city to receive this award. Ms. Hampton thanked the Administrative Service Department Staff for their help and support.

With concurrence of Council, Mayor Foreman moved to Agenda Item 13, Discussion and Possible Action.

9. Public Hearing

To receive comments from the public, both oral and written, regarding:

A. Adoption of an updated Official Zoning Map per Appendix C, Zoning Ordinance "Section 3. Provision for Official Zoning Map" incorporating zone changes and corrections since the last adopted map dated January 8, 2015

Mayor Foreman called a Public Hearing to order to receive comments from the public both oral and written, regarding adoption of an updated Official Zoning Map per Appendix C, Zoning Ordinance "Section 3. Provision for Official Zoning Map" incorporating zone changes and corrections since the last adopted map dated January 8, 2015.

Community Development Director/City Planner Aubrey Harbin stated the Planning and Zoning Commission's (P&Z) recommendation was 5-0 in favor of the request.

Mayor Foreman asked if anyone would like to speak in favor or in opposition of the request. No one spoke.

Hearing no comments from the public, Mayor Foreman closed this portion of the Public Hearing.

B. Proposed amendments to Appendix B Subdivision Ordinance "Section III. k.3. Sidewalks" to not require sidewalks in existing residential areas if sidewalks do not already exist

Mayor foreman called a Public Hearing to order to receive comments from the public both oral and written, regarding proposed amendments to Appendix B Subdivision Ordinance "Section III. k.3. Sidewalks" to not require sidewalks in existing residential areas if sidewalks do not already exist.

Community Development Director/City Planner Aubrey Harbin stated the Planning and Zoning Commission's (P&Z) recommendation was 5-0 in favor of the request.

Mayor Foreman asked if anyone would like to speak in favor or in opposition of the request. No one spoke.

Hearing no comments from the public, Mayor Foreman closed this portion of the Public Hearing.

C. Proposed amendments to Appendix C Zoning Ordinance "Sections 7. Schedule of District Regulations," "Section 7.5. Community Overlay District," and "Section 8. N. Downtown District Supplemental Requirements" to change building material requirements per House Bill 2439

Mayor Foreman called a Public Hearing to order to receive comments from the public both oral and written, regarding proposed amendments to Appendix C Zoning Ordinance "Sections 7. Schedule of District Regulations," "Section 7.5. Community Overlay District," and "Section 8. North Downtown District Supplemental Requirements" to change building material requirements per House Bill 2439.

Community Development Director/City Planner Aubrey Harbin explained the request and stated the Planning and Zoning Commission's (P&Z) recommendation was 5-0 in favor of the request.

Mayor Foreman asked if anyone would like to speak in favor or in opposition of the request. No one spoke.

Hearing no comments from the public, Mayor Foreman closed this portion of the Public Hearing.

10. Communications from the Public

Communications from the Public (To comply with provisions of the Open Meetings Act, the City Council may not deliberate on items discussed under this agenda item. The Council may refer this item to the City Manager or direct this item to be placed on the next regular Council agenda. PowerPoint presentations are not conducted during the citizen comment period. Out of respect for those speaking during public comment, please refrain from any outbursts or interjections to include, but not limited to, applause and/or disparaging noises from the audience. Doing so discourages others from voicing their thoughts and opinions, and disrupts the meeting. Furthermore, any personnel complaints against a City employee aside from the City Manager, City Secretary, City Attorney or Municipal Judge cannot be discussed under this section. Please contact the City Manager's office for concerns involving a City employee.)

Mayor Foreman asked if anyone would like to speak. No one spoke.

With concurrence of Council, Mayor Foreman moved to Agenda Item 14D, Ordinance No. T2020-03.

11. City Manager's Report

A. Annual Tree Give Away

City Manager Morad Kabiri reported that the Annual Tree Giveaway sponsored by Keep Friendswood Beautiful will be held January 18, 2020, starting at 8:00 AM at City Hall. Over 100 –

fifteen-gallon trees will be given away to residents. The trees chosen this year include Pride of Texas Yaupon, Live Oak, Red Oak, Cedar Elm, Vitex, and Green Giant Magnolia. The giveaway is limited to two trees per family (first come-first served) and is for Friendswood residents only. A City of Friendswood water bill or driver's license is required. For more information, please contact the City of Friendswood Parks and Recreation Department.

B. Employee Service Awards

The City Manager reported that every year in December, the city recognizes its employees for their years of dedicated service. Awards are given in five-year increments and presented at the Employee Christmas Party. The city appreciates all the employees across all departments and the hard work they do to provide the quality services the citizens of Friendswood expect.

C. Wink to Webster First Responder Grant Program

The City Manager reported that the city's Fire Marshal's Office (FMO) has been selected as a recipient of funding from the Wink to Webster First Responder Grant Program. The grant, in the amount of \$3,940 is being awarded to support the purchase of four gas meters that will ultimately be transferred to the Friendswood Volunteer Fire Department. The Wink to Webster grant is a program intended to assist first responders. Earlier this year, the city's FMO made an application to purchase four gas meters that will be deployed on three fire engines, and one tactical vehicle for use at pipeline emergencies, hazardous materials releases, fires, and other similar scenarios.

D. Community Development Block Grant-Disaster Recovery Program: Utility Line Relocate

The City Manager reported that Staff recently learned Lift Station No. 1 and 17 projects submitted in early 2019 would not be eligible for funding from the Community Development Block Grant – Disaster Recovery Program. An evaluation was undertaken of possible opportunities that would qualify based upon funding available. The project identified was the relocation of a waterline and sewer force mains that cross Clear Creek near the Polly Ranch Subdivision. The lines are currently vulnerable to bank erosion along Clear Creek and pose potential sewer flooding impact. Staff proposes to apply dollars previously directed at the lift station project to this effort. An application was posted December 20, 2019, on the city's website for public comment. There will be a public hearing and resolution for Council's consideration at the February 3, 2020, meeting.

E. Hurricane Harvey Update

The City Manager reported that Staff continues to move forward with the Hazard Mitigation Grant Program buyout program. Property appraisals have been completed and presented to homeowners for buyouts. Staff is awaiting approval of the city's Texas Water Development Board Flood Mitigation Assistance grant from the Federal Emergency Management Agency (FEMA) for buyouts. Conditional approvals have been granted from the Community Development Block Grant – Disaster Recovery Program for both the Blackhawk Facility and the Forest Bend flood mitigation project. Staff is working toward the procurement of professional services for architectural, engineering, and environmental activities associated with the projects. Applications through the Texas General Land Office on property acquisition/critical infrastructure are still pending. Unites States Congressmen Pete Olson and Randy Weber have been contacted to enlist help with FEMA on all projects and initiatives. Staff is working on a draft of the first Memorandum of Understanding (MOU) with Clear Creek Community Church regarding the Whitcomb Property. The first MOU will be exploratory in

nature to determine the maximum benefit of the proposed shelf along Clear Creek.

Councilmember Rockey stated he was at the Farmer's Market on January 4, 2020, saw an elderly woman and the City Manager trip on the uneven concrete area left from the old fire station, and asked Staff to look into making the uneven areas a little safer.

12. Communications from Committees and Special Reports

A. Annual Report from Zoning Board of Adjustment Chair Phil Ratisseau

Zoning Board of Adjustment Chair Phil Ratisseau presented the annual report from the Zoning Board of Adjustment.

With concurrence of Council, Mayor Foreman moved to Agenda Item 6, Executive Session.

13. Discussion and Possible Action

A. Discussion and possible action regarding approving the dedication of the Joycina Baker Room at the Friendswood Public Library

******Councilmember Rockey moved to approve the dedication of the Joycina Baker Room at the Friendswood Public Library.

The motion was seconded and approved unanimously.

B. Discussion and possible action regarding reappointments to the following boards and commissions:

- Fourth of July Steering Committee to reappoint Thomas McDonald, Anthony Scarpa, Rufino Ramirez, Michelle Bjacek, Christine Scarpa, Stefanie Karacostas and Stacy Scarpa to 3 year terms expiring November 2022.

******Councilmember Scott moved to approve the reappointment of Thomas McDonald, Anthony Scarpa, Rufino Ramirez, Michelle Bjacek, Christine Scarpa, Stefanie Karacostas and Stacy Scarpa to the Fourth of July Steering Committee with terms to expire November 2022.

The motion was seconded and approved unanimously.

C. Discussion and possible action regarding approving a contract with Galveston County for Election Services

******Councilmember Rockey moved to approve a contract with Galveston County for Election Services.

The motion was seconded and approved unanimously.

14. Ordinances

Consideration and possible action regarding the following:

A. Ordinance No. T2019-47: Second and Final reading of an ordinance amending the Code of Ordinances, Chapter 82 – “traffic and vehicles,” by adding Section 82-10, regulating hours of movement of oversize vehicles and adding a definition for “oversize vehicle”; adding Section 82-11, prohibiting certain oversize vehicles in the Downtown District; adding Section 82-12, requiring permitted oversize vehicles to contact the police department at least 24 hours prior to movement of an oversized vehicle within the city; providing a penalty clause; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; providing for severability and an effective date.

****Councilmember Scott** moved to approve the Second and Final reading of Ordinance No. **2019-47** – An ordinance amending the Code of Ordinances, Chapter 82 – “traffic and vehicles,” by adding Section 82-10, regulating hours of movement of oversize vehicles and adding a definition for “oversize vehicle”; adding Section 82-11, prohibiting certain oversize vehicles in the Downtown District; adding Section 82-12, requiring permitted oversize vehicles to contact the police department at least 24 hours prior to movement of an oversized vehicle within the city; providing a penalty clause; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; providing for severability and an effective date.

The motion was seconded and approved unanimously.

B. Ordinance No. T2020-01: First reading of an ordinance repealing Ordinance No. 97-20, Ordinance No. 2000-06, Ordinance No. 2003-17, that adopted and amended the Municipal Court Building Security Fund and the Municipal Court Building Technology Fund.

****Councilmember Griffon** moved to approve the First reading of Ordinance No. **T2020-01** – An ordinance repealing Ordinance No. 97-20, Ordinance No. 2000-06, Ordinance No. 2003-17, that adopted and amended the Municipal Court Building Security Fund and the Municipal Court Building Technology Fund.

The motion was seconded and approved unanimously.

C. Ordinance No. T2020-02: First and Final reading of an ordinance amending City of Friendswood, Texas, Ordinance No. 2019-38, passed and approved October 7, 2019, same being an ordinance approving and adopting the City’s General Budget for Fiscal Year 2019-2020 by approving “Budget Amendment II” to the “Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2019-2020”; providing for supplemental appropriation and/or transfer of certain funds; providing for severability; and providing other matters related to the subject.

****Councilmember Scott** moved to approve the First and Final reading of Ordinance No. **2020-02** – An ordinance amending City of Friendswood, Texas, Ordinance No. 2019-38, passed and approved October 7, 2019, same being an ordinance approving and adopting the City’s General Budget for Fiscal Year 2019-2020 by approving “Budget Amendment II” to the “Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2019-2020”; providing for supplemental appropriation and/or transfer of certain funds; providing for severability; and providing other matters related to the subject.

The motion was seconded and approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 16, Consent Agenda.

D. Ordinance No. T2020-03: First reading of an ordinance amending Appendix B, "Subdivision Ordinance," "Section III.k.3 – Sidewalks" to add exceptions to sidewalk requirements for existing residential subdivisions; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.

****Councilmember Scott** moved to approve the First reading of Ordinance No. **T2020-03** – An ordinance amending Appendix B, "Subdivision Ordinance," "Section III.k.3 – Sidewalks" to add exceptions to sidewalk requirements for existing residential subdivisions; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability. The motion was seconded and approved unanimously.

E. Ordinance No. T2020-04: First reading of an ordinance amending Appendix C "Zoning Ordinance," "Sections 7. Schedule of District Regulations," "Section 7.5. Community Overlay District," and "Section 8. N. Downtown District Supplemental Requirements" to change building material requirements per House Bill 2439; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability.

****Councilmember Hanks** moved to approve the First reading of Ordinance No. **T2020-04** – An ordinance amending Appendix C "Zoning Ordinance," "Sections 7. Schedule of District Regulations," "Section 7.5. Community Overlay District," and "Section 8. North Downtown District Supplemental Requirements" to change building material requirements per House Bill 2439; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances inconsistent or in conflict herewith; and providing for severability. The motion was seconded and approved unanimously.

F. Ordinance No. T2020-05: First reading of an ordinance amending Appendix C, "Zoning," Section 3. "Provision for Official Zoning Map," to update and adopt the Official Zoning Map of the city, incorporating approved changes in district boundaries and other matters portrayed on the Official Zoning Map; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances in conflict herewith; and providing for severability.

****Councilmember Scott** moved to approve the First reading of Ordinance No. **T2020-05** – An ordinance amending Appendix C, "Zoning," Section 3. "Provision for Official Zoning Map," to update and adopt the Official Zoning Map of the city, incorporating approved changes in district boundaries and other matters portrayed on the Official Zoning Map; providing a penalty for violation in an amount not to exceed \$2,000, or as otherwise provided by law; repealing all ordinances or parts of ordinances in conflict herewith; and providing for severability. The motion was seconded and approved unanimously.

15. Communications from the Mayor and Councilmembers

Councilmember Scott stated he is up for reelection and will run for Council Position No. 5, has been a tremendous honor to serve on Council for nine years, and if fortunate enough he will serve his last three years of eligibility the same way he has served the previous nine.

Mayor Foreman wished Councilmember Scott good luck in the upcoming election, and stated it has been an honor serving with him for the past four years.

Councilmember Hanks stated over the holidays Friendswood Independent School District lost two students unexpectedly. It is always hard to lose young people but especially over the holidays. Keep their families in your prayers.

Councilmember Branson stated the renaming of the conference room at the library for Joycina D. Baker was approved earlier in the agenda. There will be a reception at the Friendswood Public Library on January 8, 2020, at 5:00 PM. Councilmember Branson announced she will run for reelection for Council Position No. 2, and further stated she has only served for two and half years, has been a true honor to serve the community in this capacity, and it would be a privilege to be able to continue to serve for a second term.

Mayor Foreman reported that Galveston County Consolidated Drainage District Commissioner Gary Harris and his wife Lynda Harris are present at tonight's meeting, and Mr. and Mrs. Harris are Councilmember Branson's parents.

Councilmember Branson stated her Dad is up for reelection as well and they will both be on the May ballot.

Councilmember Rockey stated he has been cast in another play here in town called "August Osage County", is a fabulous play and will be performed in February, a very adult play with adult language, and encourages everyone to come see the play and support the arts in Friendswood.

Mayor Foreman stated he would like to reemphasize that the sales tax for streets will be part of the May election cycle, sales tax re-authorization for 3/8 of a cent that goes towards street repairs will be on the ballot, funds have been critical for needed maintenance on city streets, would be hard pressed to find additional funds in the city's budget without having to cut services, and should be easy to support.

With concurrence of Council, Mayor Foreman moved to Agenda Item 17, Adjournment.

16. Consent Agenda

Consideration and possible action regarding the following:

- A. Authorize the Mayor to sign the Acceptance by Grantee for Access Easement for Sterling Creek Section 4
- B. Approving a sidewalk easement for 1705 S. Friendswood Drive (Chipotle)
- C. Accepting the November 2019 Property Tax Report
- D. Approving the minutes of the December 02, 2019, Council Meeting

******Councilmember Rockey moved to approve all items on the Consent Agenda as presented: A. Authorize the Mayor to sign the Acceptance by Grantee for Access Easement for Sterling Creek Section 4. B. Approving a sidewalk easement for 1705 South Friendswood Drive (Chipotle). C. Accepting the November 2019 Property Tax Report. D. Approving the minutes of the December 02, 2019, Council Meeting.

The motion was seconded and approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 11, City Manager's Report.

17. Adjournment

This meeting was adjourned at 07:14 PM.

Attest:

Mayor Mike Foreman

Melinda Welsh, TRMC
City Secretary