

STATE OF TEXAS )(  
 CITY OF FRIENDSWOOD )(  
 COUNTIES OF GALVESTON/HARRIS )(  
 APRIL 01, 2019 )(  
 )

MINUTES OF A REGULAR MEETING OF THE FRIENDSWOOD CITY COUNCIL THAT WAS HELD ON MONDAY, **APRIL 01, 2019**, AT 4:30 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  | JOHN SCOTT        |
| COUNCILMEMBER  | STEVE ROCKEY      |
| COUNCILMEMBER  | SALLY BRANSON     |
| COUNCILMEMBER  | TRISH HANKS       |
| COUNCILMEMBER  | ROBERT J. GRIFFON |
| COUNCILMEMBER  | CARL GUSTAFSON    |
| CITY ATTORNEY  | MARY KAY FISCHER  |
| CITY MANAGER   | MORAD KABIRI      |
| CITY SECRETARY | MELINDA WELSH     |

### **REGULAR SESSION**

Mayor Foreman called the meeting to order.

The invocation was given by Pastor Moe Mays with First Baptist Church.

Cub Scouts Daniel Requeña Herrera, Leo Requeña Herrera, and Josué Requeña Herrera with Cub Scout Pack 452 led the Pledge of Allegiance to the United States and to the State of Texas.

### **COMMUNICATIONS FROM THE PUBLIC**

John Cole, Friendswood resident, addressed Council and stated he would like to address how the city can get out of debt, and gave a history of the budget. His recommendation is that in order to maintain city services, cut employee salaries by 50% for five years, resulting in a savings of \$20 Million per year, will allow the city to eliminate total city debit and allow an account to be established for budget surplus, and projects outside the city budget will function from a budget surplus.

Ed Cummins addressed Council and stated he is a real estate broker representing the Cleave's, spoke in support of the proposed Avalon at Friendswood subdivision.

Connie Cleaves Brakebill, Friendswood resident, addressed Council and stated she is at the meeting to speak in favor of the proposed zoning change for the Avalon at Friendswood subdivision.

### **WORK SESSION**

Mayor Foreman opened the discussion regarding the Capital Projects update. Interim Public Works Director Rene' Ibarra presented a PowerPoint presentation regarding the progress made on Capital Projects since January 2019. He reported on Old City Park, Blackhawk Boulevard Phase II, 2018 street maintenance contract, de-silting project, storm sewer cleaning and inspection, sidewalks on Greenbriar Drive, Lift Station No. 23, reconstruction of the pool restroom and ticket booth, current Texas Department of Transportation (TxDOT) projects, and current Galveston County Consolidated Drainage District projects.

With concurrence of Council, Mayor Foreman moved to Agenda Item 6B, Presentation of the 2018 Comprehensive Annual Financial Report (CAFR) from auditors Whitley Penn, presented by Lupe Garcia.

**SPECIAL RECOGNITION AND ACKNOWLEDGEMENTS**

Lupe Garcia, Certified Public Accountant (CPA) with Whitley Penn, presented the 2018 Comprehensive Annual Financial Report (CAFR). Mr. Garcia reviewed the audit process, reviewed accounting policies of the city, are in good standing, and stated the results of the audit was an unmodified opinion.

Mayor Foreman thanked Administrative Services Director Katina Hampton and Administrative Services Deputy Director Rhonda Boskas for doing a great job.

With concurrence of Council, Mayor Foreman moved to Agenda Item 9, City Manager's Report.

**CITY MANAGER'S REPORT**

City Manager Morad Kabiri reported that the Keep Friendswood Beautiful (KFB) Board and the City of Friendswood are sponsoring the annual Spring Sparkle event for the citizens of Friendswood at Centennial Park on Saturday, April 13, 2019. Residents will be required to show proof of residency to participate. KFB Board members have teamed with the city's solid waste services provider, Waste Connections, JSC Federal Credit Union, Sonic of Friendswood, and Star Service, Inc., to provide the community with a great clean-up day. Shred-It Document Shredding will also be onsite to accept paper for shredding from 8:00 AM until noon. Items that will be accepted include green waste, such as tree limbs and grass clippings, appliances, furniture, electronics, miscellaneous wood, metal, and plastic. Simple Recycling will also be there to accept clothing, shoes, jewelry, toys, sleeping bags, pots/pans, blankets, tools, bags, drapes/curtains, silverware, coats/jackets, hats, pillows, bedding, and dishes. No household hazardous waste will be accepted at this location. Residents can also donate garage sale items to Keep Friendswood Beautiful. KFB will be accepting furniture, household items, bikes that are in good condition, clothing will not be accepted. Garage sale items can be dropped off the morning of the event at Centennial Park. All proceeds from the garage sale will benefit the beautification of city facilities and parks.

The City Manager reported that the Friendswood Public Library will celebrate National Library Week from April 8 through April 13, 2019. The Friends of the Library will provide 4GB USB drives and stylus pens for those who visit the library during that week. Dr. William Johnson, Horticulturalist with the Galveston County AgriLife service, will present Beneficials in the Garden on April 13, 2019, at 10:30 AM. For more information about National Library Week, or anything related to the Friendswood Public Library, visit the library's website at [www.friendswood.lib.tx.us](http://www.friendswood.lib.tx.us).

The City Manager reported that the annual Youth Fishing Derby event sponsored by the City of Friendswood Parks and Recreation Department has been scheduled for Saturday, May 11, 2019, at Centennial Park pond for kids ages 16 and under. Over 600 pounds of adult catfish will be stocked in the Centennial Park pond to catch. There is no pre-registration or fishing licenses required to participate. Participants are encouraged to bring their own fishing supplies due to the supply of loaner rods will be limited. Prizes will be awarded to the largest fish caught in different age groups. For more information regarding this event, please contact the Parks and Recreation Department.

The City Manager reported that Staff continues to work with Federal Emergency Management Agency (FEMA) representatives to finalize projects. Resolutions have not been reached with FEMA in regards to the old Public Works and Parks facility on Deepwood Drive. Buyout and elevation applications through the Hazard Mitigation Grant Program and Texas Water Development Board are being reviewed by FEMA.

With concurrence of Council, Mayor Foreman moved to Agenda Item 11, Discussion and possible action regarding disposition of Bid No. 2019-02 for Bulk Fuel Purchase and Delivery.

**ACTION ITEMS**

\*\*Councilmember Griffon moved to approve the disposition of Bid No. 2019-02 for Bulk Fuel Purchase and Delivery and award to Lee Oil Company.

Seconded by Councilmember Branson. The motion was approved unanimously.

**\*\*Councilmember Rockey** moved to approve an Access and Utilities Easement Agreement with Coastal Bend Property Development, LP.

Seconded by Councilmember Branson. The motion was approved unanimously.

**\*\*Councilmember Hanks** moved to approve the acquisition and implementation of Integrated Body-Worn Camera and In-Car Solution.

Seconded by Councilmember Griffon. The motion was approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 15, Resolutions.

## **RESOLUTIONS**

**\*\*Councilmember Scott** moved to approve Resolution **R2019-09** – A resolution of the City Council of the City of Friendswood, Texas, authorizing and approving the 2018 Community Development Block Grant – Disaster Recovery (CDBG-DR).

Seconded by Councilmember Griffon. The motion was approved unanimously.

**\*\*Councilmember Hanks** moved to approve Resolution **R2019-10** – 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.

Seconded by Councilmember Griffon. The motion was approved unanimously.

**\*\*Councilmember Griffon** moved to approve Resolution **R2019-11** – A resolution of the City Council of the City of Friendswood, Texas, expressing its full support for the bond projects identified, prioritized, and publicly presented as being included in and funded by the Harris County Flood Control District 2018 Bond Election and requesting that Harris County Commissioners Court proceed with such bond projects; requesting that Harris County Commissioners Court not incorporate the use of HUD low-to-moderate income criteria to now re-prioritize the HCFCD 2018 Bond Election Bond Projects.

Seconded by Councilmember Branson. The motion was approved unanimously.

## **ORDINANCES**

**\*\*Councilmember Scott** moved to approve the Second and Final reading of Ordinance No. **2019-10** – An ordinance amending the Code of Ordinances of the City of Friendswood, Texas, Appendix C – “Zoning,” by amending the zoning classification for a tract or parcel containing 1.8864 acres of land, situated in the Sarah McKissick Survey, Abstract 151, being out of Lot 4 in Block 11 of Friendswood Subdivision according to the plat thereof recorded in Volume 238, Page 14, Friendswood, Galveston County, Texas; amending the zone classification from Community Shopping Center (CSC) to Downtown District (DD); providing for amendment of the Official Zoning Map; providing a penalty in an amount not to exceed \$2,000 for each day of violation of any provision hereof; and providing for severability.

Seconded by Councilmember Branson. The motion was approved unanimously.

**\*\*Councilmember Hanks** moved to approve the First reading of Ordinance No. **T2019-11** – An ordinance amending the Code of Ordinances of the City of Friendswood, Texas, Appendix C – “Zoning,” by amending the zoning classification for a tract or parcel containing 115.998 acres of land along the future Friendswood Lakes Boulevard between West Ranch and Friendswood Lakes Subdivisions, Friendswood, Galveston County, Texas, to change from Single Family Residential (SFR) to Planned Unit Development (PUD) for a residential development, “Avalon at Friendswood”, consisting of the following tracts: 1) 87.774 acres, more or less, being a portion of a called 96.944 acres tract in the Mary Fabreau Survey, Abstract No. 69 in Galveston County, Friendswood, Texas, save and except a 9.170 acre portion of the same tract; and 2) 28.2240 acres of land, more or less, being a portion of a called 194.21 acre tract described as Tract “A” as conveyed to Yellowstone Hill Country Ranching, LLC, Friendswood, Galveston County, Texas; amending the zone classification from Single Family Residential (SFR) to Planned Unit Development (PUD) for a residential development, “Avalon at Friendswood”; providing for amendment of the Official Zoning Map;

providing a penalty in an amount not to exceed \$2,000 for each day of violation of any provision hereof; and providing for severability.

Seconded by Councilmember Branson. The motion was approved 4-3 with Councilmembers Griffon, Scott, and Gustafson opposed.

Community Development Director/City Planner Aubrey Harbin reported that the Planning and Zoning Commission's vote for Agenda Item 16B, First reading of Ordinance No. T2019-11, An ordinance amending the Code of Ordinances of the City of Friendswood, Texas, Appendix C – "Zoning," by amending the zoning classification for a tract or parcel containing 115.998 acres of land along the future Friendswood Lakes Boulevard between West Ranch and Friendswood Lakes Subdivisions, Friendswood, Galveston County, Texas, to change from Single Family Residential (SFR) to Planned Unit Development (PUD) for a residential development, "Avalon at Friendswood", consisting of the following tracts: 1) 87.774 acres, more or less, being a portion of a called 96.944 acres tract in the Mary Fabreau Survey, Abstract No. 69 in Galveston County, Friendswood, Texas, save and except a 9.170 acre portion of the same tract; and 2) 28.2240 acres of land, more or less, being a portion of a called 194.21 acre tract described as Tract "A" as conveyed to Yellowstone Hill Country Ranching, LLC, Friendswood, Galveston County, Texas; amending the zone classification from Single Family Residential (SFR) to Planned Unit Development (PUD) for a residential development, "Avalon at Friendswood"; providing for amendment of the Official Zoning Map **was approved 4-3**.

Ms. Harbin further stated the opposition was due to concerns regarding limited access to lakes, percentage of lot sizes not comparable to other Planned Unit Developments (PUD), lack of amenities such as trails, ponds, small parks, etc. Reasons for approval were market conditions to provide a variety of lot sizes, meets the spirit of the law, quality builder, meets the general purpose of PUD per Zoning Ordinance, and private streets.

Discussion took place between Mayor, Council, Bobby Skinner and Bob Kulpinski with Taylor Morrison, Kathryn Parker with META Planning + Design, and Staff regarding variety of lot sizes, lake access, each lot would pay into Park Funds, anticipated retail value of homes is \$400,000 to \$800,000 depending on size, ninth Avalon community in Houston Metropolitan area, amenities included, impervious cover requirements, and land density.

Councilmember Rockey asked for a Point of Order and asked if Councilmember Gustafson made a motion to table.

\*\*\*Councilmember Gustafson moved to **table** the First reading of Ordinance No. T2019-11.

Seconded by Councilmember Griffon. The **motion to table failed** 3-4 with Mayor Foreman and Councilmembers Rockey, Branson, and Hanks opposed.

With concurrence of Council, Mayor Foreman moved to Agenda Item 7, Joint Public Hearing.

### **JOINT PUBLIC HEARING**

Mayor Foreman and Planning and Zoning Commission Chair Joe Matranga called a Joint Public Hearing to order to receive comments from the public both oral and written, regarding amending the City of Friendswood Code of Ordinances, Appendix C, Zoning Ordinance "Section 15. Amendments" and "Chapter 70 Vacation of Street, Drainage, Utility or other Public Easement" to change from Joint Public Hearings to separate Public Hearings and to amend ordinance wording to be consistent with state law.

Community Development Director/City Planner Aubrey Harbin explained the Planning and Zoning Commission's (P&Z) desire to change the current process implemented in 2007, changes since implementation, 2012 Council started meeting only once a month, 2015 City Attorney was hired on Staff rather than outside counsel, intent is to remain developer friendly, would be able to give developers a firm schedule, and change P&Z meeting dates to the second and fourth Thursday of each month.

Planning and Zoning Commission Chair Matranga asked if anyone would like to speak in favor or in

opposition of the request. No one spoke.

Planning and Zoning Commission Chair Matranga adjourned the Planning and Zoning Commission's portion of the Joint Public Hearing. Mayor Foreman left Council's portion of the Joint Public Hearing open.

With concurrence of Council, Mayor Foreman moved to Agenda Item 14, Discussion and possible action regarding concurrence with the City Manager's appointment of a Public Works Director.

#### **ACTION ITEMS (continued)**

\*\*Councilmember Scott moved to approve the City Manager's appointment of Rene' Ibarra as the Public Works Director.

Seconded by Councilmember Rockey. The motion was approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 10A, Keep Friendswood Beautiful Annual Report given by Chair Natasha McAdoo.

#### **COMMUNICATIONS FROM COMMITTEES AND SPECIAL REPORTS**

Keep Friendswood Beautiful (KFB) Chair Natasha McAdoo gave the annual report. Ms. McAdoo presented a video presentation that highlighted many of KFB's projects and events over the past year. In 2018, KFB had face-to-face engagement with over 15,000 citizens, educated over 3,900 youth and adults in environmental stewardship, and shared KFB's message through newsletters, email, press releases and social media with over 100,000 people. KFB held workshops on creating bird friendly communities and backyard citrus seminars, provided welcome bags for new Friendswood residents, sponsored a "Schools Out for Summer" event, helped with Eagle Scout projects, managed creations of murals for "Art in the Park", received and organized items received to be reused and recycled, and successfully kicked off the Simple Recycling program in March. At the recent tree giveaway, 100 trees were given away to Friendswood residents. A pollinator garden has been created and implemented at Stevenson Park which will provide beauty and sustainability to pollinators, and provide a tangible educational model of our ecosystem. Texas Department of Transportation (TxDOT) has started the planning and implementation of the median rebuild from damage during Hurricane Harvey, and work should begin in the fall of 2019. TxDOT has graciously agreed to add brick end caps to each of the medians, and provide new flowers and plants that will complement the new color scheme and branding for the City of Friendswood. KFB will be promoting a summer bucket list to encourage individuals and families to spend unplugged time outdoors and with each other. The summer bucket list will include items like climbing a tree, watching a sunset with a loved one and having a picnic in the park. KFB members present in the audience were acknowledged, worked 2,967 volunteer hours over the past year, works well with Parks and Recreation staff, and thanked Council for their continued support.

With concurrence of Council, Mayor Foreman moved to Agenda Item 6A, Proclamation for Sherry Goen for her service with the Keep Friendswood Beautiful Committee.

#### **SPECIAL RECOGNITION AND ACKNOWLEDGEMENTS (continued)**

Mayor Foreman presented a proclamation to Keep Friendswood Beautiful member Sherry Goen for her years of service with the Keep Friendswood Beautiful Committee.

With concurrence of Council, Mayor Foreman moved to Agenda Item 16D, Ordinance No. T2019-14.

#### **ORDINANCES (continued)**

\*\*Councilmember Griffon moved to approve the First reading of Ordinance No. **T2019-14** – An ordinance approving the execution of a Developer Participation Agreement between the City of Friendswood (city) and Coastal Bend Property Development, LP, (developer) and Ser Construction Partners, LLC, (contractor), for the purpose of making certain public improvements as authorized by law.

Seconded by Councilmember Scott. The motion was approved unanimously.

**\*\*Councilmember Branson moved to approve the First and Final reading of Ordinance 2019-15 – An ordinance amending City of Friendswood, Texas, Ordinance No. 2018-28, passed and approved October 1, 2018, same being an ordinance approving and adopting the City's General Budget for Fiscal Year 2018-2019 by approving "Budget Amendment VI" to the "Original General Budget of the City of Friendswood, Texas, for the Fiscal Year 2018-2019"; providing for supplemental appropriation and/or transfer of certain funds; providing for severability; and providing other matters related to the subject.**

Seconded by Councilmember Hank. The motion was approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 16C, Ordinance No. T2019-13.

**\*\*Councilmember Scott moved to approve the First reading of Ordinance No. T2019-13 – An ordinance amending Appendix C – "Zoning," section "Amendments" and Chapter 70 "Vacation of Street, Drainage, Utility or other Public Easement" to change from Joint Public Hearings to separate Public Hearings and to amend ordinance wording to be consistent with state law; 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.**

Seconded by Councilmember Branson. The motion was approved unanimously.

City Manager Morad Kabiri reported that the Planning and Zoning Commission's vote for Agenda Item 16C, First reading of Ordinance No. T2019-13, An ordinance amending Appendix C – "Zoning," section "Amendments" and Chapter 70 "Vacation of Street, Drainage, Utility or other Public Easement" to change from Joint Public Hearings to separate Public Hearings and to amend ordinance wording to be consistent with state law **was approved 6-0.**

With concurrence of Council, Mayor Foreman moved to Agenda Item 18, Consent Agenda.

#### **CONSENT AGENDA**

**\*\*Councilmember Scott moved to approve the Consent Agenda as presented: A. Approving an agreement with Friendswood Area Swim Team (FAST) for the use of the Sesquicentennial Swimming Pool and authorizing the Mayor to execute the agreement. B. Accepting the February 2019 Property Tax Report. C. Approving the minutes of the March 04, 2019, Council Meeting.**

Seconded by Councilmember Griffon. The motion was approved unanimously.

With concurrence of Council, Mayor Foreman moved to Agenda Item 20, Close Executive Session.

Mayor Foreman recessed the meeting at 6:41 PM, and reconvened the meeting at 6:54 PM.

#### **CLOSED EXECUTIVE SESSION**

Mayor Foreman asked if anyone would like to speak regarding the Executive Session. No one spoke.

Council convened into Executive Session in accordance with Texas Government Code, pursuant to Section 551.074 – Personnel Matters; to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee with possible discussion and action related thereto in open session (Evaluation of the City Secretary).

#### **RECONVENE INTO OPEN SESSION**

Council reconvened into Open Session with action taken later in the meeting regarding Section 551.074 – Personnel Matters; to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee with possible discussion and action related thereto in open session (Evaluation of the City Secretary).

With concurrence of Council, Mayor Foreman moved to Agenda Item 8, Communications from the Public.

### **COMMUNICATIONS FROM THE PUBLIC**

Mayor Foreman asked if anyone would like to speak. No one spoke.

With concurrence of Council, Mayor Foreman moved to Agenda Item 19, Work Session.

### **WORK SESSION (continued)**

Mayor Foreman opened the discussion regarding the Drainage Subcommittee report. Drainage Subcommittee member James Stahl presented a PowerPoint presentation regarding the Drainage Subcommittee's observations, conclusions, and recommendations. Drainage Subcommittee members were introduced, and reported that Council chartered the subcommittee in June 2018, subcommittee has met 35 times since the first meeting on June 28, 2018, with over 500 hours of service. The presentation was developed by the whole subcommittee team. Subcommittee members James Stahl and Lee Coggins will present the presentation to Council tonight. The subcommittee presented the problem statement, a significant portion of the data and analysis in previous work sessions with Council. Additional analysis will be presented along with observations, conclusions, and recommendations. Drainage Subcommittee member Lee Coggins stated after Hurricane Harvey, the city's Public Works Staff visited all damaged buildings and homes. The estimated level of flooding was measured from water marks on the outside of houses above the slab, Staff did not enter homes, and the subcommittee believes the data is accurate within a few inches in either direction. A chart was shown displaying that the total number of units flooded in the City of Friendswood was 2,838, single family residential made up 85% of impacted units, and the majority of affected units had minor to major flooding. A chart was displayed showing the cumulative totals of units flooded by inches of water taken on. Modeling and simulation are important to help solve drainage problems. The city hired Rice University Professor Doctor Phil Bedient and his team from Rice University to create a model of how Clear Creek reacts in the Friendswood area. Dr. Bedient's team has reported back to the subcommittee with their model and measured the effects of various proposed projects, and the subcommittee intends to keep the relationship with Dr. Bedient's work and have future items modeled. Overall study area and modeling domain of Dr. Bedient's work included the Clear Creek Watershed and Armand Bayou Watershed. The City of Friendswood's study of focus included primarily residential and commercial development, and flood drivers were low slopes, high imperviousness, and proximity to coast. Dr. Bedient's model evaluated existing flood vulnerability with mathematical modeling, validated the model against the observed flooding seen in Hurricane Harvey, explored a variety of mitigation scenarios including bridge raising, de-snagging, channelization and terracing, diversion at outlet, proposed detention ponds, and modeled multiple scenarios to determine the best group. A hydrologic model was used to see rainfall, soils, and land use, and translated into a hydraulic model in which water surface elevations were extracted and floodplain maps generated. The distributed Hydrologic Model included fully distributed physics-based hydrologic model developed by Vieux and Associates Incorporated, infiltration calculated by Green and Ampt Equation, used Kinematic Wave to route runoff between overland grid cells and Modified Puls for channel cells, and rainfall input can be rain gauge data or radar rainfall. Hydraulic Model was developed by the Hydrologic Engineering Center of the United States Army Corps of Engineers, used in various floodplain studies and dam breach analyses, 1D steady-state is used as the basis for Federal Emergency Management Agency (FEMA) floodplains, and the existing model was obtained from Harris County Flood Control District M3 system. Additionally floodplain maps can be predicted for each test scenario by using the models, and a floodplain map of Hurricane Harvey scenario was shown, accurate to the events that happened, and flood waters covered almost half of the City of Friendswood. Changes in land use in Clear Creek Watershed from 2008 to 2018 included a decrease in surface elevation mostly from the addition of detention ponds, increases in land elevations due to land development, and some areas remain unchanged. Model validation for peak water surface evaluation for Hurricane Harvey included measurements from gauges at different points along the creek, around a half a foot difference, actual measurements versus model measurement is pretty good, and it is actually considered outstanding in the field of flood modeling. A mitigation example scenario of raising the FM 2351 bridge was run through the model to see the impact of such projects. In all cases, data was shown for the effect of the example project for the historical 100-year storm, and negative numbers indicated a lower flooding rate if the project would have been in place.

If the FM 2351 bridge was raised, most impacts seen are at lower rain amounts. In a Hurricane Harvey type storm, a lot of water does not have as much of an impact because once the water has covered the bridge it can no longer act like a dam or hindrance. All three bridges would need to be looked at to get the best benefit. Another method of mitigation is terracing, based on terracing design, extend a 200 foot terrace to both sides of the creek to allow more detention of water, channel meanders remain intact, grass terracing has a roughness coefficient of 0.04 on its terraces. A summary of scenario individual testing at different location points was shown. Dr. Bedient's team calculated the group of projects that would have the biggest effect, raising the FM 2351 bridge, de-snagging and terracing together have the greatest positive impact, those same projects do not negatively affect League City, combination scenario decrease up to about 3.5 feet of water at Friendswood during Hurricane Harvey, effect is more pronounced upstream of Whispering Pines and begins to diminish downstream, land availability downstream of FM 528 is greater, increasing the terracing width there would likely increase the effect between FM 528 and Bay Area Boulevard, and a graph was shown demonstrating the effects of raising the FM 2351 bridge and terracing on Hurricane Harvey flood levels. Assuming the best project case was completed before Hurricane Harvey, using locations of where the houses flooded and possible reduction basis modeling, 850 houses would have flooded instead of 2,830, 250 of those houses would have gotten six inches or less, and 550 of the houses would have gotten between six inches to two feet of water. The Drainage Subcommittee asked for modeling of six proposed detention ponds at different locations, and detention ponds did not help in regards to a 100-year storm in modeling. One example used was a detention pond at Whispering Pines, changes were minimal for a Hurricane Harvey type storm. In order to have an effect on a Hurricane Harvey type storm, a 4,500 acre pond would be needed somewhere upstream, and additional modeling could be done to provide better estimates of the effects of detention ponds. The modeling scenario used for diversion was diverting water out of Clear Creek at the Bay Area Bridge and finding another path to the Gulf other than going down and out Clear Lake. The positive effects of the modeling occur mainly near and below the diversion point, further modelling is needed to better define, does require moving the water across other watersheds, significant land acquisition is needed, project cost would exceed \$300 Million and would have to be done by United States Army Corps of Engineers, City of Friendswood's portion of cost would be less than 5%, other cities and agencies would control this, there are other diversion type projects that need to be modeled, Friendswood should remain interested in this project, and, if triggered by other agencies, Council should support.

Drainage Subcommittee member James Stahl stated an observation is a conclusion the team has reached based on research, majority of the observations have been previously presented to Council and supported by a majority of the team, and each observation has multiple premises that helped the subcommittee reach the conclusion. Observations can be in the area of mitigation projects, costs, implementation, political concerns, safety, and environmental and more from the observations. The subcommittee has formulated recommendations from their observations and premises. A graph showing historical rainfall events in Friendswood was shown. Observation No. 1 is the City of Friendswood experiences catastrophic flooding when the watershed receives rainstorms of 24 inches or more in less than two days. The subcommittee believes such storms are occurring more frequently, there have been three major storms that have occurred in the last 40 years (Tropical Storm Claudette, Tropical Storm Allison, and Hurricane Harvey). Storms of lesser severity can cause localized flooding but do not create the wholesale flooding of significant portions of the city. Further development of the watershed will exacerbate the effects of such storms or will cause smaller storms to have the same impact. Observation No. 2 is that in the City of Friendswood and all other areas, flooding of Clear Creek occurs because enough water cannot either be stored upstream or drain fast enough to the ocean during storms. Methods to reduce flooding include reducing the amount of water entering Clear Creek in Friendswood during storms, and increase the ability to flow water out of Clear Creek during storms. An estimated 300,000 acre-feet of water came to the City of Friendswood in Hurricane Harvey (2/3 of that in Tropical Storms Allison and Claudette). Acquisition of property would be required to implement these options. In Hurricane Harvey, tributaries in Friendswood were not the restrictions but backed up because they could not exit into Clear Creek. Observation No. 3 is that over the last 80 years the Clear Creek Watershed has been significantly changed by humans for land use and this has altered the physics of the flow. Portions were straightened and widened to reclaim wetlands for farm use and later for residential areas. Some areas have not been altered and retain their natural unimproved watercourse such as in the City of Friendswood. Clear Lake is extensively developed at the outlets of the Clear Creek Watershed to Galveston Bay. Observation No. 4 is there are multiple jurisdictions in the Clear Creek

Watershed that pass water into Clear Creek without any further responsibility. The land mass of the jurisdictions that drain to Clear Creek in Friendswood is seven times the size of the City of Friendswood. Jurisdictions generally apply a 1% storm criterion for land use, which are not the type of storms that currently cause wholesale flooding. Some jurisdictions are beginning to make changes. There is no overall governing body although the current Clear Creek Watershed Steering Team has an advisory role. Observation No. 5 is that currently the City of Friendswood considers their role is to move water effectively from property owner boundaries to the nearest creek or drainage waterway to Clear Creek. That is consistent with other jurisdictions in the watershed, to the extent that the infrastructure exists, there are some areas or pockets of the city that flood in big storms, and may have a local drainage issue. Observation No. 6 is that the City of Friendswood's General Fund is inadequate to fund projects necessary to mitigate flooding of Clear Creek from the storms in question. The city is hampered by not having capital funds to support shared funding or pre-funding and payback projects. The city's yearly General Fund is \$25 Million, mitigation projects could be an order of magnitude larger. Funding would be required from other sources and the city would be required to aggressively pursue this funding and be vocal about how funds are disbursed. Observation No. 7 is cities and areas that are successful in advancing flood projects nationwide have built in a structure that ensures a constancy of purpose to create a long term strategy. Observation No. 8 is there are multiple Hurricane Harvey related funding streams available (federal, state, and county), some agencies have already been funded and projects are in the early stages of implementation, and the impacts of these projects on the City of Friendswood has not been adequately demonstrated to the Drainage Subcommittee. Harris County has received direct Federal Funds, other counties, including Galveston County, have not received direct funds yet, and it is currently not clear how the funds will be shared. The City of Friendswood has applied for federal and state funding for property buy-outs but some have not been approved and some are pending. Projects have been scheduled for areas upstream like Clear Creek in the City of Pearland, Mud Gully, and Turkey Creek. Simulation results shared with the subcommittee were for 1% storms only, and the subcommittee has requested the United States Army Corps of Engineers perform simulations on storms like Hurricane Harvey but the information has not been received yet. Caveats to the subcommittee's observations are that the team stayed within its charter to examine flooding and fixes. There are a number of areas not addressed but some of the important ones include projects that might have environmental impacts that will have to be addressed, projects such as retention, detention, and terracing of Clear Creek may afford opportunities to create appealing benefits such as parks, sport fields, nature trails, and more. The subcommittee did not define the cost of these appealing benefits. The subcommittee's recommendations are based on the data collected and the observations shared with Council during this work session and in previous Council meetings. Some recommendations attack multiple observations and all recommendations are intended to be actionable by Council if they choose to take action. Recommendation No. 1 is that Council needs to clearly state, through a resolution, that the work of the subcommittee generates a cause for action to mitigate rainstorm flood events. The subcommittee has provide backup information to all presentations, and a resolution would demonstrate commitment from Council. Recommendation No. 2 is that Council accepts that there are a number of mitigation projects that involve the main stem of Clear Creek that need to be pursued to completion to significantly reduce flooding in the City of Friendswood. The main stem of the creek is the problem, tributaries flood by backing up, and the methods to reduce flooding are either store more water, drain it faster, or remove structures from properties that flood. Mitigation is expensive and will take time to acquire matching funds, perform engineering, acquire right-of-ways, and implement the projects. Recommendation No. 3 is to allow voters to cast a vote on a bond election that would provide \$32 Million over the next 15 years on drainage projects. These funds would only be allowed to be spent on drainage projects associated with the main channel of Clear Creek. The cost to complete the needed projects is higher than \$32 Million, but this amount allows the city to leverage other funds available. Without money to spend on flood projects the City of Friendswood would be frozen out of consideration for many direct impact projects. The number of projects, their positive effects, their costs, expected percentage the city would have to contribute and the time frame, determined the proposed amount. Council would need to determine the net impact on taxes for bonds drawing over that period of time. This recommendation also relies on the Galveston County Consolidated Drainage District to continue their work on their tributaries. A list of estimated cost of projects with the best benefit was shown with an estimated total cost to the City of Friendswood of \$31,800,000. The proposed projects listed included de-snagging, bridge/road raising FM 2351, bridge/road raising FM 528, terracing Dixie Farm Road to FM 2351, terracing FM 2351 to Whispering Pines Avenue, terracing Whispering Pines Avenue to FM 528, terracing FM 528 to West Bay Area Boulevard, buyout lots, and engineering and environmental

impact studies. Estimated costs are based on engineering estimates for similar work. Recommendation No. 4 is for the city to hire a long-term Clear Creek Watershed Drainage Coordinator for the City of Friendswood to create a long-term strategy and a constancy of purpose. Experience shows with government to ensure something is completed and to have a long-term approach it has to be one person's clear job and they are held accountable for their progress. The City Manager would be responsible for defining the job description, hiring, and managing the performance toward the long-term goals. Council should be very active in the progress of this work and expect routine reports in Council meetings. The position would need to have a budget to successfully complete projects and continue the subcommittee's work on mathematical simulations, would be responsible for Clear Creek drainage project definition, spending, grant writing, interaction with other jurisdictions, and interaction with the public, and would monitor projects on Clear Creek and require simulations to show the effect of these projects during storms sizes that flood the City of Friendswood. Recommendation No. 5 is that the city should review and change its current permitting criteria regarding drainage to reflect the realities of the types of storms that occur here. Design criteria for new construction at the 1% storm level is inadequate. Optimally this should be done in conjunction with other municipalities up and down the creek, and current existing structures would be grandfathered unless substantially altered. Recommendation No. 6 is the acquisition of properties will be required to adapt Clear Creek to meet the demand for drainage. The City of Friendswood will need to have the means to acquire properties for drainage projects. The acquisition of land was included in the subcommittee's calculations for bond needs, will allow quick response to purchase damaged properties after a flood event and purchase of properties as they go on the market at any time. Privately owned properties cannot be used for drainage projects. Recommendation No. 7 is the city needs to be proactive regarding the management of the flow of water down Clear Creek. The city should take a leadership role in organizing municipalities along Clear Creek to create a common purpose in fixing the creek. There are over half a dozen agencies currently involved with Clear Creek. The city needs to recognize the responsibilities of other entities and needs to increase support to these groups. The current master plan for the watershed needs improvement, and solutions have to involve land use. Council needs to reach out to other cities to initiate communications, and initial discussions with League City leadership indicates they are of like minds with the subcommittee. Recommendation No. 8 is that there are currently several efforts to restructure watershed management being contemplated at the county and state level. Council needs to be active and participate in and determine if these efforts would be beneficial to the City of Friendswood. Generating watershed control systems can be hugely helpful so long as they are focused on the entire watershed, are governed fairly, and are resourced properly. Care should be given to ensure that changes do not reduce effective current drainage system, and until the Drainage Coordinator position is filled Council should determine a method to evaluate changes coming from either the counties or state. Recommendation No. 9 is Council's focus should entirely be toward the future. There is no justification to seek redress directed at upstream or downstream entities for the changes that have occurred along Clear Creek. Many of the significant alterations of the creek were done a long time ago, continue to this day, and will continue in the future. All municipalities comply with current laws and ordinances, state and federal law would not support being successful with legal action. The City of Friendswood has also allowed development, including houses built right on the creek, and that has also contributed to the drainage problem. Recommendation No. 10 is that the city should be directed to research and propose solutions for flooding that was not caused by Clear Creek in the city during Hurricane Harvey. This may require funding not part of bond capital which is dedicated to Clear Creek's main stem, and may require General Funds to perform the repairs. Recommendation No. 11 is the monitoring of creeks in Friendswood need to be greatly increased during flood events for flooding and safety purposes. There are blind spots on Clear Creek and tributaries in Friendswood regarding inundation levels and rain gauges. This affects safety and the ability to give first alerts to be issued, and more of these need to be added in critical areas. A summary of actions the subcommittee needs from Council at this meeting includes a decision if the Drainage Subcommittee should present information to the Citizen Advisory Team regarding the bond recommendations from the subcommittee. The subcommittee has met its original charter from Council to make recommendations back to Council that are fact-based only and include project types, costs, societal impacts, and political obstacles. There is on-going work with Dr. Bedient's team to further define project effects, Staff could keep moving forward, Council could re-charter the current team, or Council could charter a new subcommittee to continue this work.

Drainage Subcommittee member Lee Coggins stated a lot of information has been presented, and asked

Council to review information provided. After Hurricane Harvey, he came to City Hall for a building permit and unloaded on Staff in frustration, lives a mile away from the creek, only a 15-foot elevation difference as the creek runs through the City of Friendswood, heard stories from friends that floodwater came up to their doorways but not inside their homes, something needs to be done now regarding flooding, subcommittee has done a lot of work and are now passing the torch onto Council, and thanked Council for the honor of serving on the Drainage Subcommittee.

Drainage Subcommittee member James Stahl stated the subcommittee invested a lot of time and effort into their work, high level of professionalism and commitment, wished Council the best of luck, hopes Council takes the information provided and are driven to the same constancy of purpose as the subcommittee, need to set things in motion now with current Council, projects will take many years to complete, appreciates Councilmember Rockey, amazed at the work and time Councilmember Rockey has put into the subcommittee, and recognized the Drainage Subcommittee members present.

Discussion took place between Mayor, Council, Staff, and Drainage Subcommittee members Lee Coggins and James Stahl regarding that Rice University Professor Doctor Phil Bedient's report is in draft form and is being reviewed by the Drainage Subcommittee. Dr. Bedient's final report will be made available to the public once finalized. Council is appreciative of the work the subcommittee has done, funds are needed for various projects recommended by the subcommittee, localized flooding issues throughout portions of the city, City of League City is interested in regional collaborations, Harris County Flood Control District and Galveston County Consolidated Drainage District had a presence in subcommittee meetings, United States Army Corps of Engineers is interested in having future meetings with the city, majority of recommended projects would require the city partnering with other agencies, and overall management of Clear Creek Watershed is needed instead of multiple entities working individually. The consensus of Council was for the Drainage Subcommittee to present information to the Citizen Advisory Team, projects for possible proposed bond projects will need to be specific to things that will have the greatest impact on reducing flooding in the city. Council consensus was to dissolve the Drainage Subcommittee and allow Staff to move forward, and Staff will schedule an additional work session with Council to further discuss the subcommittee's recommendations.

With concurrence of Council, Mayor Foreman moved to Agenda Item 17, Communications from the Mayor and Councilmembers.

#### **COMMUNICATIONS FROM THE MAYOR AND COUNCILMEMBERS**

Councilmember Gustafson stated the Drainage Subcommittee has met for nine months, a lot of work, everyone has done a great job, and met some neat people he would not have met otherwise. He believes the subcommittee ended up producing a good project scoping estimates and showing ideas of what each project could do for the city.

Councilmember Rockey stated May 4, 2019, the library will host a Star Wars themed event, his son is going to dress as Chewbacca, and the library will have various activities going on for the event.

Councilmember Branson stated the city just completed the first full month of Simple Recycling, Spring Sparkle is April 13, 2019, Rotary Reverse Draw is April 06, 2019, former Friendswood Independent School District Superintendent Walter Wilson's memorial service will be April 06, 2019, and thanked the Drainage Subcommittee for the great job they did.

Councilmember Hanks stated the Mayor gave a great State of the City address, congratulated Councilmember Branson on receiving Business of the Month from Friendswood Chamber of Commerce, and thanked Staff for the reflective painting on the curbs.

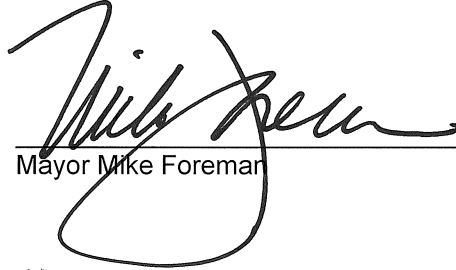
Mayor Foreman and Councilmembers Griffon and Scott stated they had nothing to report.

With concurrence of Council, Mayor Foreman moved to Agenda Item 22, Consideration and possible action regarding the annual review of the City Secretary.

**ACTION ITEMS (continued)**

\*\*Councilmember Griffon moved to approve giving the City Secretary a 3.5% salary increase. Seconded by Councilmember Hanks. The motion was approved unanimously.

The meeting was adjourned at 8:51 PM.

  
\_\_\_\_\_  
Mayor Mike Foreman

Attest:

  
\_\_\_\_\_  
Melinda Welsh, TRMC  
City Secretary

