



The City of West University Place

A Neighborhood City

CITY COUNCIL

Bob Higley, Mayor
Kevin Trautner, Mayor Pro Tem
John P. Barnes, Councilmember
Lauri Lankford, Councilmember
Ed Sobash, Councilmember

STAFF

David J. Beach, City Manager
Alan Petrov, City Attorney
Thelma Gilliam, City Secretary

CITY COUNCIL MINUTES

The City Council of the City of West University Place, Texas, remotely met in a workshop and regular session on **Monday, July 27, 2020**, at **5:30 p.m.** in the Municipal Building located at 3800 University Boulevard.

Agenda items were as follows:

WORKSHOP (5:30 PM)

Call Workshop to Order

Mayor Higley called the workshop to order remotely from the Bill Watson Conference Room at 5:30 p.m. Mayor Pro Tem Trautner, Councilmembers Barnes, Lankford and Sobash were in attendance via video/teleconference.

Staff: City Manager Beach, City Secretary Gilliam, Police Chief Walker, Human Resources Director Urban, and HR Generalists Langdon were physically present in the Council Chambers. City Attorney Petrov attended via video/teleconference.

Consultants: Rachel Skaggs and Joellen Cademartori, with GovHr attended via video/teleconference.

1. Compensation Study / Personnel Policies and Employee Handbook

Matters related to the City's Employee Handbook and discussion regarding a recent Compensation Study conducted by consultants on the City's behalf. **Mr. James Urban, Human Resources Director**

Before beginning the presentation, City Manager Beach noted that for budgetary purposes discussion of the Compensation Study is to receive direction from Council relating to the three options provided to them. He also noted that the reason staff is before Council to discuss personnel policies is because the Charter states that Council has to approve it.

Ms. Skaggs with GovHR gave a brief presentation and then there was a question/answer period.

Mayor Higley moved for staff to incorporate Version 3 of the proposed Compensation Plan into the 2021 Budget.

After discussion of the Compensation Study, HR Director Urban presented changes to the Personnel Policies and Employee Handbook and noted that the changes had been reviewed by City Attorney Petrov as well as the City's employment attorney Susan Bickley.

Mr. Urban said one of the things that interested a couple of the councilmembers was holidays.

Mayor Higley said from a historical standpoint this is an anachronism, a holdover from another era, in a time when West U did not have the number of directors and division leaders it now does and the Council did a lot of the work because it was a much smaller job. He said it is a huge job now and most of the work has gone to the city manager and robust staff so setting holidays as an agenda item is way down in the weeds for Council and is best resolved by people by the City's working men and women to decide what holidays they want and what they want to call them. He said while it is an interesting subject he doesn't know if Council needs to be in it, but rather taking the time to amend the Charter and recognizing and doing away with this ancient appendage.

Councilmember Barnes spoke to say that he thinks the City's choice of holidays reflects the City's policy and image of the City to some degree and thinks it is an anachronism that the City doesn't recognize Martin Luther King Day, which is recognized by every municipality around West U, the state and the "feds" and so the City stands out by omission in that regard. He said it is not a good look for the City for not doing it and may have an impact on the people the City is able to attract from elsewhere.

Mayor Higley responded and said (1) if it was not for the anachronism holidays would not be a policy of the City but rather an election of the employees; and (2) if he was a prospective employee, he would be more impressed if the City would say "it's your holiday" so get together with the other employees and come to Council with holidays you want to see observed.

City Manager Beach pointed out that the City has 10 holidays and for every one added would add approximately \$25,000 to the City's budget due to time worked during a holiday. He said the floating holiday does not have an effect on the budget because the day is chosen by the employee and is taken on a day that is special to him or her.

Mayor Higley asked if all 10 holidays could be floating holidays. City Manager Beach said if Council so chooses, but then there would have to be guidelines and procedures in place to ensure minimal staffing on certain holidays (i.e. Christmas Day).

Councilmember Barnes said he feels strongly that the time has come for the City to recognize Martin Luther King Day and happens to think the City's recognition of Good Friday is in itself an anachronism and proposed replacing the Good Friday holiday with Martin Luther King Day. He said doing so would have \$0 budgetary impact.

Councilmember Sobash said he would like to keep the schedule as it is and add an extra floating holiday. He said he would also like to leave holidays up to staff.

In response to Mayor Higley's question as what happens now, HR Director Urban said holidays will be approved with the personnel manual and an ordinance will be brought before the Council with proposed revisions.

In response to Mayor Pro Tem Trautner's inquiry on the median number of holidays for municipalities. HR Director Urban responded out of the 16 municipalities the consultants surveyed, the number ranged from 8 to 14 so the average would be 11.

Councilmember Lankford said she originally felt the City should have all the Federal holidays, but at that time she didn't realize there would be such a cost impact.

Mayor Higley said this should probably be subject to a Charter review to let the voters vote on what they want to do on holidays and primarily let the employees decide what 10 or 11 holidays they want to call holidays.

Councilmember Sobash said he hasn't heard anyone say how the current schedule is problematic so he is a little reluctant to fix something that is not a problem.

With that discussion ending, HR Director Urban did a “lightning round” of other changes and updates to the following sections of the manual:

- Meaning of S.P.I.R.I.T.
 - Superior Service
 - Professionalism
 - Integrity
 - Results
 - Innovation
 - Teamwork
- Created a Code of Ethics section
- Compensation related policies
- Wellness Program
- Emergency Pay

After a few other questions and answers, City Manager Beach said staff will schedule first and second readings of an ordinance soon to approve the revisions.

A copy of the audio of the discussion is on the City’s website or you can contact the City Secretary’s office for a copy.

2. Adjourn Workshop

Mayor Higley adjourned the workshop at approximately 6:25 p.m.

REGULAR MEETING (6:30 PM)

3. Call Regular Meeting to Order

Mayor Higley called the Regular Meeting to order at 6:30 p.m. in the Bill Watson Conference Room located in the Municipal Building at 3800 University Boulevard.

4. Roll Call

Mayor Pro Tem Trautner and Councilmembers Barnes, Lankford, and Sobash attended via audio/videoconference.

Staff participants: City Manager Beach, City Secretary Gilliam, and Public Works Director Barrera were physically in attendance. Fire Chief Taylor, Finance Director DuBose, and Chief Building Official Chew attended remotely. City Attorney Petrov attended via video/teleconference.

Others attending remotely: Zoning and Planning Commission Chair Richard Wilson, Evan DuVall with BBG Consultants, Kevin Taylor with BBG Consultants, Nawa Panthi and Hui-Fong Chang with HTJ, LLC, John Robuck with Bok Financial Securities, and Marcus Deitz with Orrick

5. Pledge of Allegiance

Councilmember Lankford led the Pledge.

6. Public Comments

This is an opportunity for citizens to speak to the Council relating to agenda and non-agenda items.

Cynthia Johnson, 3805 Tennyson, spoke to thank Council for approving the noise ordinance on first reading and for hearing what she and others said. She said she is looking forward to Council finalizing the ordinance.

Richard Beck, 4116 Rice, spoke to say he is in support of the proposed noise ordinance and requested that Council adopt it. He discussed some of the misinformation out in the community and thanked Council and the Zoning and Planning Commission for their work.

Gregg Thompson, 3758 Plumb, spoke to say he is in the landscape business and is familiar with leaf blowers and the nuisance value associated with them. He said for the record he does not allow blowers at his house for different reasons than the decibel level. He said he is more concerned with the air pollution associated with them. He said he believes stair-stepping to the proposed decibel level will help a lot of the companies. See attached letter, which Mr. Thompson requested be made a part of the record.

Aurelio Diez, 4025 Southwestern, spoke to say he has been following this and thanked the Zoning and Planning Commission and City Council for approving Option B on first reading of the ordinance.

Michael Green, 4115 Swarthmore, thanked Council for voting in favor of the noise ordinance. He said has no doubt the ordinance will improve the quality of life for West U residents.

Perry Nolen, 4203 Milton, spoke in opposition of the changes being proposed to the ordinance. He said everyone cares about noise but he would like to see changes made responsibly without severely impacting small businesses that perform these services. He said Option B is not sensible and should be rejected for reasons documented by the ZPC.

Eddie Matthews, 5906 Fordham, spoke to request Council withdraw the noise ordinance from tonight's consent agenda to allow more careful consideration of ZPC's reasons for its recommendations set forth in its letter of July 9 and the assessments and decisions of past commissions and councils on this issue. He supports ZPC's recommendation to approve Option A and rejects Option B, which ZPC does not support.

Dick Yehle, 6401 Rutgers, spoke to ask Council to take the advice offered by the ZPC seriously and approve the ordinance with Option A and reject Option B on the second reading. He provided another suggestion to get to the same place in a different way and without restarting the approval process.

Bryan Lethcoe, 3907 Ruskin, spoke to say he has two issues with the proposed ordinance – (1) it does not fully consider the costs associated with the ordinance change and (2) Council has basically chosen to disregard the hard work of the ZPC for the sake of mollifying a handful of vocal residents.

Kim King, 6603 Rutgers, thanked Council for approving the proposed ordinance on the first reading and said it is a reasonable compromise.

Paul Scheet, 3602 Carnegie, spoke to say he supports the effort to limit the noise from leaf blowers.

Susie Hairston, 2620 Pittsburgh, spoke to say she is extremely glad City Council has decided to help protect the workers citizens hire and the residents by putting in place an ordinance that will lower the allowed decibel level of leaf blowers. She said although she would like to see the gas-powered leaf blowers banned altogether, this is a step in the right direction.

7. **Information and Updates related to COVID-19**

Matters related to COVID-19. *Recommended Action: Discuss and take any desired action.* **Mr. Dave Beach, City Manager and Mr. Aaron Taylor, Fire Chief and Emergency Management Coordinator**

Chief Taylor reported:

- Since the peak of cases experienced last on July 15, there has been a decrease in the number of cases and positivity rate when looking at the statewide average.
- As of July 26 The Texas Medical Center is still exceeding Phase I ICU capacity and is 21 percent into Phase II capacity.
- There are 29 confirmed cases in West U – 4 active, 25 recovered, and 0 deaths.
- Fire Department is currently managing a potential exposure case and taking necessary protections and precautions.

8. Cash Defeasance of 2017 General Obligation Refunding Bonds

Matters related to the consideration and approval of a resolution calling for the defeasance and redemption of certain outstanding bonds of the City of West University Place, Texas. *Recommended Action: Approve resolution calling for the defeasance and redemption of certain outstanding bonds of the City of West University Place, Texas; directing the redemption of such bonds; and containing other matters related thereto. Ms. Katherine DuBose and Mr. John Robuck of BOK Financial Securities*

Mr. John Robuck with BOK Financial Securities presented. He has the opportunity to save \$266,000 by paying off some 2017 General Obligation Refunding Bonds, which will also help with the tax rate and lock in interest-cost savings.

In response to Councilmember Sobash, Mr. Robuck said the savings is because the City will no longer be obligated to pay the interest on the loans it is paying off. Councilmember Barnes said the City is basically avoiding the compounding of interest over the next several years.

Councilmember Sobash moved to approve the resolution calling for the defeasance and redemption of the 2017 bonds. Councilmember Barnes seconded the motion. **MOTION PASSED.**

Ayes:	Higley, Trautner, Barnes, Lankford, Sobash
Noes:	None
Absent:	None

9. Consent Agenda

All Consent Agenda items listed are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council member requests in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda.

A. City Council Minutes

Approve the City Council Meeting Minutes of July 13, 2020.

B. Quarterly Investment Report

Matters related to accepting the City's Quarterly Investment Report. *Recommended Action: Accept the Quarterly Investment Report. Mr. Harrison Nicholson, Treasurer*

C. Amendment to Lighting Regulations

Matters related to an ordinance amending the City's outdoor lighting regulations. *Recommended Action: Approve ordinance on the second and final reading. Mr. Gerardo Barrera, Public Works Director [see Agenda Memo 9C]*

D. Amendment to Noise Regulations

Matters related to an ordinance amending the City's noise regulations. *Recommended Action: Approve ordinance on second and final reading. Mr. Gerardo Barrera, Public Works Director*

E. Truth in Taxation Resolution

Matters related to a resolution designating the Harris County Tax Assessor-Collector's Office to calculate, sign and submit all necessary information in connection with "Truth in Taxation."
Recommended Action: Approve Resolution. Ms. Katherine Dubose, Finance Director

F. SCADA Programmable Logic Controller Replacement

Matters related to awarding a contract for the replacement of Wastewater SCADA System.
Recommendation: Award contract. Mr. Gerardo Barrera, Public Works Director

Councilmember Sobash requested that Item D be removed from the Consent Agenda.

Councilmember Barnes moved to approve the Consent Agenda as presented with the exception of Item D. Mayor Pro Tem Trautner seconded the motion. **MOTION PASSED.**

Ayes: Higley, Trautner, Barnes, Lankford, Sobash
Noes: None
Absent: None

City Manager Beach asked Councilmember Sobash his reason for requesting removal of this item from the Consent Agenda. Councilmember Sobash responded that on July 13 Council passed the first reading of the noise amendment with Option B and he would like further discussion being that the ZPC recommendation was Option A.

As requested by Councilmember Sobash, City Attorney Petrov explained the process related to second readings and reconsiderations.

Mayor Higley stated that he clearly recollects that Council discussed all of the aspects of the report from the ZPC. Councilmember Barnes said that was his recollection as well and that the discussion included the Chair of the ZPC Richard Wilson and the City's noise consultants.

Councilmember Sobash moved to approve the first reading of the ordinance with Option A that the ZPC recommended. City Attorney Petrov informed Mr. Sobash that another councilmember would have to make that motion because it would be a reconsideration being that he made the same motion at the last meeting and it failed due to lack of a second.

Councilmember Barnes asked Councilmember Sobash if there was something on the merits of Option A other than ZPC's recommendation. Councilmember Sobash said he believes the enforcement issue is real and that A is the superior option.

Councilmember Sobash recommended creating a stair step or a compromise to the adoption of the 70 decibels. He proposed going to a 75 decibel leaf blower limit starting January 2021 through the end of 2022 and then move to a 70 decibel limit starting January 1, 2023.

Councilmember Lankford said she thinks the stair step sort of makes sense. She said she would be in favor of it but not delaying so long in implementing the 70 decibel limit. Mayor Higley agreed.

Councilmember Barnes said there is a 6 months delay from the signing of the ordinance, but he asked what are staff's thought on the merits of stair-stepping. City Manager Beach said any changes will require an educational period so the City would have to re-educate the residents for every step. He said there will be twice the education and twice the learning curve as opposed to going with one step as in the current proposed ordinance.

Mayor Higley said he doesn't think a two-step process is necessary and said if it could get done in 6 months why frustrate residents and the City and leave people confused.

Councilmember Sobash said he thinks a stair-step is a reasonable process to get to 70 decibels. He said he believes the equipment will outpace the schedule and will be a problem that will take care of itself, but also thinks having an ordinance that sets the limit is appropriate and giving time to adopt is a fair compromise.

Mayor Higley said he would consider 9 months (for the ordinance to go into effect after signing) if Councilmember Sobash thinks that is a fairer solution. Councilmember Sobash said the fairness is the transition to this new standard and the impact that it will have to those that have this equipment that becomes obsolete in West U. He said he would like to work with those people to get to this standard and thinks that is a fair way to do it, but is looking for someone else to suggestion other stair-step times.

Councilmember Lankford said seems like companies generally plan year to year when budgeting so she can see taking it to 75 decibels at the 6 months and then in another 6 months go to 70 decibels. She said if 6 months apart, she doesn't think there would need to be two educational programs because residents can be educated to plan the year accordingly.

City Manager Beach said if it is the desire of Council to extend the time in order for people to comply, he suggests a period of 9 months for the ordinance to become effective rather than having the two steps.

Councilmember Barnes moved to approve the noise ordinance with an amendment that the enactment will be a 9 month period instead of the prior 6 months. Mayor Pro Tem Trautner seconded the motion. **MOTION PASSED.**

Ayes: Higley, Trautner, Barnes, Lankford, Sobash
Noes: None
Absent: None

10. Recess Regular Meeting to Convene Executive Session

Executive Session will be held in accordance with Section 551.072 of Chapter 551 of the Texas Government Code.

Mayor Pro Tem Trautner moved to table the Executive Session. Councilmember Barnes seconded the motion. **MOTION PASSED.**

Ayes: Higley, Trautner, Barnes, Lankford, Sobash
Noes: None
Absent: None

11. Adjourn Executive Session and Reconvene Regular Meeting

Matters related to any action taken resulting for the Executive Session

Not applicable. Executive Session was tabled.

12. Recess Regular Meeting to Convene Workshop on Drainage

Matters related to the City's Drainage/Modeling Study. *Recommended Action: Discuss and take any desired action. Mr. Gerardo Barrera, Public Works Director*

City Manager Beach gave a PowerPoint presentation recapping discussions over the past few months regarding the drainage/modeling project. The presentation and discussion included proposed improvements, costs, design phase services and schedule.

John Robuck with Bok Securities reviewed the City's options for the drainage project – issuing General Obligation Bonds (requires a bond election) or issuing Certificates of Obligation (can issue when needed and doesn't require a bond election). Mr. Robuck said there is no difference in costs to the residents with either one, except one has the associated cost of an election.

After discussion, the consensus of Council is to sale Certificates of Obligation for the Buffalo Speedway portion of the drainage project in the amount of \$20m and lock in the bond rate before the November election. Mr. Robuck said he will put together a schedule to have the bonds sold in October.

Regarding drainage improvements in other parts of the City for an amount of \$60m, the consensus of Council is to have a future discussion on how to fund that portion and the steps to get there.

A copy of the presentation is attached and audio of the discussion is available on the City's website or contact the City Secretary's office to obtain a copy.

13. Adjourn Workshop and Reconvene Regular Meeting

With no other business to discuss in the workshop, Councilmember Sobash moved to adjourn. Councilmember Lankford seconded the motion. **MOTION PASSED.**

Ayes: Higley, Trautner, Barnes, Lankford, Sobash
Noes: None
Absent: None

14. Adjourn Regular Meeting

With no other matter before the council, the meeting will adjourn.

Mayor Pro Tem Trautner moved to adjourn the regular meeting at 9:08 p.m. Councilmember Lankford seconded the motion. **MOTION PASSED.**

Ayes: Higley, Trautner, Barnes, Lankford, Sobash
Noes: None
Absent: None

Audio of the Council Meeting is available in its entirety on the City's website or contact the City Secretary's office.

Prepared by: City Secretary Thelma A. Gilliam

Approved by City Council on: August 10, 2020

Attached: Letter from Gregg Thompson regarding Leaf Blowers
Drainage Presentation

Thelma A. Gilliam

From: Gregg Thompson <gregg@thompsonhanson.com>
Sent: Monday, July 27, 2020 8:28 AM
To: Thelma A. Gilliam
Cc: Dave Beach
Subject: FW: Additional thoughts and suggestions on leaf blower discussion
Attachments: City of West University - Blowers.docx

Good morning Thelma,

As a follow up to my email below to Mayor and Council yesterday, please include that email and attachment in the minutes for the city council meeting tonight.

I will call in from 713-702-5779.

Thank you very much,

GREGG THOMPSON

THOMPSON + HANSON
t 713 839 7056 | c 713 702 5779
1301 N. First Street
Bellaire, Texas 77401

[Website](#) | [Facebook](#) | [Instagram](#)

From: Gregg Thompson <gregg@thompsonhanson.com>
Date: Sunday, July 26, 2020 at 1:15 PM
To: "bhigley@westutx.gov" <bhigley@westutx.gov>, "ktrautner@westutx.gov" <ktrautner@westutx.gov>, "jbarnes@westutx.gov" <jbarnes@westutx.gov>, "llankford@westutx.gov" <llankford@westutx.gov>, "esobash@westutx.gov" <esobash@westutx.gov>
Cc: "Thelma A. Gilliam" <tgilliam@westutx.gov>, Dave Beach <DBeach@westutx.gov>
Subject: Additional thoughts and suggestions on leaf blower discussion

Dear Mayor and City Council,

I wanted to share some of my thoughts and suggestions around the use of leaf blowers from the perspective of a West U resident that also happens to be in the landscape business. Either way, I applaud your efforts to improve the quality of life in West University and I hope that my attached comments provide you with some additional information to improve on what is currently being considered.

Thank you,

GREGG THOMPSON

THOMPSON + HANSON
t 713 839 7056 | c 713 702 5779
1301 N. First Street
Bellaire, Texas 77401

[Website](#) | [Facebook](#) | [Instagram](#)

Requested letter be included with the 07.27.2020 Minutes

Gregg I. Thompson
3758 Plumb St
West University, TX 77005

July 26, 2020

Honorable Mayor & City Council
City of West University Place

Re: Leaf Blowers

Dear Mayor & City Council,

Thank you for your efforts to continue to improve the quality of life within West University. I applaud your initiative to reduce decibel levels associated with leaf blowers and I would like to share additional thoughts that might be helpful towards that end, as well as address what I see as two larger, yet less obvious, problems associated with leaf blowers.

Full disclosure: I have a landscape company that has a number of clients in the City of West University and we operate gas powered leaf blowers that will fall outside of the proposed decibel limit. **I also do not like leaf blowers and I do not allow their use at my house, however, for reasons other than the decibel level.**

As I mentioned in the disclosure, I am not a fan of leaf blowers. They are effective tools when used properly, however, that is not always the case. We have all seen landscape crews spend time in the middle of the street with the blowers on "full blast" yet only dispersing the leaves and debris from the front of their client's house rather than sweeping them up, thus nothing is actually accomplished other than more noise and air pollution. While the decibel level is likely the most obvious nuisance with blowers, there are two other issues that are equally, if not more of, a nuisance yet don't appear to be addressed in the City's current initiative to reduce just the decibel level: 1. The amount of time that the blowers are in the "on" position at each home; and 2. The air pollution, especially air particulates, that result from their use. Electric blowers solve the "exhaust" portion of the air pollution, but they do not address the air particulates issue.

If the City's desire is to reduce decibel level, reduce the amount of time that blowers are in use and reduce the air pollution and particulate matter associated with their use, I would ask you to consider adopting an ordinance that forbids their use in the City streets.

Requested letter be included with the 07.27.2020 Minutes

Following is a short list of some of the pros and cons of eliminating leaf blowers in the streets:

Pros:

1. Immediate reduction in the time spent with the blowers in the "on" position, thus an immediate reduction of noise pollution.
2. Blowers usually operate at "full blast" (highest decibels) when in the streets and much lower settings when in a yard, thus an immediate reduction in higher decibel operations.
3. Easily enforceable after a period of time to "train" landscapers of the new ordinance.
4. Residents can help enforce with photos rather than trying to measure decibel levels.
5. The debris in the street is some of the worst material that you want to release into the air as particulates to be inhaled, ingested or settle back down on cars, pets, people. Streets and curbside are filled with volatile organic compounds, animal waste, vulcanized tire rubber, dried vehicle fluids, dust, pollen, fungi, etc.
6. The curbside can be easily and quickly swept and bagged by a landscape crew.
7. Addresses three problems of 1. Decibel levels, 2. Amount time spent with the blowers operating at each residence, 3. Immediate reduction of air pollution and air particulate matter, rather than just one problem of decibel level.
8. Most likely will not result in any additional cost of "extra time" to the homeowner.
9. Much less debris and pollution goes into the storm sewer, bayous, bay if curbs are swept and City increases street sweeping.

Cons:

1. There will be a period of time to "retrain" homeowners and landscape companies to the new rules, but I think that everyone will like this, including landscape companies.
2. The City will most likely have to increase street sweeping routes at additional cost, but I feel residents will think that is money well spent.

I'm sure that I'm missing more cons, however, I think that addressing the three issues of air pollution, the amount of time that leaf blowers are spent "on", and decibel levels goes a lot farther towards increasing our quality of life rather than just lower decibel settings.

Lastly, I would also ask the city to consider stair-stepping the decibel setting downwards over a period of 2-3 years, rather than immediately dropping it to 70 decibels as I understand is currently being considered. We are starting to see the first round of commercially viable electric blowers that will last more than on just one or two yards. Most of the landscaping companies that I speak to, including mine, are ready to make the move to electric, however, the technology is close but not quite there yet.

Thank you,

Gregg Thompson

City of West University Place Citywide Storm Sewer Analysis

July 27, 2020

Prepared for:



Prepared by:



Agenda

Additional Results Discussion

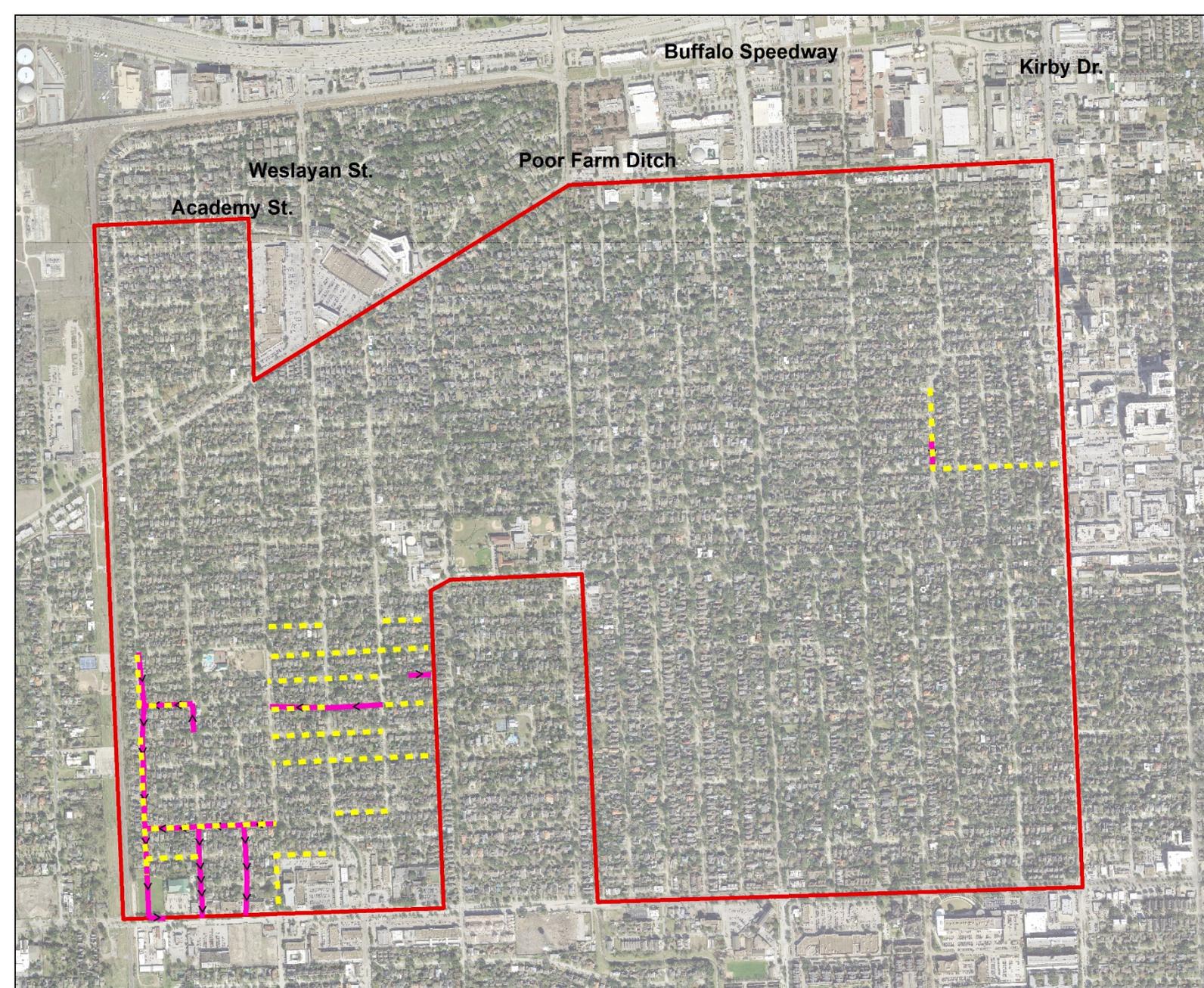
Proposed Improvements and Cost

Reported FEMA Claims

Drainage System	FEMA Flooded Homes
Academy	12
College	34
PFD	26
Buffalo	68
Kirby	9
TOTAL:	149

Total Cost Per Drainage System

Drainage System	Improvements Cost
Academy	\$31,000,000
College	\$15,000,000
PFD	\$2,000,000
Buffalo & Kirby	\$12,000,000
TOTAL:	\$60,000,000



- 
-  West University Road Rehabilitation
-  Proposed HT&J Drainage Improvements
-  West University Boundary

City of West University Place
Citywide Drainage System Study

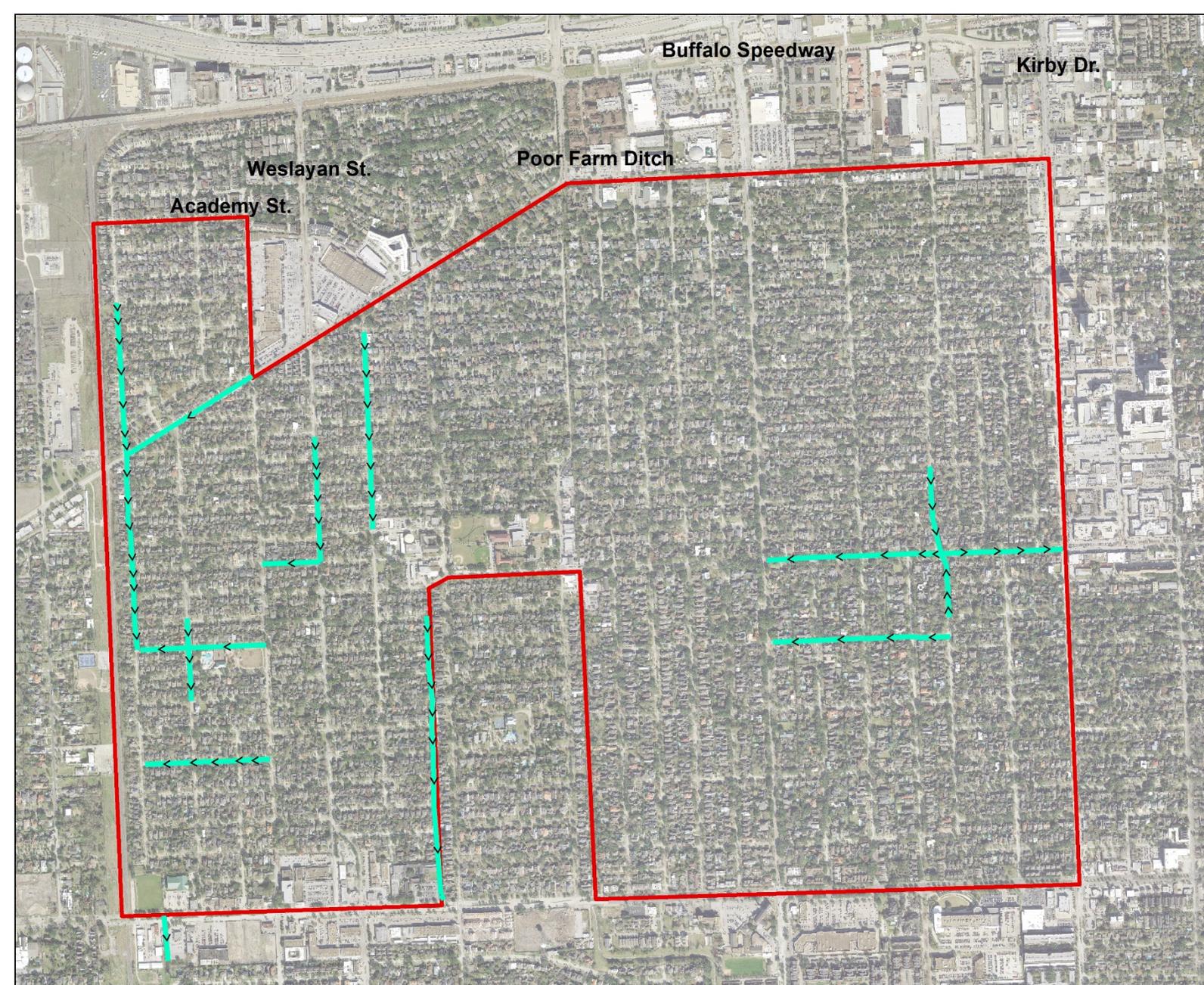
Road Rehabilitation &
Select Drainage Improvements

Estimate
\$31M*

Road Replacement
\$21M

Proposed
Improvements
\$10M

* Includes 4-year
cost escalation



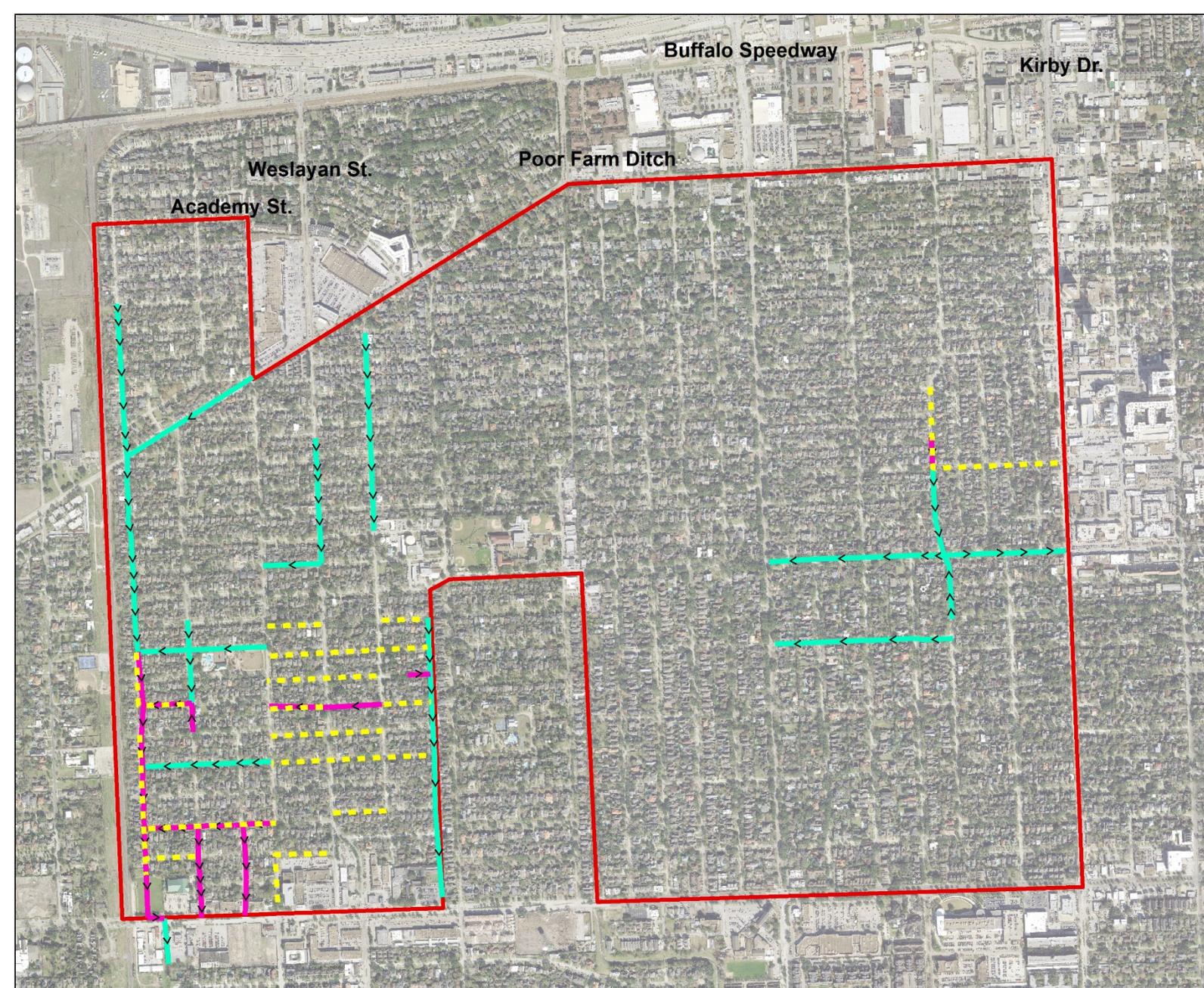
-  Proposed HT&J Drainage Improvements
-  West University Boundary

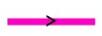
City of West University Place
Citywide Drainage System Study

Road Rehabilitation &
Select Drainage Improvements

Estimate
\$29M*

* Includes 4-year
cost escalation



- 
-  West University Road Rehabilitation
-  Proposed HT&J Drainage Improvements
-  Proposed HT&J Drainage Improvements
-  West University Boundary

City of West University Place
Citywide Drainage System Study

Road Rehabilitation &
Drainage Improvements

Estimate
\$60M*

* Includes 4-year
cost escalation

Summary of Average Drop in Water Surface Elevation, Inches

System	W/ Restrictor			
	2-Year	10-Year	50-Year	100-Year
Academy	6.6	5.1	2.3	1.8
College	7.0	4.8	1.8	1.2
Poor Farm Ditch	4.8	3.4	1.5	1.0
*Buffalo Speedway	7.2	4.5	3.0	1.7
Kirby	4.2	3.0	1.6	1.0

Average was estimated based on 4 locations within each system

* As designed

Design Phase Services and Schedule

-
- Preliminary Engineering Report 6-8 Months
 - Survey
 - Geotechnical
 - Environmental
 - Landscaping
 - Utility Conflicts and Resolution
 - Design, Permit and Coordination 9-12 months
 - 60%, 90% and 100%
 - Permit coordination starts at 60% design phase
 - Bid and Construction Contract Award 3-4 Months
- Total: 18-24 months

Construction Time 3-4 years.

Questions & Answers

Thank You

10351 Stella Link Road
Houston, Texas 77025

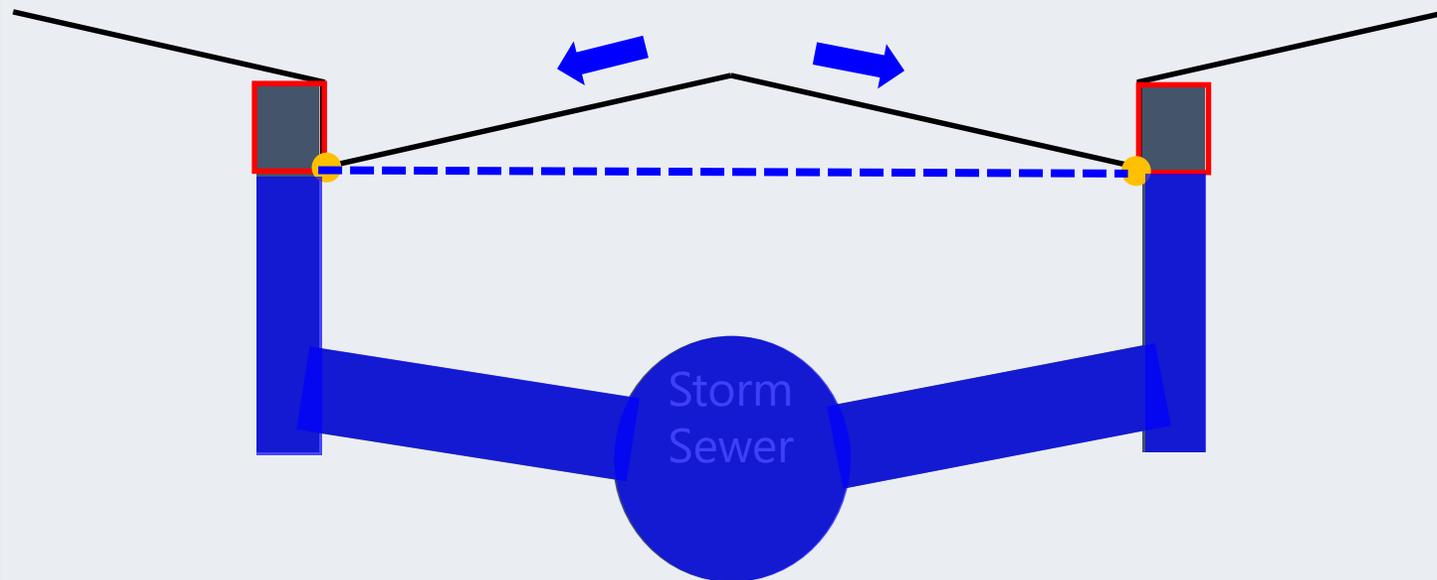
www.ht-j.com
hfc@ht-j.com

(O) 832-767-0090
(F) 832-767-0141

Design Criteria

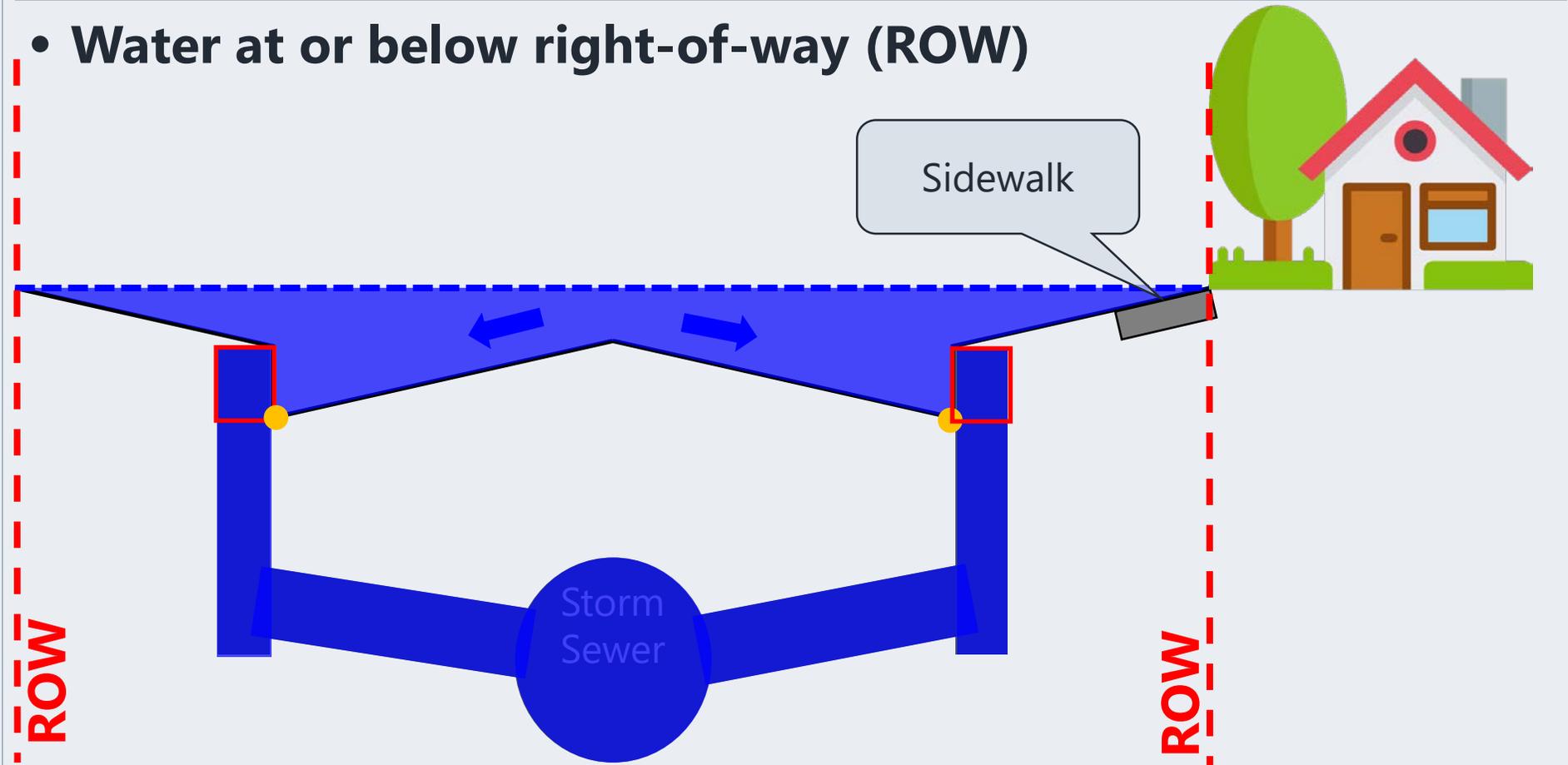
Drainage Design Criteria – 2-year

- **Hydraulic Grade Line (HGL) at or below the gutter**



Drainage Design Criteria – 100-year

- Water at or below right-of-way (ROW)



Benefit Cost Ratio

Based on Estimated Values

- Ratio of the Benefit to the Cost , and value of 1 means Breakeven
- BCR <1 – Project is not financially feasible. BCR <2 – May not be competitive for any Grants
- USACE Methodology
 - Flood Depth –Damage
- Based on FEMA claims 150 homes flooded with average flood depth of 6" (Assume Average loss \$150K)
- Assume loss of 300 Cars During Harvey (Assume average price \$30K)
- Assume Impassable Streets for 3 days
- Assume damage at 20% of Harvey Loss for future 50-Year event
- Drainage Improvement cost is \$39M for BCR analysis

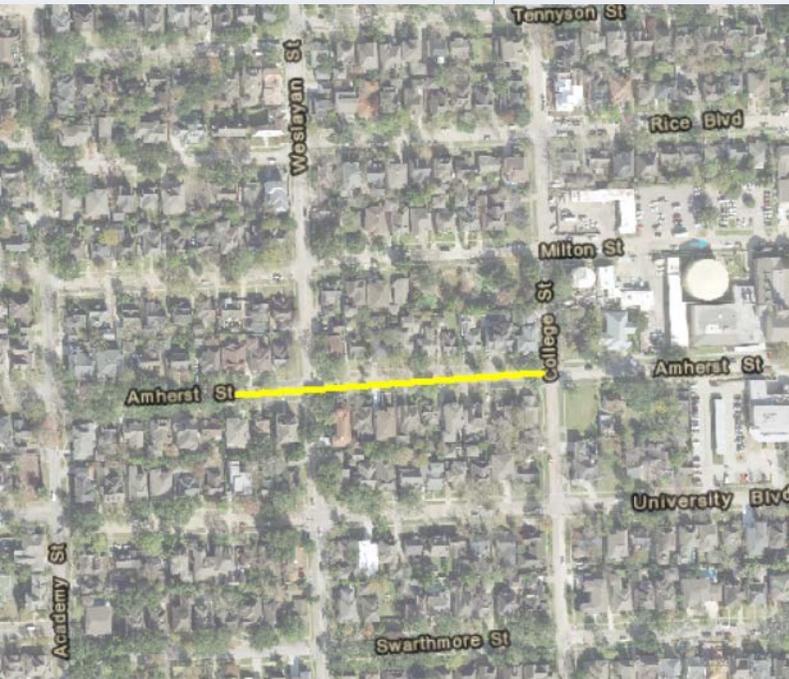
$$\text{BCR} = 1.03$$

No dollar values were assigned for citizens mental and social stresses.

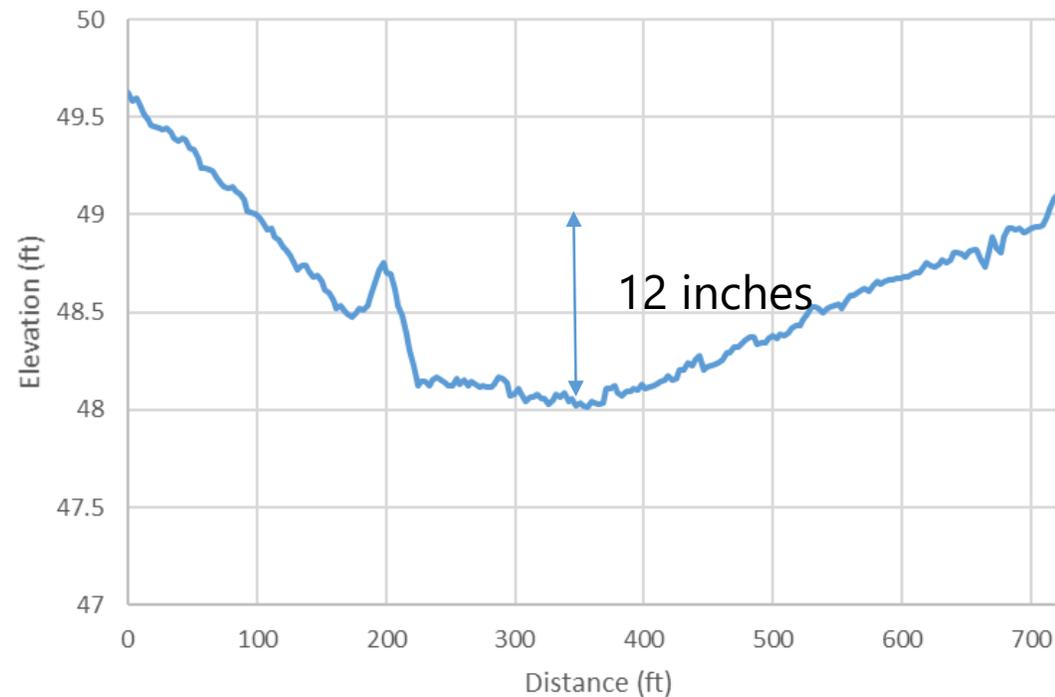
Benefit Cost Ratio– Contd.

Property Damage:	\$ 22,500,000.00
Car Flooded and Damaged	\$ 9,000,000.00
Property Repair Cost	\$ 7,500,000.00
Emergency Response and Damage	\$ 1,000,000.00
Content	\$ 5,625,000.00
Economic Damage (3 days of lost wages)	\$ 4,800,000.00
Total Loss	\$ 50,425,000.00
Cost of Drainage Improvements	\$ 39,000,000.00
Damage After Improvements @20%	\$ 10,085,000.00
Total Benefit	\$ 40,340,000.00
BCR	1.03

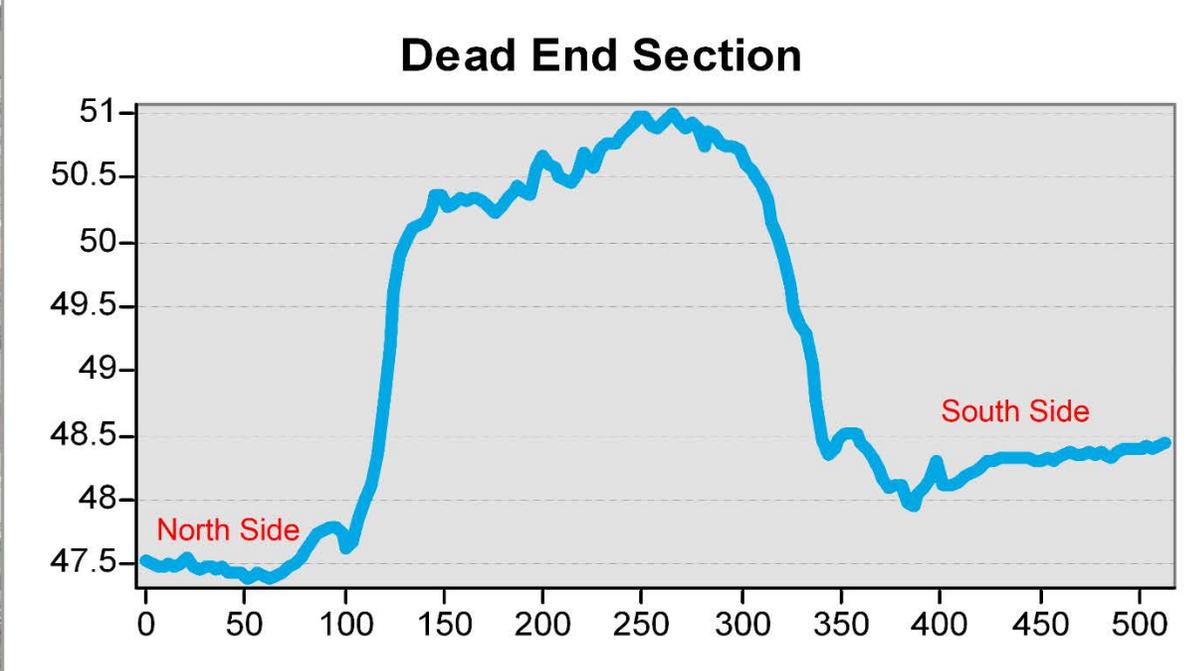
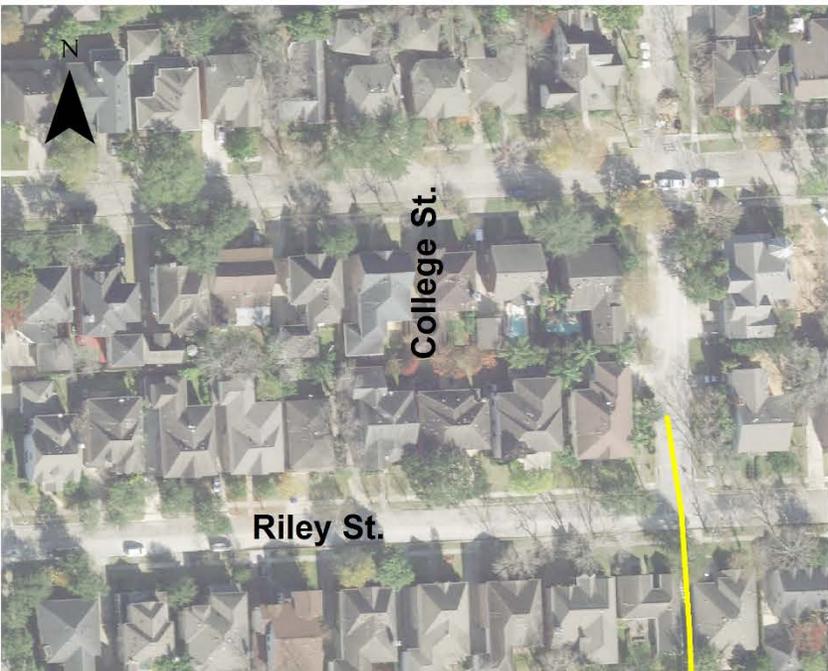
Amherst Street



Profile of Amherst



- Low Spot – Water will accumulate roughly 12 inches before it can spill over.
- Increase pipe size did not help the area
- FF elevation is 12 to 18 inches from the Natural Ground



- South side is higher than North side
- W. College St. slopes towards Ruskin not towards Bellaire.