AGENDA
CITY COUNCIL MEETING

July 6, 2023 | 6:30 PM
Council Chambers
City Hall | 665 Country Club Road, Lucas, Texas

Notice is hereby given that a meeting of the Lucas City Council will be held on Thursday, July 6, 2023, beginning at 6:30 pm at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002-7651, at which time the following agenda will be discussed. As authorized by Section 551.071 of the Texas Government Code, the City Council may convene into closed Executive Session for the purpose of seeking confidential legal advice from the City Attorney on any item on the agenda at any time during the meeting. Pursuant to Texas Government Code 551.127, one or more members of the governing body may appear via videoconference call. The presiding officer and a quorum of the City Council will be physically present at this meeting.

If you would like to watch the meeting live, you may go to the City's live streaming link at https://www.lucastexas.us/departments/public-meetings/.

How to Provide Input at a Meeting:

Speak In Person: Request to Speak forms will be available at the meeting. Please fill out the form and give to the City Secretary prior to the start of the meeting. This form will also allow a place for comments.

Submit Written Comments: If you are unable to attend a meeting and would like to submit written comments regarding a specific agenda item, email Assistant City Manager Kent Souriyasak at kent@lucastexas.us by no later than 3:30 pm the day of the meeting. The email must contain the person's name, address, phone number, and the agenda item(s) for which comments will be made. Any requests received after 3:30 pm will not be included at the meeting.

Call to Order

- Roll Call
- Determination of Quorum
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

Citizen Input

1. Citizen Input.

Community Interest

Pursuant to Section 551.0415 of the Texas Government Code, the City Council may report on the following items: 1) expression of thanks, congratulations or condolences; 2) information about holiday schedules; 3) recognition of individuals; 4) reminders about upcoming City Council events; 5) information about community events; and 6) announcements involving imminent threat to public health and safety.

2. Items of Community Interest.

Consent Agenda

All items listed under the consent agenda are considered routine and are recommended to the City Council for a single vote approval. If discussion is desired, an item may be removed from the consent agenda for a separate vote.

3. Consent Agenda:

   A. Approval of the minutes of the June 15, 2023 City Council meeting. **(Assistant City Manager Kent Souriyasak)**

Regular Agenda

4. Consider the City of Lucas Code Compliance Program. **(City Manager Joni Clarke, Development Services Director Joe Hilbourn)**

5. Consider adopting Ordinance 2023-07-00985 amending the City of Lucas Code of Ordinances, Chapter 13 titled "Utilities", Article 13.07 titled "Planning and Design Drainage Criteria". **(Public Works Director Scott Holden, Contract Engineer Joe Grajewski)**

6. Consider legislative bills that passed during the 88th Texas Legislative Session and provide direction to City Staff and City Council if needed. **(City Attorney Courtney Morris)**

7. Consider the recruitment process for the position of City Secretary and provide guidance to the City Manager. **(City Council, City Manager Joni Clarke)**

Executive Session

8. Executive Session:

   As authorized by Section 551.074 of the Texas Government Code, the City Council may convene into closed Executive Session to discuss the appointment of an Interim City Secretary. This meeting is closed to the public as provided in the Texas Government Code.

9. Reconvene from Executive Session and take any action necessary as a result of Executive Session.

10. Adjournment.

Certification

I do hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, TX 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on June 30, 2023.

_____

Joshua Menhennett, Management Analyst

In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to City Secretary Kent Souriyasak at 972.912.1211 or by email at kent@lucastexas.us at least 48 hours prior to the meeting.

City of Lucas
City Council Agenda Request
July 6, 2023

Item No. 01

Requester: Mayor Jim Olk

Agenda Item Request

Citizen Input.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

Item No. 02

City of Lucas
City Council Agenda Request
July 6, 2023

Requester: Mayor Jim Olk

Agenda Item Request

Items of Community Interest.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

Item No. 03

City of Lucas
City Council Agenda Request
July 6, 2023

Requester: Assistant City Manager Kent Souriyasak

Agenda Item Request

Consent Agenda:

A. Approval of the minutes of the June 15, 2023 City Council meeting.

Background Information

NA

Attachments/Supporting Documentation

1. June 15, 2023 City Council Meeting Minutes

Budget/Financial Impact

NA

Recommendation

City staff recommends approval of the Consent Agenda.

Motion

I make a motion to approve the Consent Agenda as presented.

MINUTES
CITY COUNCIL REGULAR MEETING
June 15, 2023 | 6:30 PM
Council Chambers
City Hall | 665 Country Club Road, Lucas, Texas

City Councilmembers Present:
Mayor Jim Olk
Councilmember Tim Johnson
Councilmember David Keer
Councilmember Phil Lawrence *(video conference)*
Councilmember Debbie Fisher

City Councilmembers Absent:
Councilmember Dusty Kuykendall
Mayor Pro Tem Kathleen Peele

City Staff Present:
City Manager Joni Clarke
Public Works Director Scott Holden
Development Services Director Joe Hilbourn
Fire Chief Ted Stephens
Assistant Fire Chief Aaron Alderdice
City Secretary Erin Flores
Contract Engineer Joe Grajewski
Deputy Daniel Gillespie

The regular City Council meeting was called to order at 6:30 pm.

Citizen Input

1. Citizen Input

Community Interest

2. Items of Community Interest.

- Lucas Farmers Market
- Personal Protection Classes held by Councilmember Phil Lawrence
- Prohibited Fireworks Reminder

Consent Agenda

3. Consent Agenda:

A. Approval of the minutes of the June 1, 2023 City Council meeting.

MOTION: A motion was made by Councilmember Johnson, seconded by Councilmember Fisher, to approve the Consent Agenda as presented. The motion passed unanimously by a 5 to 0 vote, with Mayor Pro Tem Peele and Councilmember Kuykendall absent.

Regular Agenda

4. Discuss the proposed goals and objectives of the Lucas Fire-Rescue Long-Range Plan, seek input from the City Council, and provide direction to the City Manager.

Assistant Fire Chief Aaron Alderdice gave a presentation explaining the purpose and the time frame for the Long-Range Plan.

Councilmember Lawrence asked if there was a general estimate of cost of the data analysis. Assistant Chief Alderdice advised anywhere from $7,000 to $30,000. Councilmember Lawrence asked if vehicle needs are addressed in the plan outline. Assistant Chief Alderdice advised they are. Mayor Olk advised the Fire-Rescue Department was tasked with gathering all of the future cost information, not just vehicles, including costs of service calls to the extra territorial jurisdictions (ETJ's). Councilmember Lawrence asked if there could be a future need for an additional fire station. Chief Alderdice responded that it is not known at this time.

City Manager Joni Clarke advised the data will be presented to the City Council periodically and recommendations can be made over time. Ms. Clarke explained that Lucas-Fire Rescue partnered on a contract for a Geographic Information System (GIS) analysis, but the cost was more than anticipated. Ms. Clarke indicated that one of the challenges is that the Fire-Rescue Department has a lot of data in their systems that needs to be pulled into a graphical representation so that response times can be determined in a geographical map. Assistant Chief Alderdice advised there will be several maps that will be created which utilize community best practices, and that this Lone-Range Plan is intended to be a living document that will change and be updated over time.

Councilmember Keer complimented the Fire-Rescue Department on doing a great job creating the outline and advised that its creation has good timing since the Comprehensive Plan was just updated. Councilmember Keer asked if the City manages traffic lights in an emergency. Ms. Clarke advised that it does, and that Lucas Fire-Rescue and the Engineering Department handles the management of the traffic lights during an emergency. Councilmember Johnson asked if the lights have to be changed manually. Fire Chief Ted Stephens responded that they do have to be manually adjusted.

Mayor Olk also complimented the Fire-Rescue Department on the creation of the plan outline. Councilmember Fisher indicated that her concern is mutual aid and the time, traffic, and wear and tear of the City vehicles traveling great distances. Councilmember Fisher advised she is concerned about coverage for the Lucas residents and asked that as the plan is made that those concerns are kept in mind.

Councilmember Johnson asked that the balance of mutual aid be determined, what the City is receiving versus what is going out. Councilmember Fisher asked if mutual aid agreements could be placed on the agenda for the first meeting in August.

MOTION: There was no motion needed for this item.

5. Consider the approval of a proposal from BCC Engineering, LLC, for the development and presentation of design alternatives for the drainage and realignment of the western end of West Lucas Road for an estimated amount of $44,150.

Public Works Director Scott Holden gave a presentation explaining the reasons for needing design alternatives, the background on meetings that have occurred between Collin County and the City to find a solution, and four possible alternatives for the West Lucas Road reconstruction.

Mr. Holden advised that all of the options require the assistance of a design engineer. Councilmember Lawrence asked which option Mr. Holden would choose if he had to pick one. Ms. Clarke advised that decision cannot be determined at this time without further analysis. Councilmember Lawrence asked if any of the presented options would work with the constraints presented. Mr. Holden advised all four could work, but that the options need to be put on paper and costs need to be determined.

Councilmember Lawrence asked if pushing water to the middle of the road is common, versus pushing water to the outside of the road. Mr. Holden advised it is not uncommon, and it is seen more on rural highway systems. Councilmember Fisher asked if doing that would relieve the burden of having to take residents' property to put the road in. Ms. Clarke advised the right-of-way line is still the same, so there would still have to be property acquired, but that one of the goals it to mitigate the impact to the residents.

Councilmember Johnson asked if Parker Lakes Estates was not willing to give land to the City for this project. Ms. Clarke advised that staff is unsure of their stance.

Mayor Olk advised that all of the possible options need to be explored before giving up on the project altogether. Mayor Olk advised Mr. Holden that it seems Parker Lake Estates is okay with the drainage being on their side of the road, but also proposed another idea for the road. Mr. Holden explained that the option was on the table. Councilmember Fisher advised that she is still concerned about whether citizens know of the impact on their properties. Ms. Clarke advised that until the planning is out of its preliminary stages then a meeting with affected citizens isn't warranted. She advised that once the designs are agreed upon by City Council and Collin County then a meeting should be conducted.

MOTION: A motion was made by Councilmember Lawrence, seconded by Councilmember Keer, to approve a proposal from BCC Engineering, LLC, for the development and presentation of design alternatives for the drainage and realignment of the western end of West Lucas Road for an estimated amount of $44,150. The motion passed by a 4 to 1 vote, with Councilmember Fisher voting against and with Mayor Pro Tem Peele and Councilmember Kuykendall absent.

Public Hearing

6. Conduct a public hearing and consider a Specific Use Permit (SUP) application to permit an accessory building in the front of the main structure at 253 East Blondy Jhune Road, Lot 5 of Rock Creek Acres, Lucas, Texas zoned R-2 (Residential 2-Acre).

A. Presentation by Development Services Director Joe Hilbourn
B. Conduct public hearing
C. Take action on Specific Use Permit request

Development Services Director Joe Hilbourn gave a presentation explaining the specifications of the proposed building, proposed site plan, proposed elevations, and recommendations from the Planning and Zoning Commission and City staff.

Councilmember Lawrence asked if the recommended requirement that the building have 30-year asphalt shingles would prohibit the owner from having a better grade of shingles. Mr. Hilbourn explained that all of the requirements either meet the requirement or can be better than the requirement.

Councilmember Johnson asked about the visibility of the proposed building location. Mr. Hilbourn advised it is not very visible from the road. Councilmember Fisher asked if the brick would cover the entire wall. Mr. Hilbourn advised Councilmember Fisher that that is correct.

Mayor Olk advised Mr. Hilbourn that the ordinance in the packet does not have the proposed recommendations. Mr. Hilbourn advised they would be added after the Council's decision.

Mayor Olk opened and closed the public hearing at 7:27 pm with no members of the public wishing to speak.

MOTION: A motion was made by Councilmember Olk, seconded by Councilmember Fisher, to approve Ordinance 2023-06-00984 for a Specific Use Permit (SUP) application to permit an accessory building in the front of the main structure at 253 East Blondy Jhune Road, Lot 5 of Rock Creek Acres, Lucas, Texas zoned R-2 (Residential 2-Acre) with the amendment to Section 2, Subsection 1 to read "A property shall be developed in accordance with the site plan, construction plan, and boundary survey attached hereto as Exhibit B." The motion passed unanimously by a 5 to 0 vote, with Mayor Pro Tem Peele and Councilmember Kuykendall absent.

Executive Agenda

6. Executive Session:

As authorized by Section 551.071 of the Texas Government Code, the City Council may convene into closed Executive Session for the purpose of seeking confidential legal advice from the City Attorney regarding any item on the agenda at any time during the meeting. This meeting is closed to the public as provided in the Texas Government Code.

There was no executive session during this meeting.

7. Reconvene from Executive Session and take any action necessary as a result of the Executive Session.

There was no executive session during this meeting.

8. Adjournment.

MOTION: A motion was made by Councilmember Johnson, seconded by Councilmember Lawrence to adjourn the meeting at 7:28 pm. The motion passed unanimously by a 5 to 0 vote, with Mayor Pro Tem Peele and Councilmember Kuykendall absent.

APPROVED: ATTEST:

Mayor Jim Olk Kent Souriyasak, Assistant City Manager

Item No. 04

City of Lucas
City Council Agenda Request
July 6, 2023

Requesters: Development Services Director Joe Hilbourn
City Manager Joni Clarke

Agenda Item Request

Consider the City of Lucas Code Compliance Program.

Background Information

The Code Enforcement Division is responsible for premise code enforcement and is an integral component of the Development Services Department. The Code Enforcement Officer is responsible for the compliance with City ordinances including but not limited to:

- Junk Vehicles
- Weeds and Grass
- Health and Safety
- Zoning Violations
- Illegal Dumping
- Illegal Signs

A citizen can report issues by:

- Calling the Code Enforcement Division at 972-912-1215 during regular business hours
- Emailing the Code Enforcement Officer at jquiles@lucastexas.us
- Reporting online by going to lucastexas.us and clicking “Submit Service Request”

When reporting a code issue, it is important to provide a specific address with as much detail as possible regarding the issue in question. This will allow the Code Enforcement Officer to identify the correct property and begin an investigation more quickly. An investigation regarding the reported issue will begin within 48 hours of the report.

If an investigation determines that there is a violation of a City ordinance, the Code Enforcement Officer will first try to obtain voluntary compliance that addresses the violation. The initial effort will be to gain voluntary compliance through education. This will be done through efforts ranging from door tags to personal contact, telephone calls and letters. The Code Enforcement Officer will make every effort to utilize diplomacy, tact, and friendly persuasion to gain cooperation in compliance with the City ordinances when a violation is found. The Code Enforcement Officer will seek a remedy to the violation within 30 days. If there is substantial progress being made, the officer may extend the time needed to gain voluntary compliance, typically up to 90 days.

If voluntary compliance is not reached within the designated compliance timeframe, the Code Enforcement Officer will take the first formal enforcement step by issuing a Notice of Violation with a specific date to come into compliance and send this notice via first class mail and certified

City of Lucas
City Council Agenda Request
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mail. The Code Enforcement Officer may also post a copy of the Notice of Violation on the property.

After the required compliance date has passed, the Code Enforcement Officer will re-inspect the property for compliance. If significant progress has been made, the officer may extend the compliance date. If the violation is resolved, the case will be closed.

Failure to resolve a violation may result in a formal filing under one of the following adjudication processes:

- Building Standards Board (violations related to dilapidated buildings or property)
- Municipal Court (zoning violations, property use, permit violations, other violations)

Effective March 1, 2023, all enforcement actions are entered in GovQA to ensure consistent follow-up until compliance is achieved. All records related to an investigation, citation, or summons are filed according to the date as well as a reference number generated by GovQA. These records are kept for the required timeframe as outlined by state law. Citations and summons are processed by Municipal Court, and records are retained under the same state requirements. Lucas Municipal Court is scheduled the fourth Friday of each month at 3:00 pm in the Council Chambers.

The previously referenced information is not inclusive of all steps and/or actions that can be taken by the City. The amount of resources to prepare a case for Municipal Court is substantial. The City's current Code Enforcement Officer position also has responsibilities associated with facilities maintenance. The City was at one point very successful in obtaining voluntary compliance but over time, the code violations have increased in number and complexity.

Since the April 6, 2023 City of Lucas City Council meeting, staff has been using GovQA to enter most code enforcement cases and track progress. Please see attached GovQA report.

Staff performed code enforcement training for the Public Works Department on June 6, 2023 to assist with identifying potential code violations especially keeping a watchful eye on construction activity to ensure the proper permit has been obtained. All public works staff attended the code enforcement training and if needed, staff will do a refresher training towards the end of the year.

One of the most significant challenges the City is facing with its code compliance program is staffing. There has been an open position for a Code Enforcement Officer ever since Scott DeJong was transferred to the Lucas Fire-Rescue Department on March 27, 2023 to fill a vacant firefighter/EMT position. Very few candidates have applied for the open code position and there are several of other cities looking to fill code compliance offer positions in Texas. It is very challenging to find a person with the right blend of skills and professionalism. We have recently received an application from a qualified candidate, and we are hopeful once the initial screening is completed by Human Resources that this candidate will be scheduled for an interview.

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City Council Agenda Request
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Attachments/Supporting Documentation

1. Code Compliance Flowchart
2. GovQA Compliance Report

Budget/Financial Impact

N/A

Recommendation

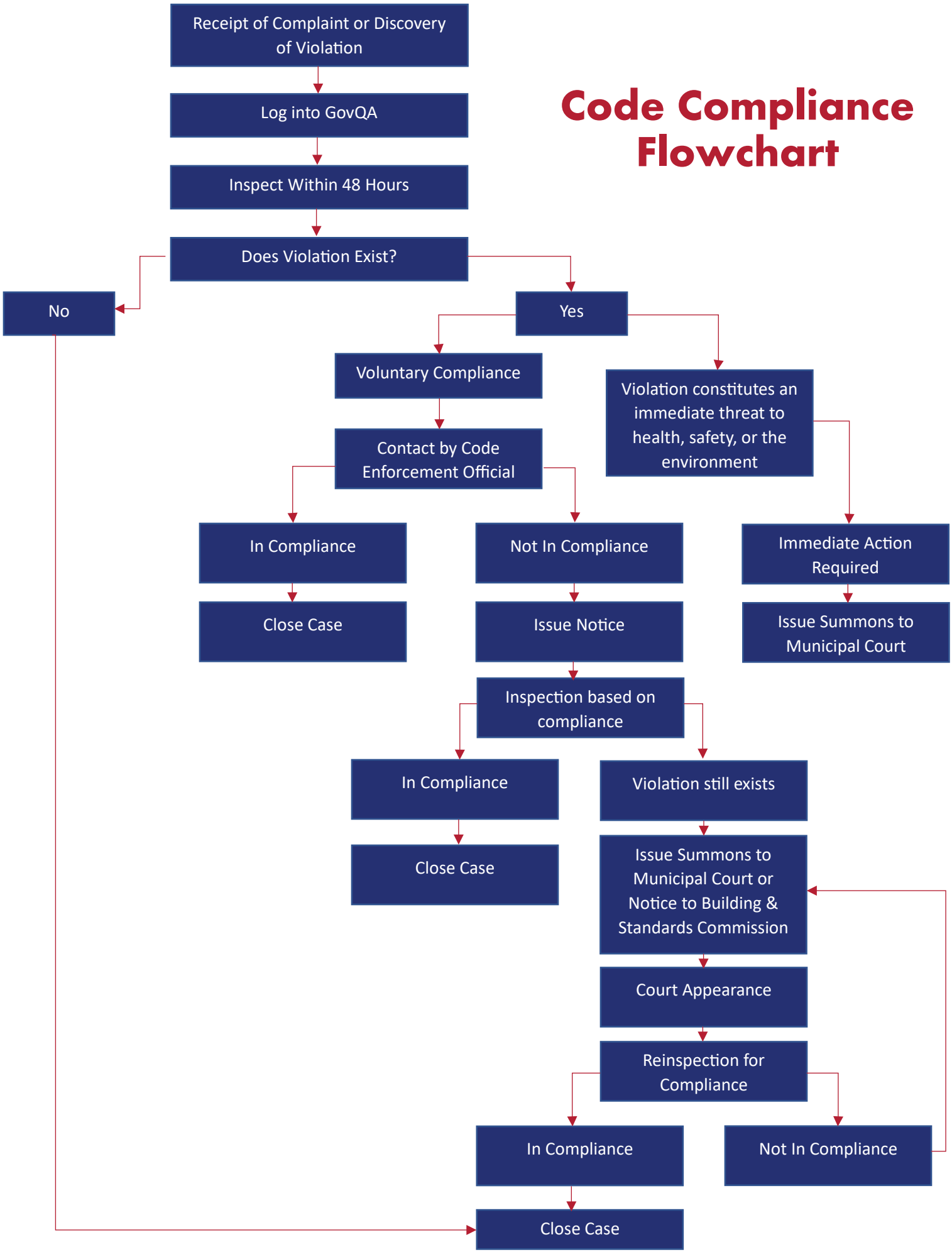
One of the goals established for the City Manager by the Lucas City Council is the City's Code Enforcement Program including weekend sign and code patrol. This is one of the City's high priorities as the City Council has recently expressed some desires to review our current reactive Code Enforcement Program. City Council has expressed concern regarding illegal home occupation enforcement and requested staff to present a report at a future City Council meeting that explains the program/process used by Code Enforcement and to obtain direction from City Council on program enhancements which was done on April 6, 2023. This presentation is being provided to the City Council as an update to the initial presentation to highlight how GovQA is enhancing the City's abilities to respond to code-related issues and staffing issues.

Staff continues to strive for compliance and uses enforcement tools when compliance is unobtainable. The City Manager and Development Services Director is seeking any additional feedback by the City Council regarding the City's code enforcement program.

Motion

N/A

Code Compliance Flowchart



Code Enforcement Requests

Run Date: 06/26/2023 4:26 PM

Request Type	Assigned Dept	Assigned Staff	Close Date	Create Date	Notes	Request Status	Total Activities	Total Open Subrequests	Update Date	Updated By	Request City	Request State	Request Zip	Service Request Details
Litter	Public Works/Engineering	Jeremy Bogle	2/23/2023	2/17/2023		Completed	0	7	2/23/2023	Jeremy Bogle	Lucas	TX	75002	Pick up garbage at Ingram
High Grass & Weeds	Development Services	Jose Quiles	3/10/2023	2/23/2023	Lot 90% mowed, incomplete in wet areas. ew owner is responsive.	New	0	0	3/10/2023	Joe Hilbourn	Lucas	TX	75002	Lot is overgrown. Grass over 48 inches
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	3/2/2023	3/2/2023	Finished by Joe, contacted developer by email sent acceptable hours of operation.	Completed	0	0	3/2/2023	Joe Hilbourn	Lucas	TX	75002	extensive amount of equipment, metal, & "junk" around premises of home and along back fenceline.
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	3/16/2023	3/10/2023		New	0	0	3/16/2023	Joe Hilbourn	Lucas	TX	75002	City Staff observed a pile of trash/rubbish strewn along the driveway and grounds of the property, adjacent to Country Club Road
Building Code Violation	Development Services	Joe Hilbourn	5/5/2023	3/10/2023		New	0	0	5/5/2023	Joe Hilbourn	Lucas	TX	75002	While investigating a separate issue, City Staff and CCSO found two individuals living in a recreational vehicle on the back yard of the property
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	6/5/2023	3/10/2023		New	0	0	6/5/2023	Joe Hilbourn	Lucas	TX	75002	Backyard is full of trash/refuse/debris (scrap metal, scrap wood, recreational vehicles, trailers full of trash)

Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	3/21/2023	3/11/2023	Notice sent to contractor giving them until the 17th to clean up the property. Staff will stop out on the 18th to verify it has been cleaned up. This is the second notice the first notice was given during an inspection on 2/28	New	0	0	3/21/2023	Joe Hilbourn	Lucas	TX	75002	Customer is concerned about the quality of house keeping of a new construction project next door, wind is carrying debris onto her property.
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	6/1/2023	3/14/2023	Jose Make sure legal notice is both sent to the property and posted on the property. For proof please take a photo of the notice in the yard. Thanks Joe	New	0	0	6/1/2023	Joe Hilbourn	Lucas	TX	75002	Site is full of trash. Dumpster has not been emptied. No sanitary facilities on site. Fence has gone into a state of disrepair and has fallen over in multiple places.
Building Code Violation	Development Services	Joe Hilbourn		3/14/2023		New	0	1	3/15/2023	Joe Hilbourn	Lucas	TX	75002	There are 2 illegal fence/barriers crossing the stream behind the house
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	3/21/2023	3/15/2023		New	0	0	3/21/2023	Joe Hilbourn	Lucas	TX	75002	Full dumpster/trash blowing onto adjoining properties
Building Code Violation	Development Services	Joe Hilbourn	3/16/2023	3/16/2023	Staff cannot require anyone to do anything to replace the missing fence section, the property owner would be required to go to council for permission to replace the fence it is currently located in an easement for utilities and a city street. See code sec	New	0	0	3/16/2023	Joe Hilbourn	Lucas	TX	75002	Citizen is concerned that a fence at the end of (redacted) was removed do to dilapidation.

Building Code Violation	Development Services	Joe Hilbourn	3/16/2023	3/16/2023	(Redacted) has an open permit and is required to have temporary sanitary facilities on site for contractor use see code section below: § 3.01.009 Sanitary facilities at construction sites. Adequate sanitary facilities for the convenience of all	New	0	0	3/16/2023	Joe Hilbourn	Lucas	TX	75002	Concerned about porta pody at neighboring home
High Grass & Weeds	Development Services	Joe Hilbourn	5/5/2023	3/23/2023		New	0	0	5/5/2023	Joe Hilbourn	Lucas	TX	75002	Complaint received by City Staff of high grass at the 2 addresses on either side of (redacted)
Building Code Violation	Development Services	Joe Hilbourn	4/3/2023	4/3/2023		New	0	0	4/3/2023	Joe Hilbourn	Lucas	TX	75002	An onsite sanitary facility is located on the property and was wondering if this is allowed.
Building Code Violation	Development Services	Joe Hilbourn		4/10/2023		New	0	0	4/10/2023	Jose Quiles	Lucas	TX	75002	Legal non-conforming structure located on neighboring property lines. Renovated without a permit
Junk, Refuse & Rubbish	Development Services	Joe Hilbourn	6/1/2023	4/10/2023		New	0	0	6/1/2023	Joe Hilbourn	Lucas	TX	75002	Brush, debris, and trash located throughout the grounds of the property. Owner plans to clean the property upon completion of permitted accessory building. Deadline is May 6, 2023
Building Code Violation	Development Services	Joe Hilbourn		4/10/2023		New	0	0	4/10/2023	Jose Quiles	Lucas	TX	75002	Illegal non-conforming structure located on property
Building Code Violation	Development Services	Joe Hilbourn		4/10/2023		New	0	3	5/8/2023	Joe Hilbourn	Lucas	TX	75002	Accessory structure built without a permit
Building Code Violation	Development Services	Joe Hilbourn		4/10/2023		New	0	0	4/10/2023	Jose Quiles	Lucas	TX	75002	Unpermitted privacy fence. Does not meet setbacks
Building Code Violation	Development Services	Joe Hilbourn	4/24/2023	4/10/2023		New	0	0	4/24/2023	Joe Hilbourn	Lucas	TX	75002	Initial complaint was concerning a home based business at this address. Monitoring a planned accessory building at this address. Accessory building must be built to plan and not used as a commercial kitchen.

Trash & Recycling	Administration	Kent Souriyasak	4/18/2023	4/13/2023	Completed	0	0	4/18/2023	Kent Souriyasak	Lucas	TX	75002	I'd like to request a hazardous waste removal of some old paint cans. One is a 5 gallon drum and there are several smaller ones. Maybe 6-8? Let me know if that is something you can collect. Thanks so much.
Trees & Limbs	Public Works/Engineering	Jeremy Bogle	4/17/2023	4/14/2023	Completed	0	0	4/17/2023		Lucas	TX	75002	Would you mind checking to see if the trees/shrubs could be trimmed back from the Country Club some? Coming out of (redacted) onto Country Club looking north is very blocked. May not be a code issue, but thought I would ask. Thank you!
Tree Trimmings & Removals	Development Services	Joe Hilbourn	4/17/2023	4/17/2023	New	0	0	4/17/2023	Joe Hilbourn	Lucas	TX	75002	There are many broken trees due to last storm. There one big broken that laying on another tree is it's about to fall on my house roof . Please send someone to take care of it . We do really appreciate. Home owner (redacted)
High Grass & Weeds	Development Services	Joe Hilbourn	4/24/2023	4/21/2023	New	0	0	4/24/2023	Joe Hilbourn	Lucas	TX	75002	The grass turning on Lucas Rd from Stinson is super high. Thank you
Trees & Limbs	Public Works/Engineering	Jeremy Bogle	5/1/2023	4/28/2023	Completed	0	0	5/1/2023		Lucas	TX	75002	Tree along (redacted) fell in one of last storms. Neighbor cleaned up some to get clear. He also cut and took parts of the tree trunk but all the rest is piled along (redacted). Can this be removed... its an eyesore.
Tree Trimmings & Removals	Development Services	Joe Hilbourn		5/1/2023	New	0	3	5/1/2023		Allen	TX	75002	Tree limbs have encroached sides of road on E Winningkoff Rd and have dropped down to the point of scraping tall vehicles such as my RV . Height of RV is 12ft 6 in. We are now at the point of getting damage to our vehicles , have to drive in middle or wrong side of rd to get down road. Please address this issue, I know people like the canopy over the road but we should be able to use Road with out damage of scraping.
Trash & Recycling	Development Services	Joe Hilbourn	5/4/2023	5/4/2023	New	0	1	5/4/2023	Joe Hilbourn	Lucas	TX	75002	live in Lucas. And I was just wondering now that barns in doing the trash, I have a lot more bags to take out that they will sit in my trash cans, can I take them out in big bugs or and leave them by the side, or do I have to put them in the trash cans to have it removed? thank you."
High Grass & Weeds	Development Services	Joe Hilbourn	5/16/2023	5/8/2023	New	0	0	5/16/2023	Joe Hilbourn	Lucas	TX	75002	I live at (redacted) and both lots on the sides of us need mowing. Thanks!!
High Grass & Weeds	Development Services	Joe Hilbourn	5/16/2023	5/9/2023	New	0	0	5/16/2023	Joe Hilbourn	Lucas	TX	75002	Grass and weeds in excess of 24 inches at (redacted)
High Grass & Weeds	Development Services	Joe Hilbourn	5/16/2023	5/9/2023	New	0	0	5/16/2023	Joe Hilbourn	Lucas	TX	75002	Grass and weeds in excess of 18 inches at (redacted)

High Grass & Weeds	Development Services	Joe Hilbourn		5/9/2023	New	0	0	5/9/2023	Jose Quiles	Lucas	TX	75002	Unpermitted dumpster, trash, and dilapidated structure at (redacted)
High Grass & Weeds	Development Services	Joe Hilbourn	6/5/2023	5/9/2023	New	0	0	6/5/2023	Joe Hilbourn	Lucas	TX	75002	Report recieved of unpermitted work causing environmental disturbances at (redacted). Investigation found property being used as an open storage yard for a business
High Grass & Weeds	Development Services	Joe Hilbourn	5/16/2023	5/9/2023	New	0	0	5/16/2023	Joe Hilbourn	Lucas	TX	75002	Report received of dogs at large (redacted)
High Grass & Weeds	Development Services	Joe Hilbourn	5/16/2023	5/9/2023	New	0	0	5/16/2023	Joe Hilbourn	Lucas	TX	75002	Dogs at large (redacted)
High Grass & Weeds	Development Services	Joe Hilbourn	5/15/2023	5/9/2023	New	0	0	5/15/2023	Joe Hilbourn	Lucas	TX	75002	Weeds, bushes, and trees have overgrown the corny and sides of the house nearly covering the windows. This yard detracts from the pleasant appearance of the rest of our neighborhood. Thank you.
Tree Trimmings & Removals	Development Services	Joe Hilbourn	6/14/2023	5/10/2023	New	0	0	6/14/2023	Joe Hilbourn	lucas	TX	75098	Brush and tree limbs are piled up along this property next to the road. Been there for 9+ months. This is a fire hazard and eye sore.
Building Code Violation	Development Services	Joe Hilbourn	6/1/2023	5/10/2023	New	0	0	6/1/2023	Joe Hilbourn	Lucas	TX	75002	The house is currently under construction and it looks like set. The builder is putting the metal slats on the fence to close together without the appropriate spacing between them in the front of the house. This needs to be checked out ASAP and stopped since my understanding of the ordinance there needs to be at least 50% open, and the slats will not allow that to be the case.
Animal Concerns	Development Services	Joe Hilbourn	5/15/2023	5/15/2023	New	0	0	5/15/2023	Joe Hilbourn	Lucas	TX	75002	About 20 Goats roam the streets with a great pyrenes. Animal Control says that nothing can be done, because we are a free range state. Have contacted the owners, Sometimes they put them up and sometimes they won't answer the door. This is happening on a regular basis, It is a nuisance.
High Grass & Weeds	Development Services	Joe Hilbourn		5/15/2023	New	0	0	5/15/2023	Joe Hilbourn	Lucas	TX	75002	Tall weeds and tall grass at house and pasture at (redacted).
High Grass & Weeds	Development Services	Joe Hilbourn	6/5/2023	5/15/2023	New	0	0	6/5/2023	Joe Hilbourn	Lucas	TX	75002	Grass in excess of 24 inches at (redacted)
Noise	Development Services	Joe Hilbourn	6/1/2023	5/27/2023	New	0	0	6/1/2023	Joe Hilbourn	Allen	TX	75002	Really music still playing past 11pm.
Trees & Limbs	Public Works/Engineering	Jeremy Bogle	6/6/2023	5/30/2023	Completed	0	0	6/6/2023	Jeremy Bogle	Lucas	TX	75002	There are three dead trees in the island across from our house. There are dead limbs that keep falling and I am concerned they could hit a passing car. Who is responsible for cleaning up the island? Thank you

Tree Trimmings & Removals	Development Services	Joe Hilbourn		5/31/2023	New	0	0	5/31/2023		Allen	TX	75002	The brush and trees are growing onto the already narrow street. It is damaging my car as I drive by, especially if another car approaches. It is also dangerous because it's impossible to see around the corner.
Building Code Violation	Development Services	Joe Hilbourn	6/14/2023	6/6/2023	New	0	0	6/14/2023	Joe Hilbourn	Lucas	TX	75002	House on (redacted) is believed to be an event center. Culvert for driveway is missing and "street lights" are going in and wants to be sure the lights are dark sky compliant. This information was reported by a neighbor.
Building Code Violation	Development Services	Joe Hilbourn	6/9/2023	6/6/2023	Completed	0	0	6/9/2023	Scott Holden	Lucas	TX	75002	Resident's fence is located over the City of Lucas water line easement. The contractor can not construct the water line .
High Grass & Weeds	Development Services	Joe Hilbourn	6/14/2023	6/8/2023	New	0	0	6/14/2023	Joe Hilbourn	Allen	TX	75002	High grass and weeds. Lot next to (redacted). For whatever reason they seem to think it is the City of Lucas responsibility to mow these weeds down. The tall weeds on (redacted). and the lot needs mowing. Those weeds are blowing seeds on everyones yard. Thank you.
High Grass & Weeds	Development Services	Joe Hilbourn		6/10/2023	New	0	0	6/10/2023		Allen	TX	75002	Grass is approximately 3 ft. high and this lot is on the corner (redacted) making it difficult to see oncoming traffic. I have personally witnessed near wrecks at this intersection because of this issue. Wild hogs have also been known to nest in this lot of high grass from time to time.
Trees & Limbs	Public Works/Engineering	Jeremy Bogle	6/20/2023	6/12/2023	Completed	0	0	6/20/2023	Jeremy Bogle	Lucas	TX	75002	Tree limbs hanging into street
Trees & Limbs	Public Works/Engineering	Jeremy Bogle	6/20/2023	6/12/2023	Completed	0	0	6/20/2023	Jeremy Bogle	Lucas	TX	75002	High grass and tree limbs
High Grass & Weeds	Development Services	Joe Hilbourn	6/14/2023	6/12/2023	New	0	1	6/14/2023	Joe Hilbourn	Lucas	TX	75002	High grass at (redacted)
High Grass & Weeds	Public Works/Engineering	Jeremy Bogle	6/15/2023	6/13/2023	Completed	0	0	6/15/2023	Jeremy Bogle	Lucas	TX	75002	Please cut down all of the tall grass and weeds near the intersection of Estelle and Wendy. Please cut back any low branches that may hit vehicles also.
High Grass & Weeds	Development Services	Joe Hilbourn		6/14/2023	New	0	0	6/14/2023	Joe Hilbourn	Lucas	TX	75002	Weeds and brush are 2+ft tall. The yard (Front and Sides) is completely unkept. It's a jungle and growing wild.
Building Code Violation	Development Services	Joe Hilbourn		6/19/2023	New	0	0	6/26/2023		Lucas	TX	75002	(Redacted) is installing a Fence, at front of property. Concerned that said fence will be placed right on property line, and should be there side of property line. We have water line and fiber running down the easement and need to insure lines are not hit.
High Grass & Weeds	Development Services	Joe Hilbourn		6/19/2023	New	0	0	6/23/2023	Joe Hilbourn	Lucas	TX	75002	(redacted), grass and debris located along road. Builder and/or homeowner needs to mow.

Item No. 05

City of Lucas
City Council Agenda Request
July 6, 2023

Requesters: Public Works Director Scott Holden, P.E.
Contract Engineer Joe Grajewski, P.E., CFM

Agenda Item Request

Consider adopting Ordinance 2023-07-00985 amending the City of Lucas Code of Ordinances, Chapter 13 titled "Utilities", Article 13.07 titled "Planning and Design Drainage Criteria".

Background Information

The City's Engineering Department was directed to evaluate the current drainage design criteria and provide recommendations for revisions to Article 13.07 titled "Planning and Design Drainage Criteria". Staff met with engineering departments from adjacent municipalities and reviewed design criteria used in neighboring jurisdictions in the Dallas-Fort Worth Metroplex.

Based on the feedback received and information gathered from other municipalities, a wide variety of revisions were identified. Ordinance 2023-06-00983 regulating Construction Site Drainage was brought before the City Council and approved at the June 1, 2023 City Council Meeting. In addition, staff has developed several revisions for Article 13.07 which include the following:

1. Addition of Soil Conservation Service (SCS) methodology for calculating Time of Concentration (Section 13.07.004)
2. Addition of Unit Hydrograph Methodology for the calculation of runoff for drainage areas greater than 100 acres (Section 13.07.005)
3. Addition of Downstream Assessments to confirm there are no adverse impacts to adjacent, upstream, or downstream properties or facilities (Section 13.07.006)
4. Revisions to Open Channel Design including the requirement for Erosion Hazard Setbacks (Section 13.07.009)
5. Revisions to Culvert Design and addition of section for Bridge Design requiring scour analysis (Section 13.07.010)
6. Revisions to Stormwater Detention Pond Design criteria (Section 13.07.011)
7. Addition of section on Energy Dissipation (Section 13.07.013)
8. Addition of section on criteria for Floodplain Alterations (Section 13.07.014)
9. Addition of section on criteria for Drainage Easements (Section 13.07.015)

Attachments/Supporting Documentation

1. Ordinance 2023-07-00985 amending Article 13.07 titled Planning and Design Drainage Criteria
2. Ordinance 2023-07-00985 – Redline Version

Budget/Financial Impact

N/A

Item No. 05

City of Lucas
City Council Agenda Request
July 6, 2023

Recommendation

City staff recommends approval of the proposed revisions contained within Ordinance 2023-07-00985 amending Article 13.07 titled Planning and Design Drainage Criteria.

Motion

I make a motion to approve/deny adopting Ordinance 2023-07-00985 amending the City of Lucas Code of Ordinances, Chapter 13 titled “Utilities”, Article 13.07 titled “Planning and Design Drainage Criteria”.

ORDINANCE #2023-07-00985

[Amending Code of Ordinances Chapter 13 Utilities: Planning and Design Drainage Criteria]

AN ORDINANCE OF THE CITY OF LUCAS, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 13 TITLED "UTILITIES," BY AMENDING ARTICLE 13.07 TITLED "PLANNING AND DESIGN DRAINAGE CRITERIA", TO CONFORM TO THE DRAINAGE DESIGN MANUAL; PROVIDING FOR A REPEALING CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED TWO THOUSAND DOLLARS ($2000.00); AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, City staff recently updated the Drainage Design Manual to improve surface water drainage, and

WHEREAS, the City Council has determined it is in the best interest of the health, safety and welfare of the City to update the Code to reflect the requirements of the Drainage Design Manual.

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

SECTION 1. That the City of Lucas Code of Ordinances is amended by amending Chapter 13 titled "Utilities", Article 13.07 titled "Planning and Design Drainage Criteria," to read as follows:

§13.07.001. General

a) The drainage criteria included in this section are for the purpose of providing a set of guidelines for planning and designing storm drainage facilities in the city and within its extraterritorial jurisdiction. These criteria will be used by the department of public works, other city departments, consulting engineers employed by the city, and engineers for private developments in the city.

b) At a minimum, drainage plans shall include, but are not limited to the following:

1. Drainage area map;
2. Drainage area calculations (including size in acres, runoff coefficient, time of concentration, intensities for each required storm event and calculated flows for each storm event). Refer to the sample drainage area calculation table;
3. Inlet calculations. Refer to the sample inlet calculation table;
4. Open channel and/or storm sewer calculations. Refer to the sample open channel and storm sewer calculation tables;

5. Plan view drawings including centerline alignment (with stationing) for all open channel and closed conduit conveyances;
6. Profile view drawings including alignment stationing and vertical slope for all open channel and closed conduit conveyances. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), the depth of flow (in feet), and the maximum capacity of each segment of the conveyance shall be included;
7. Cross sections on 100-foot intervals for all open channel conveyances including the 100-year water surface elevation. Each section shall demonstrate that a minimum of 1-foot of freeboard is provided. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), and the depth of flow (in feet) shall be included for each cross section;
8. Grading plans for detention and retention ponds;
9. Standard construction details and calculations for the outfall structures at each detention or retention pond for each storm event. The calculations shall demonstrate that post-development run-off rates are reduced to pre-development rates, or the capacity of downstream systems, whichever is less;
10. Storm sewer standard construction details; and
11. Any additional information as requested by the city engineer.

§13.07.002. Rational method for peak storm flows.

The formula to be used for calculating peak storm flows for drainage areas less than ~~200~~ 100 acres shall be the Rational Method, in which:

Q = CIA, where

Q - is the peak storm flow at a given point in cubic feet per second (cfs)

C - is the runoff coefficient that is equal to the ratio that the peak rate of runoff bears to the average rate (intensity)of rainfall;

I - is the average intensity of rainfall in inches per hour for a storm duration equal to the time of travel for runoff to flow from the farthest point of the drainage area to the design point in question;

A - The area that is contributing to the point of design.

Note: For drainage areas greater than 100 acres, peak storm flows shall be determined based on a flow routing analysis using detailed hydrographs such as the Natural Resource Conservation Service (NRCS) hydrologic methods that are available in such computer programs as HEC-HMS, etc.

§13.07.003. Runoff coefficient

The runoff coefficient (C) shall consider the slope of the terrain, the character of the land use, the length of overland flow and the imperviousness of the drainage area and shall be determined based on ultimate land development. The runoff coefficient for the appropriate land used shall be as follows:

(1) Commercial/Parking Lots/Right-of-way 0.90.

(2) Industrial 0.90.

(3) Single-Family Residential 0.55.

(4) Multifamily 0.75.

(5) Parks and open space 0.35.

(6) Schools, churches, etc. 0.80.

§13.07.004. Rainfall intensity-frequency

a) The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Texas (2018) is recognized as the best available set of rainfall data for the State of Texas. This data (referred to as Atlas 14) provides point precipitation frequency values. Lucas City Hall (665 Country Club Rd, Lucas, Texas) has been selected to define standard rainfall intensity values throughout the city. All developments must be analyzed using the most recently adopted rainfall intensities, included as table 1. Redevelopment sites with receiving drainage infrastructure that was previously designed using a previous rainfall intensity standard are required to analyze and design stormwater facilities using the updated values.

b) Time of Concentration

The time of concentration, which is the longest time of travel for runoff to flow from any point of the subject drainage area to the design point, consists of the time required for runoff to flow overland plus the time required to flow in a street gutter, storm drain, open channel, or other conveyance facility. A minimum time of concentration of fifteen (15) minutes shall be used for Single-Family Residential, Parks and Open Space areas and a minimum time of concentration of ten (10) minutes shall be used for Right-of-Way, Commercial, Industrial, Multi-Family Residential, School and Church areas.

NRCS methodology shall be used to determine the time of concentration (Tc). This method separates the flow through the drainage area into sheet flow, shallow concentrated flow, and open channel flow. The Tc is the sum of travel times for sheet flow, shallow flow, and open channel flow. The time of concentration flow path and sheet flow path shall be made available to the City upon request.

1. Sheet Flow: The maximum allowable length for sheet flow is 300-foot for undeveloped drainage areas and 100-foot for developed areas. When selecting n for sheet flow, consider cover to a height of about 0.1-foot. This is the only part of the plant cover that will obstruct sheet flow. The Tt in hours for sheet flow is determined using the following equation:

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5}S^{0.4}}$$

T_t = travel time (hr)
n = Manning's roughness coefficient (Table 13.1)
L = flow length (ft)
P_2 = 2-year, 24-hour rainfall (4.0 inches)
S = slope of hydraulic grade line (land slope, ft/ft)

Table 13.1 Sheet Flow 'n' Values

Surface Description	N
Smooth Surfaces (concrete, asphalt, gravel, or bare soil)	**0.011**
Fallow (no residue)	**0.05**
Cultivated soils	
Residue cover less than 20%	**0.06**
Residue cover greater than 20%	**0.17**
Grass:	
Short Prairie Grass	**0.15**
Dense grasses	**0.24**
Range (natural)	**0.13**
Woods:	
Light underbrush	**0.40**
Dense underbrush	**0.80**

2. Shallow Concentrated Flow: Shallow concentrated flow begins where sheet flow ends. A projected slope should be established along the flow line for the shallow concentrated flow length. The Tt in hours for shallow concentrated flow is determined by the following equation:

$$T_t = \frac{L}{3600V}$$

T_t = travel time (hr)
L = flow length (ft)
V = velocity (fps)
Unpaved = 16.1345 * $S^{0.5}$
Paved = 20.3282 * $S^{0.5}$

3. Open Channel Flow: Open Channel Flow is where the runoff is located within a defined channel or in some cases, closed storm systems. The T_t for open channel flow is determined using the following equation:

$$T_t = \frac{L}{3600V}$$

$$V = \frac{1.49 r^{\frac{2}{3}} s^{\frac{1}{2}}}{n}$$

T_t = travel time (hr)
V = average velocity (ft/sec)
r = hydraulic radius (ft)
A = cross sectional flow (ft^2)
P = wetted perimeter (ft)
s = slope of hydraulic grade line (channel slope, ft/ft)
n = Manning's roughness coefficient

§13.07.005. Unit Hydrograph Methodologies.

For contributing drainage areas greater than 100 acres, the unit hydrograph method shall be used to determine the peak storm discharge quantities. This method shall also be used for verification of adequacy of stormwater detention facilities with contributing drainage area that are equal to or greater than 20 acres.

The use of a unit hydrograph method shall be based upon standard and accepted engineering principles used in the profession. Acceptable methods include the NRCS Technical Release Number 55 (TR-55) for drainage areas 100 acres to 2,000 acres and NRCS's Technical Release Number 20 (TR-20), or the United States Army Corps of Engineers HEC-HMS models for drainage areas 100 acres or more. When the flood study involves a watershed that does not already have any available hydrology model, or in the case where conversion of an existing model to a later version hydrology model is desired, the City's preference is the latest version of HEC-HMS model available.

When the unit hydrograph method is used, a flood study report shall be prepared and provided to the City Engineer, documenting the methodology, assumptions, derivation of all data used, and results of the study. To maintain consistency of all hydrologic studies within the City, the following requirements/conditions shall be used when performing the unit hydrograph method. These requirements/conditions shall be included in the plan set and the flood study report:

a) Compute both pre-construction conditions (based on existing off-site watershed conditions) and post-construction conditions and show comparison in summary table of results.

b) In addition to part a, compute the projected ultimate developed conditions to determine design elevations and erosion protection.

c) 24-hour rainfall storm totals.

d) Time of Concentration (Tc) and Lag Time Calculations, computed to the nearest 0.01 hour: The lag time is generally considered to be 0.6 x Tc. The Tc calculations should include

sheet flow travel time, shallow concentrated flow travel time, channel flow travel time, and travel time associated with any storm sewer system pipes, street gutter flow, and other travel times. Storm sewer pipe travel time may be derived based on design velocities and pipe flow lengths from available or proposed sewer pipe plans. General guidelines pertaining to NRCS TR-55 methodology for determining flow times for sheet flow, shallow concentrated flow, channel flow, and other flow types are included in the section above. The length of sheet flow used with the unit hydrograph method should be limited to 100 feet.

e) When using a unit hydrograph procedure, mixing the hydrology modeling data with data based on differing procedures is not acceptable.

f) Drainage areas shall be rounded to the nearest 0.01 acre (0.000001 sq. mi.) in hydrology models, as well as for areas of land use and soil categories when computing composite runoff curve numbers.

g) Impervious areas of a drainage basin should be included within the computed composite runoff curve number calculations used in the hydrology models (instead of using a percentage of impervious area in combination with a weighted curve number in hydrology models that contain that option).

h) Stream reach hydrograph routing computations within hydrology models must be performed using a procedure that accounts for the effects of channel and floodplain storage (such as Modified Puls method), so that impacts on flood discharges due to loss of flood valley storage within the reach, whether caused by currently proposed construction or due to future development, can be determined.

i) NRCS runoff curve numbers listed in NRCS's TR-55 fur urban and residential districts are generally inappropriate for typical developments in the City of Lucas, due to the indicated low percentage of impervious areas indicated with the values. Therefore, curve numbers typical of conditions in the City of Lucas are included in Table 13.2. These values should be used in most cases; however, other curve numbers for conditions not listed in Table 13.2 may be derived and used if reasonably justified and documented.

j) Options available in hydrology models to automatically compute pond spillway discharges, based on spillway or outlet type of configuration, are sometimes limited, and often do not adequately represent the designed spillway. In such cases, pond water surface elevations versus discharges may need to be computed by other methods and entered into the hydrology model as user defined paired data.

Table 13.2 NRCS Runoff Curve Numbers

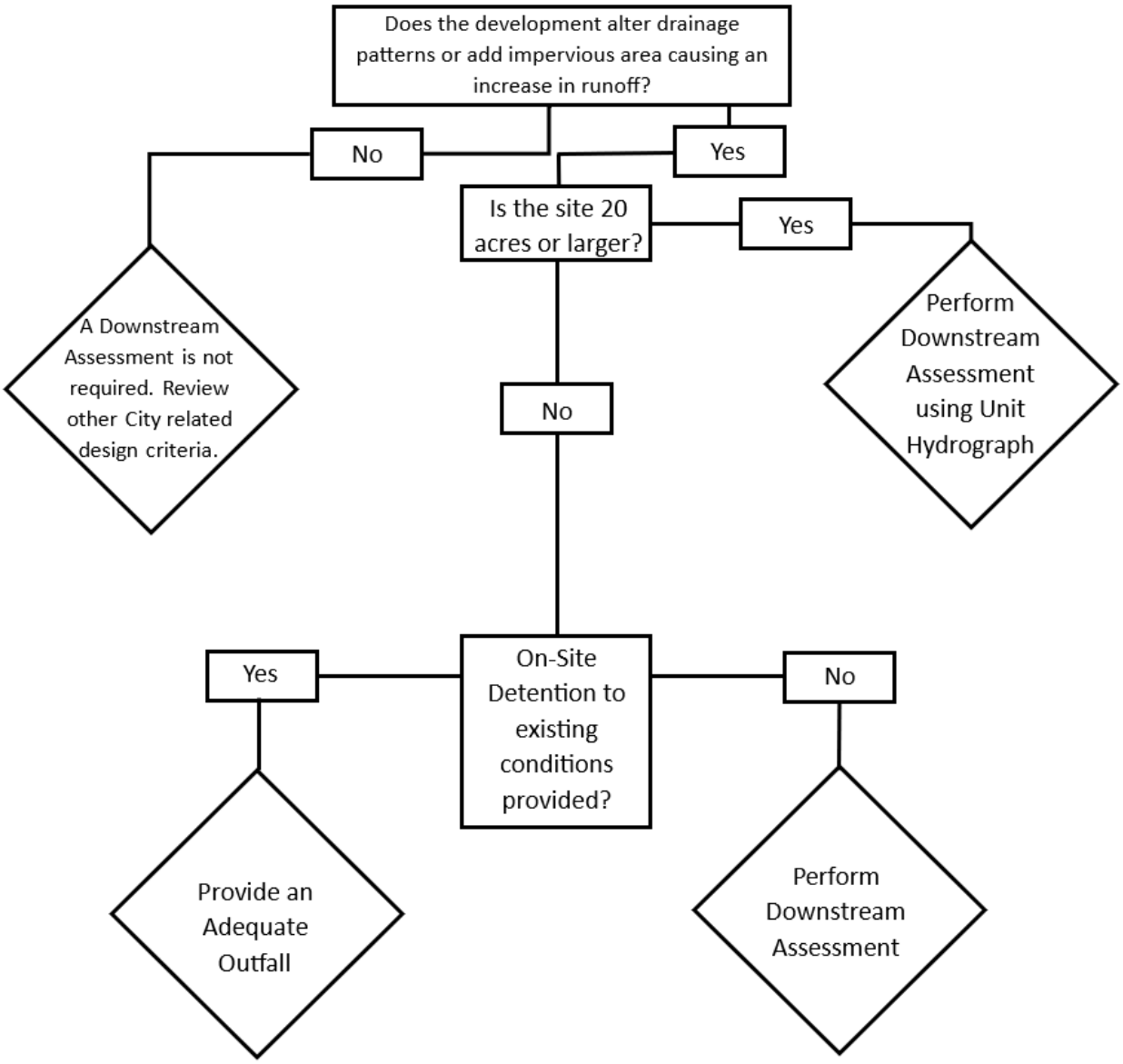
Land Use Classification	Hyrdologic Soil Group			
	A	B	C	D
Wooded (fair)	36	60	73	79
Wooded (good)	30	55	70	77
Open Space/Range/Pasture (fair)	49	69	79	84
Open Space/Range/Pasture (good)	39	61	74	80
Cultivated, Straight Row	72	81	88	91
Cultivated, Contoured w/o Terrace	70	79	84	88
Cultivated, Contoured and Terrace	66	74	80	82
Residential (R-2 / ED)	63	77	84	88
Residential (R-1 / R-1.5)	66	78	85	88
Bare Soil	77	86	91	94
Commericial/Business/Multifamily	89	92	94	95
Industrial	81	88	91	93
Dirt or Gravel Roads ROW	76	85	89	91
Paved Road ROW	83	89	83	93
Inundated	100	100	100	100
Urban High Runoff Equivalent	83	89	92	94

*Urban high runoff equivalent is used only for projected fully developed watershed conditions.

§13.07.006. Downstream Assessment.

Storm water discharge from a development shall not cause adverse impacts to adjacent, upstream, or downstream properties or facilities. The design of a storm drain facility must account for the offsite flows that are routed through the development, flows generated by the development, and the impacts of the development and the drainage system on downstream facilities. Figure 13.1 below summarizes the process for determining if a Downstream Assessment will be required.

Figure 13.1 – Downstream Assessment Flow Chart



Downstream Assessments shall be prepared and submitted with the construction plans for review by the City. The study shall evaluate the capacity of the downstream system within the Zone of Influence. If the downstream system has less than fully developed capacity, the study shall demonstrate the development will produce no adverse impacts during the 2, 5, 10, 25 and 100-year storm events. No adverse impacts may include, but are not limited to:

a) No new or increased flooding of existing structures.

b) No increases in water surface elevations unless contained within the banks of an existing channel including 1-foot freeboard.

c) Post-development channel velocities above 5-fps shall not be increased by more than 5% above pre-development velocities. Exceptions to these criteria require a certified geotechnical/geomorphologic study that provides documentation that a higher velocity will not increase erosion.

d) No increases in downstream discharges caused by the proposed development that, in combination with existing discharges, exceeds the existing capacity of the downstream storm drainage system.

e) The Downstream Assessment shall extend to a point downstream, known as the Zone of Influence (ZOI), where the proposed development creates no adverse impacts. For properties less than 20 acres, the Downstream Assessment may use the 10% Rule to determine the Zone of Influence, which ends at the point where the total drainage area is 10 times greater than the total drainage area for the site. As an example, if a structural control drains 10 acres, the Zone of Influence ends at a point where the total drainage area is at least 100 acres.

f) For all other properties, the Zone of Influence will be defined by a detailed hydrologic and hydraulic modeling analysis. The City Engineer may require analysis beyond the ZOI established by the Engineer.

g) If the subject development is part of a larger development, the Downstream Assessment must include the larger development, and the Zone of Influence shall be determined based on the entire property.

§ 13.07.007. Storm sewer design.

Stormwater in excess of that allowed to collect in the streets shall be intercepted in inlets and conveyed in a storm sewer system. Storm sewer capacity shall be calculated by the Manning's formula:

$$Q = AV, \text{ and}$$

$$Q = 1.486\ AR2/3S1/2n$$

where

Q is the discharge in cubic feet per second;
A is the cross-sectional area of the conduit in square feet;
V is the velocity of flow in the conduit in feet per second;
R is the hydraulic radius in feet, which is the area of flow divided by the wetted Perimeter.
S is the slope of the hydraulic gradient in feet per-foot;
n is the coefficient of roughness.

The recommended roughness coefficients to use in the design of a storm sewer system are as follows:

Type of Storm Drain Manning's Coefficient

Concrete Box Culvert 0.015

New Concrete Pipe 0.013

Standard, unpaved, with or without bituminous coating corrugated metal pipe 0.024

Paved invert, 25% of periphery paved corrugated metal pipe 0.021

Paved invert, 50% of periphery paved corrugated metal pipe 0.018

100% paved and bituminous coated corrugated metal pipe 0.013

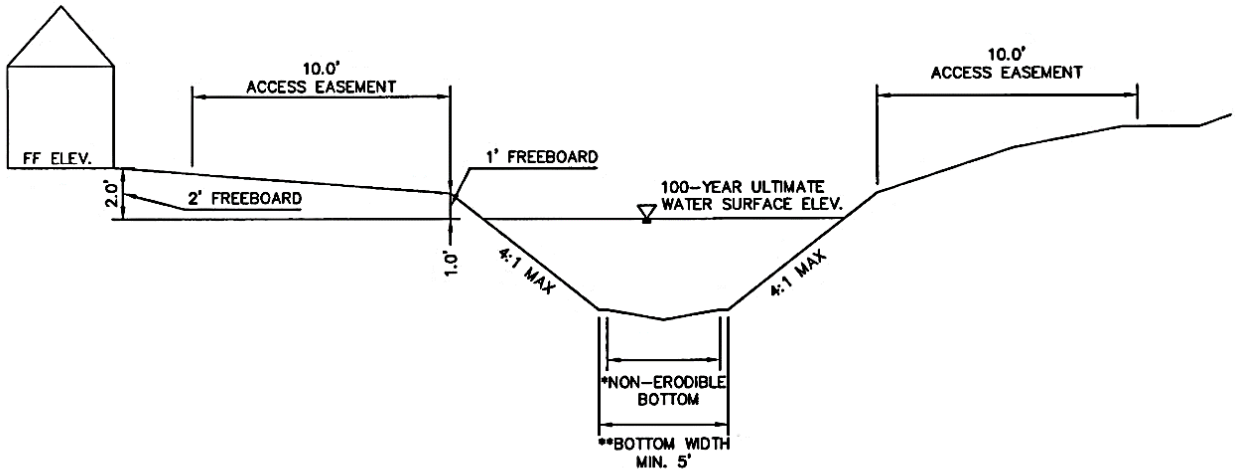
In the design of the storm sewer system, the elevation of the hydraulic gradient of the storm sewer shall be a minimum of 0.5 feet below the elevation of the adjacent street gutter. Storm sewer pipe sizes shall be so selected that the average velocity in the pipe will not exceed 15 feet per second nor less than 3 feet per second. The minimum grade recommended for storm sewer pipe is 0.30%. Closed storm sewer systems shall be installed in all areas where the quantity of storm runoff is 300 cubic feet per second, or less at the discretion of the city. A closed storm sewer system may be constructed when the quantity exceeds 300 cfs at the discretion of the City. Hydraulic gradients shall be calculated and lines drawn for each storm sewer.

§ 13.07.008. Intentionally left blank for future use.
[Reserved]

§13.07.009. Open Channel Design.

Excavated open channels shall be designed to convey the full design discharge. The allowable excavated channel cross section is shown on Figure 13.2. The maximum velocity allowed for unlined, vegetated excavated channels is 5-foot/s.

Figure 13.2: Open Channels – Excavated



*NON-ERODIBLE BOTTOM SHALL BE DESIGNED BY THE ENGINEER AND DOCUMENTATION AND CALCULATIONS SHALL BE PROVIDED TO CITY STAFF FOR REVIEW. GRADES SHALL ENSURE POSITIVE DRAINAGE THROUGHOUT THE CHANNEL.

**MINIMUM BOTTOM WIDTH SHALL BE BASED UPON PROJECT SPECIFIC CHANNEL MAINTENANCE NEEDS. BOTTOM WIDTHS SMALLER THAN WHAT IS SHOWN SHALL BE APPROVED BY THE DIRECTOR OF ENGINEERING SERVICES.

THE DIRECTOR OF ENGINEERING SERVICES MAY REQUIRE HYDRAULIC MODELING OF THE CONSTRUCTED CHANNEL TO CONSIDER A MANNINGS VALUE THAT REFLECTS A "MAINTAINED CHANNEL (0.25-0.35)" AND A "NON-MAINTAINED CHANNEL (0.35-0.055)".

a) Unlined unvegetated excavated channels are not allowed. Construction of excavated channels will not be considered complete until the channel banks are stabilized. Vegetation selected for channel cover must conform with allowable vegetation from the Approved Material List.

b) Supercritical flow shall not be allowed in channels except at drop structures and other energy dissipators.

c) At transitions in channel characteristics, velocities must be reduced to the maximum velocity per the downstream assessment. Velocities must be reduced before the flow reaches the natural channel using either energy dissipators and/or wider or less steep channel.

d) Channel armoring for erosion control shall be provided where deemed necessary by the City Engineer.

e) If the channel cannot be maintained from the top of the bank, a maintenance access ramp shall be provided and included within the drainage easement.

f) Minimum channel bottom widths are recommended to be equal to twice the depth of the channel. Any permanent open channel shall have a minimum bottom width of 5 feet.

g) All open channels require a minimum freeboard of 1-foot freeboard.

h) The minimum slope for an excavated improved channel is 1%.

i) Water surface elevations and flow velocities in channels are impacted by the maintenance condition in the channel. Calculations shall be performed assuming maintained and unmaintained vegetative conditions. Lower (maintained) Manning's values shall be used to determine maximum velocities, while higher (unmaintained) Manning's values shall be used to determine water surface elevations per Figure 13.3.

j) Any channel modification must meet the applicable requirements of all Local, State and Federal Regulatory Agencies.

k) An Erosion Hazard Setback shall be included within the Floodplain Drainage Easement for the channel. The purpose of this setback is to reduce the potential for any damage to property or infrastructure caused by the erosion of the bank. The erosion hazard setback shall be determined as follows, and is provided in Figure 13.3:

    1. For stream banks composed of material other than rock, locate the toe of the natural stream bank. Project a 4:1 line sloping away from the bank until it intersects finished grade. From this intersection add 15 feet away from the bank. This shall be the limit of the erosion hazard setback. For stream banks composed of rock, the 4:1 line may start at the top of rock in the creek bank.
    2. Figure 4.4 is intended to illustrate various scenarios under which the erosion hazard setback can be applied. Scenario 1 shows a situation where the setback may be located outside the Floodplain boundaries. Scenarios 2 and 3 show locations where the erosion hazard setback will be located inside the Floodplain boundaries.

l) Any modifications within the area designated as erosion hazard setback will require:

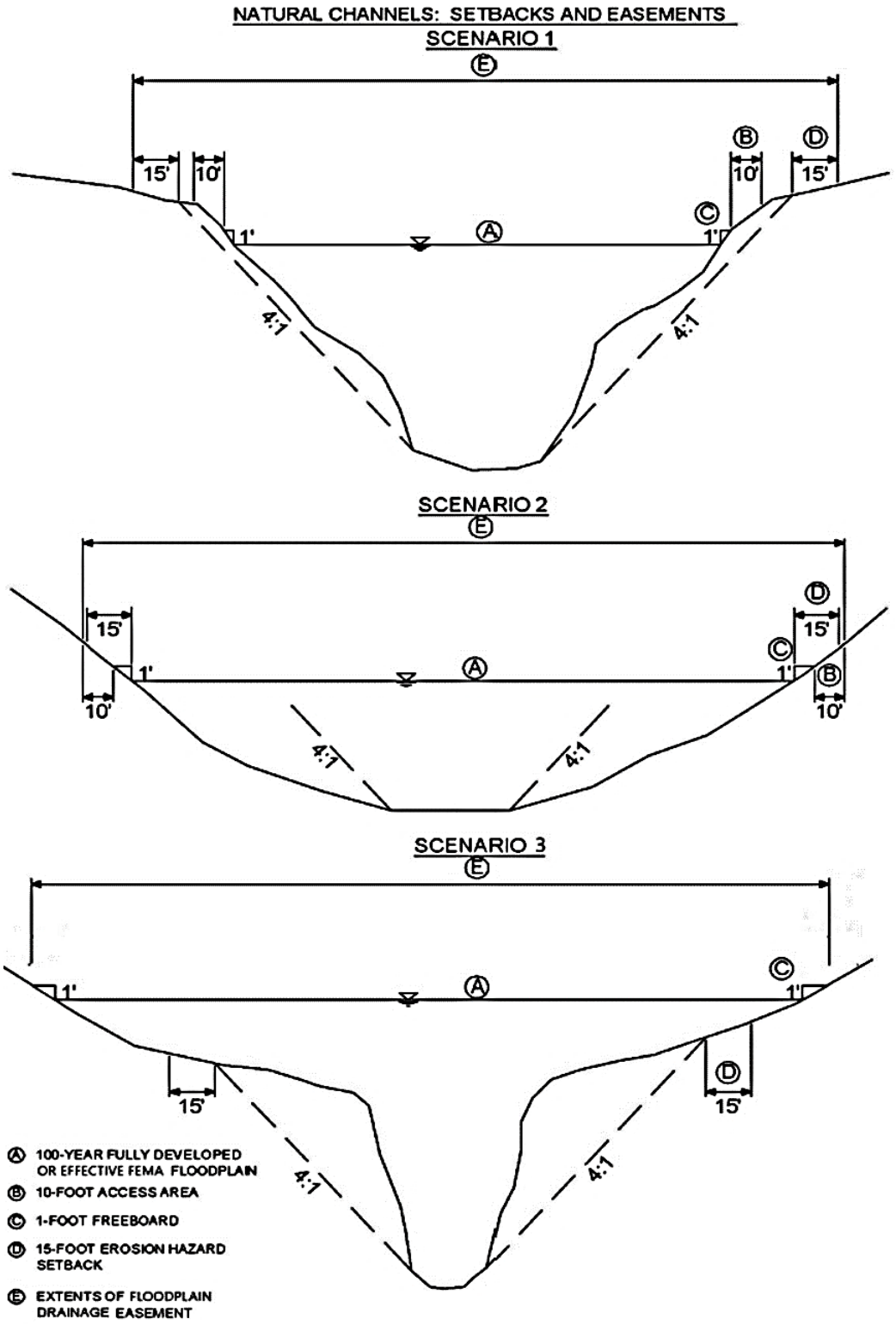
    1. A geotechnical and geomorphological stability analysis.
    2. Mitigation for flowline degradation, erosion at outside bends, or other areas of erosive risk. Mitigation could include but is not limited to:
        i. Grade control
        ii. Bendways
        iii. Headcut armoring
        iv. Slope stabilization

Table 13.3 provides allowable ranges for roughness coefficients of open channels.

Table 13.3: Channel Roughness Coefficients

Channel Description	Roughness Coefficient		
	Minimum	Normal	Maximum
Minor Natural Streams			
Moderately Well-Defined Channel			
-grass and weeds, little brush	0.025	0.030	0.033
-dense weeds, little brush	0.030	0.035	0.040
-weeds, light brush on banks	0.030	0.035	0.040
-weeds, heavy brush on banks	0.035	0.050	0.060
-weeds, dense willows on banks	0.040	0.060	0.080
Irregular Channel with Pools and Meanders			
-grass and weeds, little brush	0.030	0.036	0.042
-dense weeds, little brush	0.036	0.042	0.048
-weeds, light brush on banks	0.036	0.042	0.048
-weeds, heavy brush on banks	0.042	0.060	0.072
-weeds, dense willows on banks	0.048	0.072	0.096
Flood Plain, Pasture			
-short grass, no brush	0.025	0.030	0.035
-tall grass, no brush	0.030	0.035	0.050
Flood Plain, Cultivated			
-no crops	0.025	0.030	0.035
-mature crops	0.030	0.040	0.050
Flood Plain, Uncleared			
-heavy weeds, light brush	0.035	0.050	0.070
-medium to dense brush	0.070	0.100	0.160
-trees with flood stage below branches	0.080	0.100	0.120
Major Natural Streams			
Moderately Well-Defined Channel	0.025	-----	0.060
Irregular Channel	0.035	-----	0.100
Unlined Vegetated Channels			
Mowed Grass, Clay Soil	0.025	0.030	0.035
Mowed Grass, Sandy Soil	0.025	0.030	0.035
Unlined Unvegetated Channels			
Clean Gravel Section	0.022	0.025	0.030
Shale	0.025	0.030	0.035
Smooth Rock	0.025	0.030	0.035
Lined Channels			
Smooth Finished Concrete	0.013	0.015	0.020
Riprap (Rubble)	0.30	0.40	0.50

Figure 13.3: Natural Open Channels



§13.07.010. Culverts and Bridges

a) Culverts.

1) All culverts, headwalls, wingwalls, and aprons shall be designed in conformance with the City Standard Details. The Engineer is responsible for selecting the applicable detail. The design of culverts shall include the determination of upstream backwater conditions as well as downstream velocities and flooding conditions. Consideration shall be given to the discharge velocity from culverts, and the limitations specified culverts with the limitation that culvert pipe diameter shall be a minimum 18". A headwall is required at exposed ends. Under private driveways, permanent culverts (those with reinforced concrete, asphalt, or AASHTO #3 gravel paving over the culvert) and temporary culverts (those without paving over the culvert) shall be constructed with reinforced concrete or minimum 16 gauge galvanized corrugated steel pipe. Temporary culverts and driveways must be removed within 18 months of permit issuance and the open channel reconstructed to its original design. Under public roads, reinforced concrete culverts are required. Permanent culvert design shall include minimum embedment of Class B+ per the North Central Texas Council of Governments (NCTCOG) design manual drawing 3020 dated October 2004.

2) Culvert calculations shall be provided to the City for review. Calculations may include, but are not limited to, headwall, tailwater, and flowline elevations, lowest adjacent grade and structure elevations, inlet and outlet control calculations and velocity calculations.

3) There is a minimum 1-foot freeboard from top of grade at a culvert crossing to the 100-year fully developed water surface elevation. An emergency overflow path shall be identified and provided on the construction plans. An emergency overflow path is the path the stormwater will take when the drainage facilities become clogged or do not function in the manner as to which it was designed. The emergency overflow path shall be limited to public right-of-way or drainage easements.

4) Culverts should always be aligned to follow the natural stream channel. The engineer shall provide sufficient information to analyze the upstream and downstream impacts of the culvert and illustrate the interaction of the channel and culvert alignment.

5) Headwalls and Entrance Conditions:

i. The Engineer shall be responsible for the headwall and wingwall designs. Headwalls refer to the entrances and exits of structures and are usually formed of cast-in-place concrete and located at either end of the drainage system. Wingwalls are vertical walls, which project out from the sides of a headwall.

ii. The culvert entrance losses are provided in Table 13.4. The values of the entrance coefficient Ke represent a combination of the effects of entrance and approach conditions. Losses shall be calculated using the following formula:

$$H_e = K_e\left(\frac{v^2}{2g}\right)$$

H_e = Entrance head loss (ft)
K_e = Entrance loss coefficient
v = velocity (ft/sec)
g = gravitational constant (32.2 ft/sec^2)

6) Concrete culvert headwalls and wingwalls shall use natural stone or brick veneer. The material palette shall be similar and complimentary to materials used throughout the development and are subject to approval by the City Engineer.

Table 13.4: Culvert Entrance Loss Coefficients

Type of Structure	K_e
Pipe, Concrete	
-projecting from fill, socket and (groove end)	0.2
-projecting from fill, square cut end	0.5
-headwall or headwall and wingwalls: socket end of pip (groove end)	0.2
-headwall or headwall and wingwalls: swuare edge	0.5
-headwall or headwall and wingwalls: rounded (radius - 0.0933D)	0.2
-mitered to conform to fill slope	0.7
-beveled edges, 33.7 or 45	0.2
-side or sloped tapered inlet	0.2
Pipe, or Pipe-Arch	
-projecting from fill (no headwall)	0.9
-headwall or headwall and wingwalls: square edge	0.5
-mitered to conform to fill slope, paved / unpaved slope	0.7
-beveled edges, 33.7 or 45	0.2
-side or sloped tapered inlet	0.2
Box, Reinforced Concrete	
-headwall parallel to embankment (no wingwalls): squared on three sides	0.5
-headwall parallel to embankment (no wingwalls): rounded on three sides to radius 1/12 barrel dimension on three sides	0.2
-wingwalls at 30 to 75 to barrel: square edged at crown	0.4
-wingwalls at 30 to 75 to barrel: crown edge rounded to radius of 2/12 barrel dimension or beveled top edge	0.2

b) Bridges.

1) The City requires that head losses and depth of flow through bridges be determined with a HEC-RAS program or other approved program. The following guidelines pertain to the hydraulic design of bridges:

i. Fully developed 100-year water surface must not be increased upstream of the bridge.

ii. Excavation of the natural channel is not allowed as compensation for loss of conveyance.

iii. Channelization upstream or downstream of the proposed bridge will only be permitted when necessary to realign the flow to a more efficient angle of approach.

iv. Side swales may be used to provide additional conveyance downstream of and through bridges.
v. Bridges are to be designed with the lowest point (low beam) low chord at least 2-foot above the fully developed 100-year water surface elevation.

2) A scour analysis shall be submitted with the construction plans.

§13.07.011. Stormwater Detention Pond Design

a) Detention facilities shall be designed based upon the following minimum criteria:

1. Detention shall be provided for the 2, 5, 25, and 100-year design storms based on the results of a downstream assessment. Sites without a downstream assessment will be required to provide detention to undeveloped runoff rates.

2. The minimum bottom slope for above-ground detention facilities shall be 1%.

3. The Engineer shall provide an operations and maintenance plan for the detention/retention facility as part of the design. The operations and maintenance plan shall indicate the ingress and egress locations to enter and maintain the pond, maintenance roles and responsibilities, contact information for the party responsible for the maintenance, and a maintenance schedule. Plan shall be recorded in the Collin County Real Property Records.

4. Criteria established by the State of Texas for dam safety (TAC Title 30, Part 1, Chapter 299) and impoundment of state waters (Texas Water Code Chapter 11) shall apply where required by the state, and where, in the Engineer's judgment, the potential hazard requires these more stringent criteria.

5. All detention/retention facilities shall demonstrate and provide an adequate outfall in accordance with City Requirements. An adequate outfall is a structure or location that is adequately designed as to not cause adverse flooding conditions, erosion, or any other adverse impacts. An adequate outfall shall also have capacity to convey the increased fully developed runoff.

b) Detention Storage Calculation.

1. Detention facilities without upstream detention areas and with drainage areas of 20 acres or less can be designed using the Modified Rational Method otherwise the Unit Hydrograph Method shall be used.

2. If the Unit Hydrograph Method is used, the model shall extend through the Zone of Influence (see § 13.07.006) and include existing detention facilities within the Zone of Influence watershed.

3. No required parking space or fire lane may be located within a surface drainage pond. A maximum depth of 6 inches of ponded water is allowed in the parking lot.

4. If detention storage is located within a floodplain, the storage amount lost to the floodplain elevation must be modeled with unit hydrograph or the detention storage raised above the floodplain elevation.

c) Pond and Spillway Geometry.

1. Detention/retention facilities shall be designed with an emergency bypass/spillway in case the primary outfall ceases to function as designed. The emergency bypass/spillway shall be designed to pass a minimum of the 100-year pond inflow.

2. Detention/retention facilities shall have a minimum of 1-foot of freeboard above the 100-year water surface elevation.

3. Where embankments are used to temporarily impound detention, the effective crest of the embankment will be a minimum of 1-foot above the 100-year water surface elevation.

4. The minimum finish floor elevation for any lot adjacent to a detention/retention facility shall be 2 feet above the adjacent 100-yr fully developed water surface elevation.

5. The steepest side slope permitted for a vegetated embankment is 4:1.

6. Earth embankments used to temporarily or permanently impound surface water must be constructed according to specifications as required based on geotechnical investigations of the site and all regulatory requirements.

7. Access shall be provided to the banks and bottom of a detention facility for maintenance.

    i. Engineer shall provide an operations and maintenance plan that will detail access.
    ii. Retention facilities shall address dewatering procedures.

8. It is the responsibility of the Engineer to consider pedestrian and vehicular safety in the design of detention facilities. Perimeter rails or fencing may be required.

9. Underground detention facilities shall be designed with reinforced concrete if located under fire lane or within city right of way.

d) Texas Commission Environmental Quality Requirements for Dams. The Texas Commission on Environmental Quality (TCEQ) provides design and review criteria for

construction plans and specifications, construction, operation and maintenance, inspection, repair, removal, emergency management, site security, and enforcement of dams.

The design engineer shall refer to the Texas Administrative Code, Title 30, Part 1, Chapter 299 Dams and Reservoirs for current dam safety criteria. All proposed construction or modification of dams are required to adhere to TCEQ dam safety criteria. Should the design engineer desire to utilize an existing facility that would qualify under these criteria and the use of the facility changes from an agricultural use to another use, the existing facility may need to be brought into compliance with the TCEQ dam safety criteria. If dams that fall under the TCEQ dam safety criteria, the City will require review and approval from TCEQ prior to authorizing construction.

Retention facilities must obtain a TCEQ water rights permit if applicable. Refer to TCEQ for water rights regulations. For retention facilities without a water rights permit, the Engineer shall provide a signed statement to the City stating the water rights permit is not required.

§ 13.07.012. Tables and forms.
The following tables and forms are outlined and depicted below.[1]

§ 13.07.013 Energy Dissipators.

a) The Engineer shall be responsible for all energy dissipation designs. This may include channel armoring, gabion structures, gabion mattresses, rip-rap, turf reinforcement mats, and others as proposed

b) All energy dissipation designs shall include supporting calculations showing the design is adequate. The City may require the Engineer to provide a hydraulic model as supporting documentation.

c) All energy dissipators should be designed to facilitate future maintenance. The design of outlet structures in or near parks or residential areas shall give special consideration to appearance and shall be approved by the City Engineer.

§ 13.07.014 Floodplain Alterations.

a) No construction is allowed within floodplain areas (FEMA Effective floodplain or City of Lucas Fully Developed floodplain), but construction is allowed in those areas that have been reclaimed from the floodplain.

b) Floodplain alteration shall be allowed only if all the following criteria are met:

    1) Flood studies shall include flows generated for existing conditions and fully developed conditions for the 2, 5, 25, and 100-year storm events.

[1] *Editor's Note: Said tables and forms can be found as attachments to this chapter.*

2) Alterations shall not increase the 100-year fully developed water surface elevation on other properties.

3) Alterations shall be in compliance with FEMA guidelines.

4) Alterations of the floodplain shall meet the requirements of Section 13.07.006.

5) Alterations shall result in no loss of valley storage for a Major Creek, and a 15% maximum loss of valley storage for any other tributary for any reach, except at bridge and culvert crossings where it can be proven that there are no detrimental effects downstream.

6) Any alteration of floodplain areas shall not cause any additional expense in any current or projected public improvements, including maintenance.

7) The floodplain shall be altered only to the extent permitted by equal conveyance on both sides of the natural channel, as defined by the United States Army Corps of Engineers in a HEC-RAS analysis. The right of equal conveyance applies to all owners and uses, including greenbelt, park areas, and recreational areas. Owners may relinquish their right to equal conveyance by providing a written agreement to the City Engineer.

8) A grading permit and/or construction plan approval shall be required to perform any grading activities on site.

9) The toe of any fill shall parallel the natural direction of the flow.

10) Floodplain alterations shall incorporate and consider other City planning documents and ordinances such as the Tree Preservation Ordinance, the Subdivision Ordinance, and the Floodplain Ordinance.

11) Unless a pre-existing model is in place, United States Army Corps of Engineers (USACE) HEC-HMS and HEC-RAS shall be used. A request to use another type of hydrologic or hydraulic model must be submitted to the City Engineer for approval. Modified Puls method shall be used for flood routing information to ensure that the cumulative effects of the reduction in floodplain storage of floodwater will not cause downstream or upstream increases in water surface elevations and erosive velocities. If Modified Puls method is not feasible, a request to use another type of flood routing method must be submitted to City Engineer for approval.

c) The Engineer is responsible for providing documentation of the relevant USACE approved permits prior to beginning modification to the floodplain or impacts to Waters of the US (WoUS) or for providing a signed and sealed statement detailing why such permits are unnecessary.

d) Verification of Floodplain Alterations:

1) The owner/developer shall furnish, at their expense, to the City Engineer sufficient engineering information to confirm that the minimum finished floor elevations proposed are as required by this ordinance.

2) Construction plans will not be released for construction within areas subject to a Conditional Letter of Map Revision (CLOMR) or amendment until accepted by the City Engineer and FEMA.

3) Letters of Map Revision (LOMR) application shall be submitted to the City Engineer prior to submittal to FEMA no later than 60 days from the City's final acceptance of the construction.

4) All submittals to FEMA shall be submitted to the City Engineer prior to submittal to FEMA. A copy of all responses to FEMA comments shall be submitted to the City.

§ 13.07.015 Drainage Easements.

a) The following minimum width exclusive drainage easements are required when facilities are not located within public rights-of-way or easements:

1) Overflow paths are to be located within a minimum 10-foot drainage easement.

2) A Floodplain Drainage easement is required to be dedicated over open channels or creeks. See Figure 13.3. (Erosion Hazard Setback)

3) A Drainage and Detention Easement is required to be dedicated over detention facilities.

b) Floodplain Drainage Easements shall be dedicated for all floodplains and shall include an erosion hazard setback to reduce the potential for damage due to erosion of the bank.

c) Drainage and Detention Easements shall be dedicated for all detention/retention facilities.

SECTION 2. To the extent of any irreconcilable conflict with the provisions of this Ordinance and other ordinances of the City of Lucas and which are not expressly amended by this Ordinance, the provision of this Ordinance shall remain and be controlling.

SECTION 3. That should any word, sentence, paragraph, subdivision, clause, phrase or section of this Ordinance be adjudged or held to be unconstitutional, illegal, or invalid, the same shall not affect the validity of the remaining portions of this Ordinance or the City of Lucas Code of Ordinances, as amended hereby, which shall remain if full force and effect.

SECTION 4. An offense committed before the effective date of this Ordinance is governed by prior law and the provisions of the Ordinances of the City of Lucas, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 5. That any person, firm or corporation violating any of the provisions or terms of this Ordinance shall be subject to the same penalty as provided for in the Code of Ordinances, as amended, and upon conviction in the municipal court shall be punished by a fine not to exceed the sum of Two Thousand Dollars ($2,000.00) for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

SECTION 6. That this Ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Lucas, and it is accordingly so ordained.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF LUCAS, COLLIN COUNTY, TEXAS, ON THIS 6 DAY OF JULY, 2023.

APPROVED:

_____
Jim Olk, Mayor

APPROVED AS TO FORM:

ATTEST:

_____
Joseph J. Gorfida, Jr., City Attorney
(6-26-2023/cgm/TM 135662)

_____
Kent Souriyasak, Assistant City Manager

ORDINANCE #2023-07-00985 - DRAFT
[Amending Code of Ordinances Chapter 13 Utilities: Planning and Design Drainage Criteria]

AN ORDINANCE OF THE CITY OF LUCAS, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 13 TITLED "UTILITIES," BY AMENDING ARTICLE 13.07 TITLED "PLANNING AND DESIGN DRAINAGE CRITERIA", TO CONFORM TO THE DRAINAGE DESIGN MANUAL; PROVIDING FOR A REPEALING CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED TWO THOUSAND DOLLARS ($2000.00); AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, City staff recently updated the Drainage Design Manual to improve surface water drainage, and

WHEREAS, the City Council has determined it is in the best interest of the health, safety and welfare of the City to update the Code to reflect the requirements of the Drainage Design Manual.

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

SECTION 1. That the City of Lucas Code of Ordinances is amended by amending Chapter 13 titled "Utilities", Article 13.07 titled "Planning and Design Drainage Criteria," to read as follows:

§13.07.001. General

a) The drainage criteria included in this section are for the purpose of providing a set of guidelines for planning and designing storm drainage facilities in the city and within its extraterritorial jurisdiction. These criteria will be used by the department of public works, other city departments, consulting engineers employed by the city, and engineers for private developments in the city.

b) At a minimum, drainage plans shall include, but are not limited to the following:

1. Drainage area map;
2. Drainage area calculations (including size in acres, runoff coefficient, time of concentration, intensities for each required storm event and calculated flows for each storm event). Refer to the sample drainage area calculation table;
3. Inlet calculations. Refer to the sample inlet calculation table;
4. Open channel and/or storm sewer calculations. Refer to the sample open channel and storm sewer calculation tables;

5. Plan view drawings including centerline alignment (with stationing) for all open channel and closed conduit conveyances;
6. Profile view drawings including alignment stationing and vertical slope for all open channel and closed conduit conveyances. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), the depth of flow (in feet), and the maximum capacity of each segment of the conveyance shall be included;
7. Cross sections on 100-foot intervals for all open channel conveyances including the 100-year water surface elevation. Each section shall demonstrate that a minimum of 1-foot of freeboard is provided. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), and the depth of flow (in feet) shall be included for each cross section;
8. Grading plans for detention and retention ponds;
9. Standard construction details and calculations for the outfall structures at each detention or retention pond for each storm event. The calculations shall demonstrate that post-development run-off rates are reduced to pre-development rates, or the capacity of downstream systems, whichever is less;
10. Storm sewer standard construction details; and
11. Any additional information as requested by the city engineer.

§13.07.002. Rational method for peak storm flows.

The formula to be used for calculating peak storm flows for drainage areas less than ~~200~~ 100 acres shall be the Rational Method, in which:

Q = CIA, where

Q - is the peak storm flow at a given point in cubic feet per second (cfs)

C - is the runoff coefficient that is equal to the ratio that the peak rate of runoff bears to the average rate (intensity)of rainfall;

I - is the average intensity of rainfall in inches per hour for a storm duration equal to the time of travel for ~~run-off~~ runoff to flow from the farthest point of the drainage area to the design point in question;

A - The area that is contributing to the point of design ~~is the drainage area tributary to the design point, in acres~~.

Note: For drainage areas greater than ~~200~~ 100 acres, peak storm flows shall be determined based on a flow routing analysis using detailed hydrographs such as the ~~Soil Conservation Service~~ Natural Resource Conservation Service (NRCS) hydrologic methods that are available in such computer programs as ~~TR-20, HEC-1~~ HEC-HMS, etc.

§13.07.003. Runoff coefficient

The runoff coefficient (C) shall consider the slope of the terrain, the character of the land use, the length of overland flow and the imperviousness of the drainage area and shall be determined based on ultimate land development. The ~~run-off~~ runoff coefficient for the appropriate land used shall be as follows:

(1) Commercial/Parking Lots/Right-of-way 0.90.

(2) Industrial ~~0.70~~ 0.90.

(3) Single-Family Residential 0.55.

(4) Multifamily 0.75.

(5) Parks and open space 0.35.

(6) Schools, churches, etc. ~~0.75~~ 0.80.

§13.07.004. Rainfall intensity-frequency

a) The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Texas (2018) is recognized as the best available set of rainfall data for the State of Texas. This data (referred to as Atlas 14) provides point precipitation frequency values. Lucas City Hall (665 Country Club Rd, Lucas, Texas) has been selected to define standard rainfall intensity values throughout the city. All developments must be analyzed using the most recently adopted rainfall intensities, included as table 1. Redevelopment sites with receiving drainage infrastructure that was previously designed using a previous rainfall intensity standard are required to analyze and design stormwater facilities using the updated values.

b) Time of Concentration

The time of concentration, which is the longest time of travel for runoff to flow from any point of the subject drainage area to the design point, consists of the time required for runoff to flow overland plus the time required to flow in a street gutter, storm drain, open channel, or other conveyance facility. A minimum time of concentration of fifteen (15) minutes shall be used for Single-Family Residential, Parks and Open Space areas and a minimum time of concentration of ten (10) minutes shall be used for Right-of-Way, Commercial, Industrial, Multi-Family Residential, School and Church areas.

NRCS methodology shall be used to determine the time of concentration (Tc). This method separates the flow through the drainage area into sheet flow, shallow concentrated flow, and open channel flow. The Tc is the sum of travel times for sheet flow, shallow flow, and open channel flow. The time of concentration flow path and sheet flow path shall be made available to the City upon request.

1. Sheet Flow: The maximum allowable length for sheet flow is 300-foot for undeveloped drainage areas and 100-foot for developed areas. When selecting n for sheet flow, consider cover to a height of about 0.1-foot. This is the only part of the plant cover that will obstruct sheet flow. The Tt in hours for sheet flow is determined using the following equation:

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

T_t = travel time (hr)
n = Manning's roughness coefficient (Table 13.1)
L = flow length (ft)
P_2 = 2-year, 24-hour rainfall (4.0 inches)
S = slope of hydraulic grade line (land slope, ft/ft)

Table 13.1 Sheet Flow 'n' Values

Surface Description	N
Smooth Surfaces (concrete, asphalt, gravel, or bare soil)	**0.011**
Fallow (no residue)	**0.05**
Cultivated soils	
Residue cover less than 20%	**0.06**
Residue cover greater than 20%	**0.17**
Grass:	
Short Prairie Grass	**0.15**
Dense grasses	**0.24**
Range (natural)	**0.13**
Woods:	
Light underbrush	**0.40**
Dense underbrush	**0.80**

2. Shallow Concentrated Flow: Shallow concentrated flow begins where sheet flow ends. A projected slope should be established along the flow line for the shallow concentrated flow length. The Tt in hours for shallow concentrated flow is determined by the following equation:

$$T_t = \frac{L}{3600V}$$

T_t = travel time (hr)
L = flow length (ft)
V = velocity (fps)
Unpaved = $16.1345 * S^{0.5}$

$$\text{Paved} = 20.3282 * S^{0.5}$$

3. Open Channel Flow: Open Channel Flow is where the runoff is located within a defined channel or in some cases, closed storm systems. The T_t for open channel flow is determined using the following equation:

$$T_t = \frac{L}{3600V}$$

$$V = \frac{1.49 r^{\frac{2}{3}} s^{\frac{1}{2}}}{n}$$

T_t = travel time (hr)
V = average velocity (ft/sec)
r = hydraulic radius (ft)
A = cross sectional flow (ft^2)
P = wetted perimeter (ft)
s = slope of hydraulic grade line (channel slope, ft/ft)
n = Manning's roughness coefficient

§13.07.005. ~~Area~~ Unit Hydrograph Methodologies.

~~The drainage area used in determining peak storm flows shall be calculated by subdividing a map into the watersheds within the basin contributing stormwater runoff to the system. Areas shall be determined by planimetering or digitizing.~~

For contributing drainage areas greater than 100 acres, the unit hydrograph method shall be used to determine the peak storm discharge quantities. This method shall also be used for verification of adequacy of stormwater detention facilities with contributing drainage area that are equal to or greater than 20 acres.

The use of a unit hydrograph method shall be based upon standard and accepted engineering principles used in the profession. Acceptable methods include the NRCS Technical Release Number 55 (TR-55) for drainage areas 100 acres to 2,000 acres and NRCS's Technical Release Number 20 (TR-20), or the United States Army Corps of Engineers HEC-HMS models for drainage areas 100 acres or more. When the flood study involves a watershed that does not already have any available hydrology model, or in the case where conversion of an existing model to a later version hydrology model is desired, the City's preference is the latest version of HEC-HMS model available.

When the unit hydrograph method is used, a flood study report shall be prepared and provided to the City Engineer, documenting the methodology, assumptions, derivation of all data used, and results of the study. To maintain consistency of all hydrologic studies within the City, the following requirements/conditions shall be used when performing the unit hydrograph method. These requirements/conditions shall be included in the plan set and the flood study report:

a) Compute both pre-construction conditions (based on existing off-site watershed conditions) and post-construction conditions and show comparison in summary table of results.

b) In addition to part a., compute the projected ultimate developed conditions to determine design elevations and erosion protection.

c) 24-hour rainfall storm totals.

d) Time of Concentration (Tc) and Lag Time Calculations, computed to the nearest 0.01 hour: The lag time is generally considered to be 0.6 x Tc. The Tc calculations should include sheet flow travel time, shallow concentrated flow travel time, channel flow travel time, and travel time associated with any storm sewer system pipes, street gutter flow, and other travel times. Storm sewer pipe travel time may be derived based on design velocities and pipe flow lengths from available or proposed sewer pipe plans. General guidelines pertaining to NRCS TR-55 methodology for determining flow times for sheet flow, shallow concentrated flow, channel flow, and other flow types are included in the section above. The length of sheet flow used with the unit hydrograph method should be limited to 100 feet.

e) When using a unit hydrograph procedure, mixing the hydrology modeling data with data based on differing procedures is not acceptable.

f) Drainage areas shall be rounded to the nearest 0.01 acre (0.000001 sq. mi.) in hydrology models, as well as for areas of land use and soil categories when computing composite runoff curve numbers.

g) Impervious areas of a drainage basin should be included within the computed composite runoff curve number calculations used in the hydrology models (instead of using a percentage of impervious area in combination with a weighted curve number in hydrology models that contain that option).

h) Stream reach hydrograph routing computations within hydrology models must be performed using a procedure that accounts for the effects of channel and floodplain storage (such as Modified Puls method), so that impacts on flood discharges due to loss of flood valley storage within the reach, whether caused by currently proposed construction or due to future development, can be determined.

i) NRCS runoff curve numbers listed in NRCS's TR-55 fur urban and residential districts are generally inappropriate for typical developments in the City of Lucas, due to the indicated low percentage of impervious areas indicated with the values. Therefore, curve numbers typical of conditions in the City of Lucas are included in Table 13.2. These values should be used in most cases; however, other curve numbers for conditions not listed in Table 13.2 may be derived and used if reasonably justified and documented.

j) Options available in hydrology models to automatically compute pond spillway discharges, based on spillway or outlet type of configuration, are sometimes limited, and often do not

adequately represent the designed spillway. In such cases, pond water surface elevations versus discharges may need to be computed by other methods and entered into the hydrology model as user defined paired data.

Table 13.2 NRCS Runoff Curve Numbers

Land Use Classification	Hyrdologic Soil Group			
	A	B	C	D
Wooded (fair)	36	60	73	79
Wooded (good)	30	55	70	77
Open Space/Range/Pasture (fair)	49	69	79	84
Open Space/Range/Pasture (good)	39	61	74	80
Cultivated, Straight Row	72	81	88	91
Cultivated, Contoured w/o Terrace	70	79	84	88
Cultivated, Contoured and Terrace	66	74	80	82
Residential (R-2 / ED)	63	77	84	88
Residential (R-1 / R-1.5)	66	78	85	88
Bare Soil	77	86	91	94
Commericial/Business/Multifamily	89	92	94	95
Industrial	81	88	91	93
Dirt or Gravel Roads ROW	76	85	89	91
Paved Road ROW	83	89	83	93
Inundated	100	100	100	100
Urban High Runoff Equivalent	83	89	92	94

*Urban high runoff equivalent is used only for projected fully developed watershed conditions.

§13.07.006. ~~Spread of water~~ Downstream Assessment.

~~During the design storm, the quantity of stormwater that is allowed to collect in the streets before being intercepted by a storm drainage system is referred to as the "spread of water." In determining the limitations for carrying stormwater in the street, the ultimate development of the street shall be considered. The use of the street for carrying stormwater shall be limited to the following:~~

~~(1) Spread of water:~~

~~(A) Major thoroughfares (divided).One traffic lane on each side to remain clear.~~

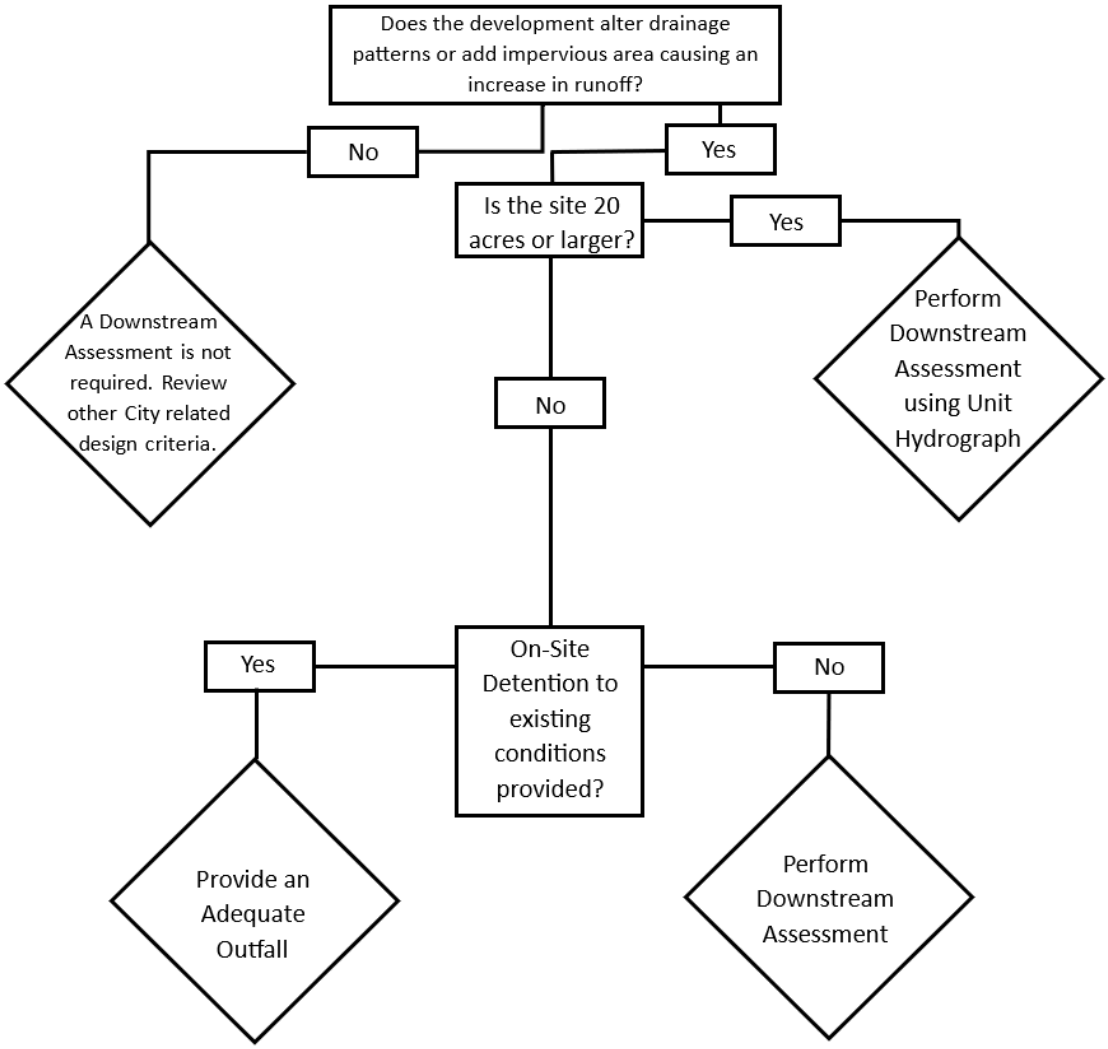
~~(B) Thoroughfares (not divided).Two traffic lanes to remain clear.~~

~~(C) Collector streets.One traffic lane to remain clear.~~

~~(D) Residential streets.Six-inch depth of flow at curb and one traffic lane to remain clear.~~

Storm water discharge from a development shall not cause adverse impacts to adjacent, upstream, or downstream properties or facilities. The design of a storm drain facility must account for the offsite flows that are routed through the development, flows generated by the development, and the impacts of the development and the drainage system on downstream facilities. Figure 13.1 below summarizes the process for determining if a Downstream Assessment will be required.

Figure 13.1 – Downstream Assessment Flow Chart



Downstream Assessments shall be prepared and submitted with the construction plans for review by the City. The study shall evaluate the capacity of the downstream system within the Zone of Influence. If the downstream system has less than fully developed capacity, the study shall demonstrate the development will produce no adverse impacts during the 2, 5, 10, 25 and 100-year storm events. No adverse impacts may include, but are not limited to:

a) No new or increased flooding of existing structures.

b) No increases in water surface elevations unless contained within the banks of an existing channel including 1-foot freeboard.

c) Post-development channel velocities above 5-fps shall not be increased by more than 5% above pre-development velocities. Exceptions to these criteria require a certified geotechnical/geomorphologic study that provides documentation that a higher velocity will not increase erosion.

d) No increases in downstream discharges caused by the proposed development that, in combination with existing discharges, exceeds the existing capacity of the downstream storm drainage system.

e) The Downstream Assessment shall extend to a point downstream, known as the Zone of Influence (ZOI), where the proposed development creates no adverse impacts. For properties less than 20 acres, the Downstream Assessment may use the 10% Rule to determine the Zone of Influence, which ends at the point where the total drainage area is 10 times greater than the total drainage area for the site. As an example, if a structural control drains 10 acres, the Zone of Influence ends at a point where the total drainage area is at least 100 acres.

f) For all other properties, the Zone of Influence will be defined by a detailed hydrologic and hydraulic modeling analysis. The City Engineer may require analysis beyond the ZOI established by the Engineer.

g) If the subject development is part of a larger development, the Downstream Assessment must include the larger development, and the Zone of Influence shall be determined based on the entire property.

§ 13.07.007. Storm sewer design.

Stormwater in excess of that allowed to collect in the streets shall be intercepted in inlets and conveyed in a storm sewer system. Storm sewer capacity shall be calculated by the Manning's formula:

$$Q = AV, \text{ and}$$

$$Q = 1.486\ AR2/3S1/2n$$

where

Q is the discharge in cubic feet per second;
A is the cross-sectional area of the conduit in square feet;
V is the velocity of flow in the conduit in feet per second;
R is the hydraulic radius in feet, which is the area of flow divided by the wetted Perimeter.
S is the slope of the hydraulic gradient in feet per-foot;
n is the coefficient of roughness.

The recommended roughness coefficients to use in the design of a storm sewer system are as follows:

Type of Storm Drain	Manning's Coefficient
Concrete Box Culvert	0.015
New Concrete Pipe	0.013
Standard, unpaved, with or without bituminous coating corrugated metal pipe	0.024
Paved invert, 25% of periphery paved corrugated metal pipe	0.021
Paved invert, 50% of periphery paved corrugated metal pipe	0.018
100% paved and bituminous coated corrugated metal pipe	0.013

In the design of the storm sewer system, the elevation of the hydraulic gradient of the storm sewer shall be a minimum of 0.5 feet below the elevation of the adjacent street gutter. Storm sewer pipe sizes shall be so selected that the average velocity in the pipe will not exceed 15 feet per second nor less than 3 feet per second. The minimum grade recommended for storm sewer pipe is 0.30%. Closed storm sewer systems shall be installed in all areas where the quantity of storm runoff is 300 cubic feet per second, or less at the discretion of the city. A closed storm sewer system may be constructed when the quantity exceeds 300 cfs at the discretion of the City. Hydraulic gradients shall be calculated and lines drawn for each storm sewer.

§ 13.07.008. Intentionally left blank for future use.

[Reserved]

§13.07.009. Open Channel Design.

~~a) Stormwater runoff in excess of that allowed to collect and be conveyed in the streets in developed areas and runoff in undeveloped areas may be carried in grass lined, concrete lined or weathered rock open channels. Earthen, non-vegetated or unlined open channels are not acceptable. Open channel capacity shall be calculated by the Manning's Formula, and roughness coefficients shall be as follows:~~

~~1. Maximum permissible.~~

~~2. Type of lining roughness coefficient "n" mean velocity.~~

~~3. Earth (Bermuda grass) 0.035 6 ft. per sec.~~

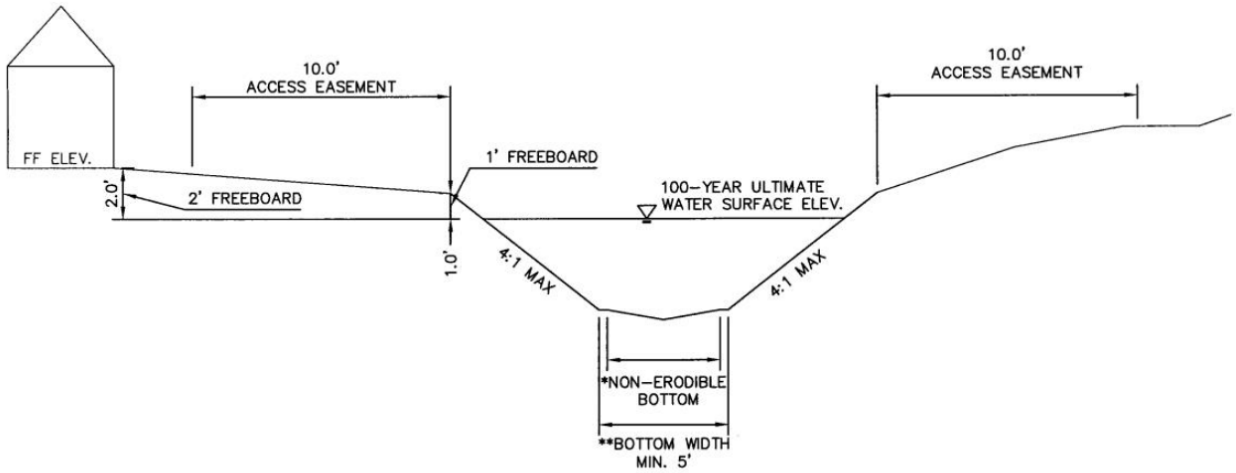
~~4. Concrete lined 0.015 15 ft. per sec.~~

~~5. Weathered rock 0.030 10 ft. per sec.~~

b) ~~Open channels shall be constructed with a trapezoidal cross-section and shall have side slopes no steeper than 3:1 when grass lined and 1.5:1 when lined with concrete. A right-of-way for all channels of sufficient width shall be dedicated to provide for excavation of the open channel of proper width, plus ten feet on each side to permit ingress and egress for maintenance. Additional width may be considered if sanitary sewer mains are proposed to follow the channel alignment.~~

Excavated open channels shall be designed to convey the full design discharge. The allowable excavated channel cross section is shown on Figure 13.2. The maximum velocity allowed for unlined, vegetated excavated channels is 5-foot/s.

Figure 13.2: Open Channels – Excavated



SCALE: 1:5

*NON-ERODIBLE BOTTOM SHALL BE DESIGNED BY THE ENGINEER AND DOCUMENTATION AND CALCULATIONS SHALL BE PROVIDED TO CITY STAFF FOR REVIEW. GRADES SHALL ENSURE POSITIVE DRAINAGE THROUGHOUT THE CHANNEL.

**MINIMUM BOTTOM WIDTH SHALL BE BASED UPON PROJECT SPECIFIC CHANNEL MAINTENANCE NEEDS. BOTTOM WIDTHS SMALLER THAN WHAT IS SHOWN SHALL BE APPROVED BY THE DIRECTOR OF ENGINEERING SERVICES.

THE DIRECTOR OF ENGINEERING SERVICES MAY REQUIRE HYDRAULIC MODELING OF THE CONSTRUCTED CHANNEL TO CONSIDER A MANNINGS VALUE THAT REFLECTS A "MAINTAINED CHANNEL (0.25–0.35)" AND A "NON-MAINTAINED CHANNEL (0.35–0.055)".

a) Unlined unvegetated excavated channels are not allowed. Construction of excavated channels will not be considered complete until the channel banks are stabilized. Vegetation selected for channel cover must conform with allowable vegetation from the Approved Material List.

b) Supercritical flow shall not be allowed in channels except at drop structures and other energy dissipators.

c) At transitions in channel characteristics, velocities must be reduced to the maximum velocity per the downstream assessment. Velocities must be reduced before the flow reaches the natural channel using either energy dissipators and/or wider or less steep channel.

d) Channel armoring for erosion control shall be provided where deemed necessary by the City Engineer.

e) If the channel cannot be maintained from the top of the bank, a maintenance access ramp shall be provided and included within the drainage easement.

f) Minimum channel bottom widths are recommended to be equal to twice the depth of the channel. Any permanent open channel shall have a minimum bottom width of 5 feet.

g) All open channels require a minimum freeboard of 1-foot freeboard.

h) The minimum slope for an excavated improved channel is 1%.

i) Water surface elevations and flow velocities in channels are impacted by the maintenance condition in the channel. Calculations shall be performed assuming maintained and unmaintained vegetative conditions. Lower (maintained) Manning's values shall be used to determine maximum velocities, while higher (unmaintained) Manning's values shall be used to determine water surface elevations per Figure 13.3.

j) Any channel modification must meet the applicable requirements of all Local, State and Federal Regulatory Agencies.

k) An Erosion Hazard Setback shall be included within the Floodplain Drainage Easement for the channel. The purpose of this setback is to reduce the potential for any damage to property or infrastructure caused by the erosion of the bank. The erosion hazard setback shall be determined as follows, and is provided in Figure 13.3:

    1. For stream banks composed of material other than rock, locate the toe of the natural stream bank. Project a 4:1 line sloping away from the bank until it intersects finished grade. From this intersection add 15 feet away from the bank. This shall be the limit of the erosion hazard setback. For stream banks composed of rock, the 4:1 line may start at the top of rock in the creek bank.
    2. Figure 4.4 is intended to illustrate various scenarios under which the erosion hazard setback can be applied. Scenario 1 shows a situation where the setback may be located outside the Floodplain boundaries. Scenarios 2 and 3 show locations where the erosion hazard setback will be located inside the Floodplain boundaries.

l) Any modifications within the area designated as erosion hazard setback will require:

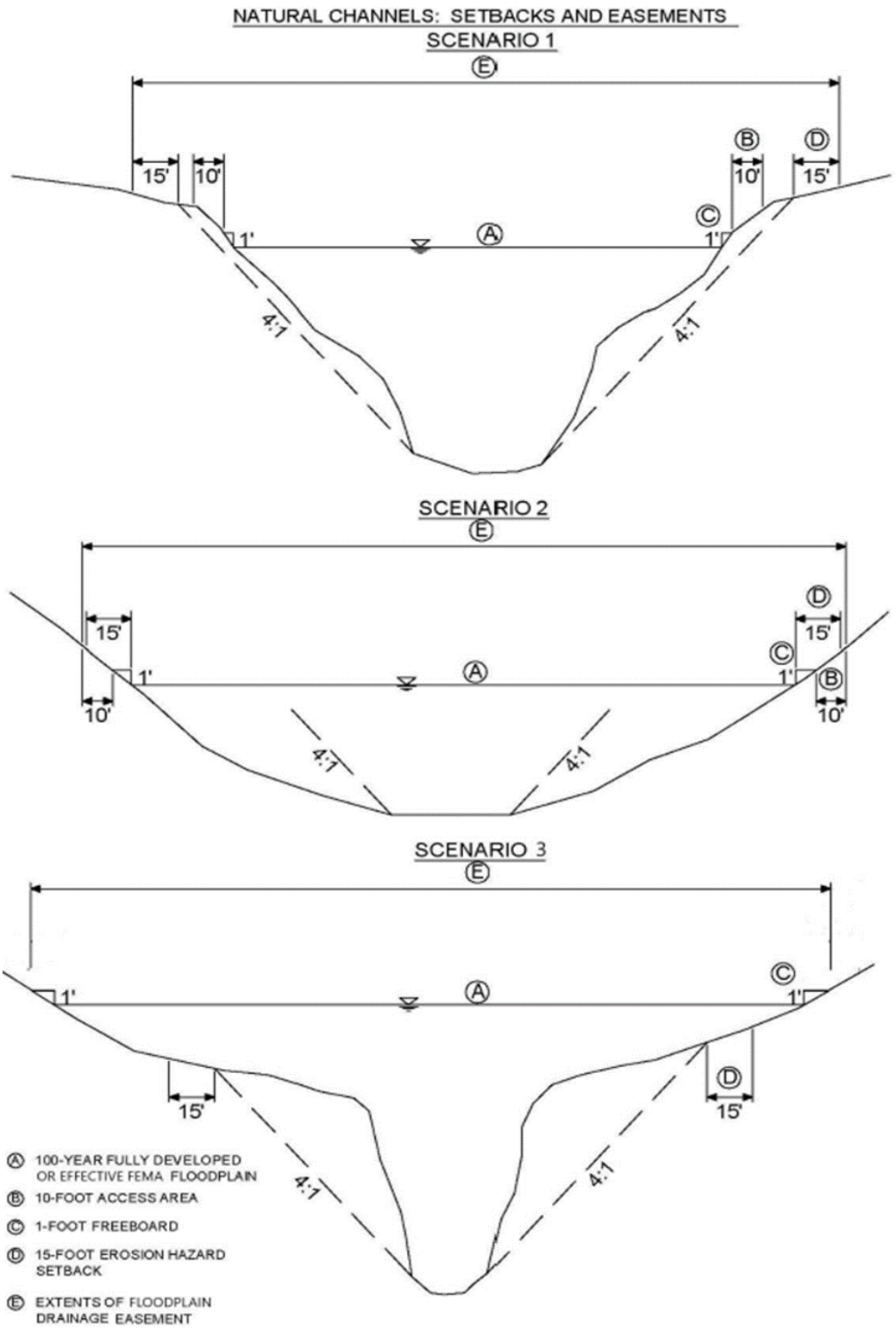
    1. A geotechnical and geomorphological stability analysis.
    2. Mitigation for flowline degradation, erosion at outside bends, or other areas of erosive risk. Mitigation could include but is not limited to:
        i. Grade control
        ii. Bendways
        iii. Headcut armoring
        iv. Slope stabilization

Table 13.3 provides allowable ranges for roughness coefficients of open channels.

Table 13.3: Channel Roughness Coefficients

Channel Description	Roughness Coefficient		
	Minimum	Normal	Maximum
Minor Natural Streams			
Moderately Well-Defined Channel			
-grass and weeds, little brush	0.025	0.030	0.033
-dense weeds, little brush	0.030	0.035	0.040
-weeds, light brush on banks	0.030	0.035	0.040
-weeds, heavy brush on banks	0.035	0.050	0.060
-weeds, dense willows on banks	0.040	0.060	0.080
Irregular Channel with Pools and Meanders			
-grass and weeds, little brush	0.030	0.036	0.042
-dense weeds, little brush	0.036	0.042	0.048
-weeds, light brush on banks	0.036	0.042	0.048
-weeds, heavy brush on banks	0.042	0.060	0.072
-weeds, dense willows on banks	0.048	0.072	0.096
Flood Plain, Pasture			
-short grass, no brush	0.025	0.030	0.035
-tall grass, no brush	0.030	0.035	0.050
Flood Plain, Cultivated			
-no crops	0.025	0.030	0.035
-mature crops	0.030	0.040	0.050
Flood Plain, Uncleared			
-heavy weeds, light brush	0.035	0.050	0.070
-medium to dense brush	0.070	0.100	0.160
-trees with flood stage below branches	0.080	0.100	0.120
Major Natural Streams			
Moderately Well-Defined Channel	0.025	-----	0.060
Irregular Channel	0.035	-----	0.100
Unlined Vegetated Channels			
Mowed Grass, Clay Soil	0.025	0.030	0.035
Mowed Grass, Sandy Soil	0.025	0.030	0.035
Unlined Unvegetated Channels			
Clean Gravel Section	0.022	0.025	0.030
Shale	0.025	0.030	0.035
Smooth Rock	0.025	0.030	0.035
Lined Channels			
Smooth Finished Concrete	0.013	0.015	0.020
Riprap (Rubble)	0.30	0.40	0.50

Figure 13.3: Natural Open Channels



§13.07.010. Culverts and Bridges

~~(a) At locations of stream or open channel crossings with proposed roadway improvements, it is sometimes necessary to receive and transport stormwater under the roadway in culverts. The quantity of flow shall be determined by the appropriate method, and the friction loss through of the culvert shall be calculated by Manning's Formula.~~

~~(b) Design of culverts shall include the determination of upstream backwater conditions as well as downstream velocities and flooding conditions. Consideration shall be given to the discharge velocity from culverts, and the limitations specified culverts with the limitation that culvert pipe diameter shall be a minimum 18". A headwall is required at exposed ends. Under private driveways, permanent culverts (those with reinforced concrete, asphalt, or AASHTO #3 gravel paving over the culvert) and temporary culverts (those without paving over the culvert) shall be constructed with reinforced concrete or minimum 16 gauge galvanized corrugated steel pipe. Temporary culverts and driveways must be removed within 18 months of permit issuance and the open channel reconstructed to its original design. Under public roads reinforced concrete culverts are required. Permanent culvert design shall include minimum embedment of Class B+ per the North Central Texas Council of Governments (NCTCOG) design manual drawing 3020 dated October 2004.~~

a) Culverts.

1) All culverts, headwalls, wingwalls, and aprons shall be designed in conformance with the City Standard Details. The Engineer is responsible for selecting the applicable detail. The design of culverts shall include the determination of upstream backwater conditions as well as downstream velocities and flooding conditions. Consideration shall be given to the discharge velocity from culverts, and the limitations specified culverts with the limitation that culvert pipe diameter shall be a minimum 18". A headwall is required at exposed ends. Under private driveways, permanent culverts (those with reinforced concrete, asphalt, or AASHTO #3 gravel paving over the culvert) and temporary culverts (those without paving over the culvert) shall be constructed with reinforced concrete or minimum 16 gauge galvanized corrugated steel pipe. Temporary culverts and driveways must be removed within 18 months of permit issuance and the open channel reconstructed to its original design. Under public roads, reinforced concrete culverts are required. Permanent culvert design shall include minimum embedment of Class B+ per the North Central Texas Council of Governments (NCTCOG) design manual drawing 3020 dated October 2004.

2) Culvert calculations shall be provided to the City for review. Calculations may include, but are not limited to, headwall, tailwater, and flowline elevations, lowest adjacent grade and structure elevations, inlet and outlet control calculations and velocity calculations.

3) There is a minimum 1-foot freeboard from top of grade at a culvert crossing to the 100-year fully developed water surface elevation. An emergency overflow path

shall be identified and provided on the construction plans. An emergency overflow path is the path the stormwater will take when the drainage facilities become clogged or do not function in the manner as to which it was designed. The emergency overflow path shall be limited to public right-of-way or drainage easements.

4) Culverts should always be aligned to follow the natural stream channel. The engineer shall provide sufficient information to analyze the upstream and downstream impacts of the culvert and illustrate the interaction of the channel and culvert alignment.

5) Headwalls and Entrance Conditions:

   i. The Engineer shall be responsible for the headwall and wingwall designs. Headwalls refer to the entrances and exits of structures and are usually formed of cast-in-place concrete and located at either end of the drainage system. Wingwalls are vertical walls, which project out from the sides of a headwall.

   ii. The culvert entrance losses are provided in Table 13.4. The values of the entrance coefficient Ke represent a combination of the effects of entrance and approach conditions. Losses shall be calculated using the following formula:

$$H_e = K_e\left(\frac{v^2}{2g}\right)$$

H_e = Entrance head loss (ft)
K_e = Entrance loss coefficient
v = velocity (ft/sec)
g = gravitational constant (32.2 ft/sec^2)

6) Concrete culvert headwalls and wingwalls shall use natural stone or brick veneer. The material palette shall be similar and complimentary to materials used throughout the development and are subject to approval by the City Engineer.

Table 13.4: Culvert Entrance Loss Coefficients

Type of Structure	K_e
Pipe, Concrete	
-projecting from fill, socket and (groove end)	0.2
-projecting from fill, square cut end	0.5
-headwall or headwall and wingwalls: socket end of pip (groove end)	0.2
-headwall or headwall and wingwalls: swuare edge	0.5
-headwall or headwall and wingwalls: rounded (radius - 0.0933D)	0.2
-mitered to conform to fill slope	0.7
-beveled edges, 33.7 or 45	0.2
-side or sloped tapered inlet	0.2
Pipe, or Pipe-Arch	
-projecting from fill (no headwall)	0.9
-headwall or headwall and wingwalls: square edge	0.5
-mitered to conform to fill slope, paved / unpaved slope	0.7
-beveled edges, 33.7 or 45	0.2
-side or sloped tapered inlet	0.2
Box, Reinforced Concrete	
-headwall parallel to embankment (no wingwalls): squared on three sides	0.5
-headwall parallel to embankment (no wingwalls): rounded on three sides to radius 1/12 barrel dimension on three sides	0.2
-wingwalls at 30 to 75 to barrel: square edged at crown	0.4
-wingwalls at 30 to 75 to barrel: crown edge rounded to radius of 2/12 barrel dimension or beveled top edge	0.2

b) Bridges.

1) The City requires that head losses and depth of flow through bridges be determined with a HEC-RAS program or other approved program. The following guidelines pertain to the hydraulic design of bridges:

i. Fully developed 100-year water surface must not be increased upstream of the bridge.

ii. Excavation of the natural channel is not allowed as compensation for loss of conveyance.

iii. Channelization upstream or downstream of the proposed bridge will only be permitted when necessary to realign the flow to a more efficient angle of approach.

iv. Side swales may be used to provide additional conveyance downstream of and through bridges.
v. Bridges are to be designed with the lowest point (low beam) low chord at least 2-foot above the fully developed 100-year water surface elevation.

2) A scour analysis shall be submitted with the construction plans.

§13.07.011. Stormwater Detention Pond Design

~~The basic concept underlying the use of stormwater detention ponds (SDP) involves providing temporary storage of stormwater runoff so that peak rates of runoff can be reduced. Runoff is released from storage at a controlled rate which cannot exceed the capacities of the existing downstream drainage systems or the pre-developed peak runoff rate of the site, whichever is less. Stormwater detention ponds may be of two (2) basic types: On-site and Regional. In general, on-site ponds are those which are located off-channel and provide stormwater detention for a particular project of development. Regional ponds are designed to provide stormwater detention in conjunction with other improvements on a watershed-wide basis. The performance and safety criteria in this section apply to all ponds which provide management of peak rates of stormwater runoff, regardless of type.~~

~~(1) Performance criteria for on-site SDP's.~~

~~(A) On-site SDP's are further classified as either small or large, as follows:~~

~~ON-SITE SDP~~	~~POND CLASS DRAINAGE AREA~~
~~Small~~	~~<25 acres~~
~~Large~~	~~25-64 acres~~

~~For design purposes, any pond with a drainage area larger that 64 acres shall be classified as a regional pond.~~

~~(B) On-site SDP ponds shall be designed to reduce post-development peak rate of discharge to existing pre-development peak rates of discharge for the 2-, 10-, 25- and 100-year storm events at each point of discharge from the project or development site. In addition, the capacity of theexisting downstream systems must be considered in determining the need for managing the100-year storm event. For the post-development hydrologic analysis, any offsite areas whichdrain to the pond shall be assumed to remain in the existing developed condition.~~

~~(C) The Rational Method (RM) may be used for the design of small on-site ponds only. The maximum contributing drainage area to a pond designed with the RM is 50 acres when using this equation.~~

~~(D) A design method approved by the City Engineer.~~

~~(2) Performance criteria for regional SDP's.~~

(A) Regional SDP's are classified as small or large, based on the following criteria:

REGIONAL IMPOUND	POND CLASS VLUME, AC-foot
Small	0-150
Large	>150

Any regional pond with a height of dam over 15 feet shall be classified as a large regional pond.

(B) Performance criteria for regional detention ponds shall be determined by the City on a project-by-project basis. The determination shall be based on a preliminary engineering study prepared by the project engineer.

(3) Safety criteria for SDP's.All ponds shall meet or exceed all specified safety criteria. Use of these criteria shall in no way relieve the engineer of the responsibility for the adequacy and safety of all aspects of the design of the SDP.

(A) The spillway, embankment, and appurtenant structures shall be designed to safely pass the design storm hydrograph with the freeboard shown in the table below. All contributing drainage areas including on-site and off-site area shall be assumed to be fully developed. Any orifice with a dimension smaller than or equal to twelve (12) inches shall be assumed to be fully blocked.

(i) Detention design storm freeboard to top pond class event of embarkment, FT.

a. On-site: Small 100 year 0.
b. Large 100 year 1.0.
c. Regional: Small 100 Year 2.0.
d. Large 100 year*.

* Design storm event and required freeboard for large regional ponds shall be determined in accordance with Chapter 299 of the Texas Administrative Code (Dam Safety Rules of the Texas Natural Resource Conservation Commission).

(B) All SDP's (except small on-site ponds) shall be designed using a hydrograph routing methodology. The Rational Method (RM) may be used only for contributing drainage areas less than fifty (50) acres.

(C) The minimum embankment top width of earthen embankments shall be as follows:

(i) Total height of minimum top embankmant, FT. width, FT.

0-6, 4'
6-10, 6'
10-15; 8'
15-20 10'
20-25, 12'
25-35 15'

(D) The constructed height of an earthen embankment shall be equal to the design height plus the amount necessary to ensure that the design height will be maintained once all

settlement has taken place. This amount shall in no case be less than five (5%) percent of the total fill height. All earthen embankments shall be compacted to 95% of maximum density.

(E) Earthen embankment side slopes shall be no steeper than three (3) horizontal to one (1) vertical. Slopes must be designed to resist erosion, to be stable in all conditions and to be easily maintained. Earthen side slopes for regional facilities shall be designed on the basis of appropriate geotechnical analyses.

(F) Detailed hydraulic design calculation shall be provided for all SDP's. Stage-discharge rating data shall be presented in tabular form with all discharge components, such as orifice, weir, and outlet conduit flows, clearly indicated. A stage-storage table shall also be provided.

(G) When designing SPD's in a series (i.e., when the discharge of one pond becomes the inflow to another), the engineer must submit a hydrologic analysis which demonstrates the system's adequacy. This analysis must incorporate the development of hydrographs for all inflow and outflow components.

(H) No outlet structures from SDP's parking detention, or other concentrating structures shall be designed to discharge concentrated flow directly onto arterial or collector streets. Such discharges shall be conveyed by a closed conduit to the nearest existing storm sewer. If there is no existing storm sewer within 300 feet, the outlet design shall provide for a change in the discharge pattern from concentrated flow back to sheet flow, following as near as possible the direction of the gutter.

(I) Stormwater runoff may be detained within parking lots. However, the engineer should be aware of the inconvenience to both pedestrians and traffic. The location of ponding areas in a parking lot should be planned so that this condition is minimized. Stormwater ponding depths (for the 100-year storm) in parking lots are limited to an average of eight (8") inches with a maximum of twelve (12") inches.

(J) All pipes discharging into a public storm sewer system shall have a minimum diameter of twelve (12"). In all cases ease of maintenance and/or repair must be assured.

(K) All concentrated flows into a SDP shall be collected and conveyed into the pond in such a way as to prevent erosion of the side slopes. All outfalls into the pond shall be designed to be stable and non-erosive.

(4) Outlet structure design. There are two (2) basic types of outlet control structures: those incorporating orifice flow and those incorporating weir flow. Weir flow is additionally broken down into two (2) categories: rectangular and V-notch. In each type, the bottom edge of the weir over which the water flows is called the crest. Sharp-crested and broad-crested weirs are the most common types. Generally if the crest thickness is more than 60% of the nappe thickness, the weir should be considered broad-crested. The coefficients for sharp-crested and broad-crested weirs vary. The respective weir and orifice flow equations are as follows:

(A) Rectangular Weir Flow Equation

$$Q = CLH\ 3/2$$

where

Q = Weir discharge, cubic feet per second
C = Weir coefficient
L = Horizontal length, feet
H = Head on weir, feet

(B) V-notch Weir Flow Equation

$$Q = Cv \tan (O/2) H 2.5$$

where

Q = Weir Flow, cubic feet per second
Cv = Weir Coefficient
O = Angle of the Weir notch at the apex (degrees)
H = Head on Weir, feet

(C) Orifice Flow Equation

$$Q = Co\ A\ (2gH)\ 0.5$$

where

Q = Orifice Flow, cubic feet per second
Co = Orifice Coefficient (use 0.6)
A = Orifice Area, square feet
g = Gravitation constant, 32.2 feet/sec2
H = Head on orifice measured from centerline, feet

Analytical methods and equations for other types of structures shall be approved by the City prior to use.

(5) Detention pond storage determination.

(A) The method to be used for determining detention pond volume requirements is governed initially by the size of the total contributing drainage area to the pond.

(B) For contributing areas up to fifty (50) acres, the Rational Method (RM) may be used.

(C) For contributing areas greater than fifty (50) acres, a flow routing analysis using detailed hydrographs must be applied. The Soil Conservation Service hydrologic methods (available in TR-20, HEC-1) can be used. The engineer may use other methods but must have their acceptability approved by the City engineer. These methods may also be used for the smaller areas.

(6) Detention pond maintenance and equipment access requirements.

(A) Silt shall be removed and the pond returned to original lines and grades when standing water conditions occur or the pond storage volume is reduced by more than 10%.

~~(B) To limit erosion, no unvegetated area shall exceed 10 sq. ft in extent.~~

~~(C) Accumulated paper, trash and debris shall be removed every 4 weeks or as necessary to maintain proper operation.~~

~~(D) Ponds hall be mowed monthly between the months of May and September.~~

~~(E) Corrective maintenance is required any time a pond does not drain completely within 60 hours of cessation of inflow (i.e., no standing water is allowed).~~

~~(F) Structural integrity of pond embankments shall be maintained at all times.~~

~~(G) Upon completion of development the owner/Homeowners association shall be required to maintain the detention basin in its original designed and approved condition.~~

a) Detention facilities shall be designed based upon the following minimum criteria:

1. Detention shall be provided for the 2, 5, 25, and 100-year design storms based on the results of a downstream assessment. Sites without a downstream assessment will be required to provide detention to undeveloped runoff rates.

2. The minimum bottom slope for above-ground detention facilities shall be 1%.

3. The Engineer shall provide an operations and maintenance plan for the detention/retention facility as part of the design. The operations and maintenance plan shall indicate the ingress and egress locations to enter and maintain the pond, maintenance roles and responsibilities, contact information for the party responsible for the maintenance, and a maintenance schedule. Plan shall be recorded in the Collin County Real Property Records.

4. Criteria established by the State of Texas for dam safety (TAC Title 30, Part 1, Chapter 299) and impoundment of state waters (Texas Water Code Chapter 11) shall apply where required by the state, and where, in the Engineer's judgment, the potential hazard requires these more stringent criteria.

5. All detention/retention facilities shall demonstrate and provide an adequate outfall in accordance with City Requirements. An adequate outfall is a structure or location that is adequately designed as to not cause adverse flooding conditions, erosion, or any other adverse impacts. An adequate outfall shall also have capacity to convey the increased fully developed runoff.

b) Detention Storage Calculation.

1. Detention facilities without upstream detention areas and with drainage areas of 20 acres or less can be designed using the Modified Rational Method otherwise the Unit Hydrograph Method shall be used.

2. If the Unit Hydrograph Method is used, the model shall extend through the Zone of Influence (see § 13.07.006) and include existing detention facilities within the Zone of Influence watershed.

3. No required parking space or fire lane may be located within a surface drainage pond. A maximum depth of 6 inches of ponded water is allowed in the parking lot.

4. If detention storage is located within a floodplain, the storage amount lost to the floodplain elevation must be modeled with unit hydrograph or the detention storage raised above the floodplain elevation.

c) Pond and Spillway Geometry.

1. Detention/retention facilities shall be designed with an emergency bypass/spillway in case the primary outfall ceases to function as designed. The emergency bypass/spillway shall be designed to pass a minimum of the 100-year pond inflow.

2. Detention/retention facilities shall have a minimum of 1-foot of freeboard above the 100-year water surface elevation.

3. Where embankments are used to temporarily impound detention, the effective crest of the embankment will be a minimum of 1-foot above the 100-year water surface elevation.

4. The minimum finish floor elevation for any lot adjacent to a detention/retention facility shall be 2 feet above the adjacent 100-yr fully developed water surface elevation.

5. The steepest side slope permitted for a vegetated embankment is 4:1.

6. Earth embankments used to temporarily or permanently impound surface water must be constructed according to specifications as required based on geotechnical investigations of the site and all regulatory requirements.

7. Access shall be provided to the banks and bottom of a detention facility for maintenance.

    i. Engineer shall provide an operations and maintenance plan that will detail access.
    ii. Retention facilities shall address dewatering procedures.

8. It is the responsibility of the Engineer to consider pedestrian and vehicular safety in the design of detention facilities. Perimeter rails or fencing may be required.

9. Underground detention facilities shall be designed with reinforced concrete if located under fire lane or within city right of way.

d) Texas Commission Environmental Quality Requirements for Dams. The Texas Commission on Environmental Quality (TCEQ) provides design and review criteria for construction plans and specifications, construction, operation and maintenance, inspection, repair, removal, emergency management, site security, and enforcement of dams.

The design engineer shall refer to the Texas Administrative Code, Title 30, Part 1, Chapter 299 Dams and Reservoirs for current dam safety criteria. All proposed construction or modification of dams are required to adhere to TCEQ dam safety criteria. Should the design engineer desire to utilize an existing facility that would qualify under these criteria and the use of the facility changes from an agricultural use to another use, the existing facility may need to be brought into compliance with the TCEQ dam safety criteria. If dams that fall under the TCEQ dam safety criteria, the City will require review and approval from TCEQ prior to authorizing construction.

Retention facilities must obtain a TCEQ water rights permit if applicable. Refer to TCEQ for water rights regulations. For retention facilities without a water rights permit, the Engineer shall provide a signed statement to the City stating the water rights permit is not required.

§ 13.07.012. Tables and forms.
The following tables and forms are outlined and depicted below.[1]

§ 13.07.013 Energy Dissipators.

a) The Engineer shall be responsible for all energy dissipation designs. This may include channel armoring, gabion structures, gabion mattresses, rip-rap, turf reinforcement mats, and others as proposed

b) All energy dissipation designs shall include supporting calculations showing the design is adequate. The City may require the Engineer to provide a hydraulic model as supporting documentation.

c) All energy dissipators should be designed to facilitate future maintenance. The design of outlet structures in or near parks or residential areas shall give special consideration to appearance and shall be approved by the City Engineer.

§ 13.07.014 Floodplain Alterations.

a) No construction is allowed within floodplain areas (FEMA Effective floodplain or City of Lucas Fully Developed floodplain), but construction is allowed in those areas that have been reclaimed from the floodplain.

[1] *Editor's Note: Said tables and forms can be found as attachments to this chapter.*

b) Floodplain alteration shall be allowed only if all the following criteria are met:

1) Flood studies shall include flows generated for existing conditions and fully developed conditions for the 2, 5, 25, and 100-year storm events.

2) Alterations shall not increase the 100-year fully developed water surface elevation on other properties.

3) Alterations shall be in compliance with FEMA guidelines.

4) Alterations of the floodplain shall meet the requirements of Section 13.07.006.

5) Alterations shall result in no loss of valley storage for a Major Creek, and a 15% maximum loss of valley storage for any other tributary for any reach, except at bridge and culvert crossings where it can be proven that there are no detrimental effects downstream.

6) Any alteration of floodplain areas shall not cause any additional expense in any current or projected public improvements, including maintenance.

7) The floodplain shall be altered only to the extent permitted by equal conveyance on both sides of the natural channel, as defined by the United States Army Corps of Engineers in a HEC-RAS analysis. The right of equal conveyance applies to all owners and uses, including greenbelt, park areas, and recreational areas. Owners may relinquish their right to equal conveyance by providing a written agreement to the City Engineer.

8) A grading permit and/or construction plan approval shall be required to perform any grading activities on site.

9) The toe of any fill shall parallel the natural direction of the flow.

10) Floodplain alterations shall incorporate and consider other City planning documents and ordinances such as the Tree Preservation Ordinance, the Subdivision Ordinance, and the Floodplain Ordinance.

11) Unless a pre-existing model is in place, United States Army Corps of Engineers (USACE) HEC-HMS and HEC-RAS shall be used. A request to use another type of hydrologic or hydraulic model must be submitted to the City Engineer for approval. Modified Puls method shall be used for flood routing information to ensure that the cumulative effects of the reduction in floodplain storage of floodwater will not cause downstream or upstream increases in water surface elevations and erosive velocities. If Modified Puls method is not feasible, a request to use another type of flood routing method must be submitted to City Engineer for approval.

c) The Engineer is responsible for providing documentation of the relevant USACE approved permits prior to beginning modification to the floodplain or impacts to Waters of the US (WoUS) or for providing a signed and sealed statement detailing why such permits are unnecessary.

d) Verification of Floodplain Alterations:

1) The owner/developer shall furnish, at their expense, to the City Engineer sufficient engineering information to confirm that the minimum finished floor elevations proposed are as required by this ordinance.

2) Construction plans will not be released for construction within areas subject to a Conditional Letter of Map Revision (CLOMR) or amendment until accepted by the City Engineer and FEMA.

3) Letters of Map Revision (LOMR) application shall be submitted to the City Engineer prior to submittal to FEMA no later than 60 days from the City's final acceptance of the construction.

4) All submittals to FEMA shall be submitted to the City Engineer prior to submittal to FEMA. A copy of all responses to FEMA comments shall be submitted to the City.

§ 13.07.015 Drainage Easements.

a) The following minimum width exclusive drainage easements are required when facilities are not located within public rights-of-way or easements:

1) Overflow paths are to be located within a minimum 10-foot drainage easement.

2) A Floodplain Drainage easement is required to be dedicated over open channels or creeks. See Figure 13.3. (Erosion Hazard Setback)

3) A Drainage and Detention Easement is required to be dedicated over detention facilities.

b) Floodplain Drainage Easements shall be dedicated for all floodplains and shall include an erosion hazard setback to reduce the potential for damage due to erosion of the bank.

c) Drainage and Detention Easements shall be dedicated for all detention/retention facilities.

SECTION 2. To the extent of any irreconcilable conflict with the provisions of this Ordinance and other ordinances of the City of Lucas and which are not expressly amended by this Ordinance, the provision of this Ordinance shall remain and be controlling.

SECTION 3. That should any word, sentence, paragraph, subdivision, clause, phrase or section of this Ordinance be adjudged or held to be unconstitutional, illegal, or invalid, the same shall not affect the validity of the remaining portions of this Ordinance or the City of Lucas Code of Ordinances, as amended hereby, which shall remain if full force and effect.

SECTION 4. An offense committed before the effective date of this Ordinance is governed by prior law and the provisions of the Ordinances of the City of Lucas, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 5. That any person, firm or corporation violating any of the provisions or terms of this Ordinance shall be subject to the same penalty as provided for in the Code of Ordinances, as amended, and upon conviction in the municipal court shall be punished by a fine not to exceed the sum of Two Thousand Dollars ($2,000.00) for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

SECTION 6. That this Ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Lucas, and it is accordingly so ordained.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF LUCAS, COLLIN COUNTY, TEXAS, ON THIS 6 DAY OF JULY, 2023.

APPROVED:

_____
Jim Olk, Mayor

ATTEST:

_____
Kent Souriyasak, Assistant City Manager

APPROVED AS TO FORM:

_____
Joseph J. Gorfida, Jr., City Attorney
(6-26-2023/cgm/TM 135662)

Item No. 06

City of Lucas
City Council Agenda Request
July 6, 2023

Requesters: City Attorney Courtney Morris

Agenda Item Request

Consider legislative bills that passed during the 88th Texas Legislative Session and provide direction to City Staff and City Council if needed.

Background Information

The 88th Legislature's regular session ran from January 10 to May 29, 2023.

Attachments/Supporting Documentation

1. TML Legislative Update Number 25 (June 23, 2023)

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

TML LEGISLATIVE UPDATE

June 23, 2023
Number 25

Special Session Update

This week, the Senate passed their new property tax relief plan, **1S.B. 26** and **1S.J.R. 2** by Bettencourt. The legislation would allow for a $100,000 homestead exemption by a school district, add more state funding to buy down school district property tax rates, exempt some small businesses from the state franchise tax, and impose a stricter revenue cap on school districts.

The House still stands adjourned *sine die*. The first called special session is set to end next week and the prospect of legislation passing during this session appears to be very slim.

Governor Vetoes Include City-Related Bills

Governor Abbott vetoed seventy-seven bills passed by the legislature during the regular session. Ten of the seventy-seven were city-related bills described in the League's "wrap-up" *Legislative Update* on June 4. (Both the pdf and online version of that edition have been updated to reflect vetoed bills.)

Those ten vetoed are detailed here:

- **H.B. 2956 (Shine/Flores) – Annexation Across Railway Right-of-Way**: this bill, among other things, allows a city that is annexing property under certain conditions to annex an additional area adjacent to railroad rights-of-way if the railroad right-of-way is: (1) contiguous, and runs parallel to the city's boundaries; and (2) contiguous to the area being annexed. (Effective immediately.)

  According to the governor's veto message, "While House Bill No. 2956 is important, it is simply not as important as cutting property taxes. At this time, the legislature must concentrate on delivering property tax cuts to Texans. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **H.B. 4759 (Campos/Menendez) – Dangerous Dogs**: this bill, among other things, provides that the identifying information of a witness who gives a sworn statement relating to a dangerous dog attack: (1) is confidential and not subject to disclosure under the Public Information Act; and (2) may be disclosed for purposes of enforcing state law related to dangerous dog determinations to the governing body of a city or county in which the incident occurred, as appliable, and any other governmental or law enforcement agency. (Effective September 1, 2023.)

  According to the governor's veto message, "Texas's existing criminal laws penalize attacks by dangerous dogs — so much so that felony arrests have already been made of the dog owners responsible for the tragic attack that took the life of a distinguished Air Force veteran in San Antonio, and that was the catalyst for House Bill No. 4759. The justice system should be allowed to work without the overcriminalization found in this bill. I look forward to working with the author to create investigations and procedures that stop dog attacks *before* they happen."

- **S.B. 267 (King/Burrows) – Law Enforcement Agency Accreditation**: provides, among other things, that: (1) the Texas Commission on Law Enforcement (TCOLE) shall adopt rules requiring each law enforcement agency that employs at least 20 peace officers to become accredited and maintain accreditation through or by (a) the Texas Police Chiefs Association Law Enforcement Agency Best Practices Accreditation Program; (b) the Commission on Accreditation for Law Enforcement Agencies, Inc.; (c) the International Association of Campus Law Enforcement Administrators; (d) an accreditation program developed by the Sheriff's Association of Texas; or (e) an association or organization designated by TCOLE; (2) the rules adopted under (1), above, must require a law enforcement agency that is not already accredited to: (a) execute a contract with an approved accrediting entity not later than September 1, 2027; and (b) become accredited not later than September 1, 2029; (3) TCOLE shall implement a program to assist law enforcement agencies in becoming accredited; (4) TCOLE shall periodically review associations and organizations that establish standards of practice for law enforcement agencies and that offer accreditation to agencies that meet those standards; (5) a law enforcement agency shall annually report the agency's accreditation status, including the applicable accrediting entity described in (1), above, to TCOLE; (6) TCOLE shall post on

its website a list of all law enforcement agencies that are currently accredited or under contract with an accrediting entity; and (7) the comptroller shall establish and administer a grant program to provide financial assistance for purposes of becoming accredited as required by (1), above, to each law enforcement agency that employs fewer than 250 peace officers. (Effective September 1, 2023.)

According to the governor's veto message, "While Senate Bill No. 267 is important, it is simply not as important as cutting property taxes. At this time, the legislature must concentrate on delivering property tax cuts to Texans. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 1399 (Schwertner/K. Bell) – Renewal of Air Quality Permits**: this bill applies to certain concrete plants that perform wet batching, dry batching, or central mixing and provides that: (1) the Texas Commission on Environmental Quality (TCEQ) shall at least once every six years conduct a protectiveness review of the permit regarding the operation of a permanent concrete plant, including by reviewing available background concentrations of air pollutants; (2) if TCEQ amends the permit after a protectiveness review, TCEQ shall allow facilities authorized to emit air contaminants under the permit as it read before the amendment to continue to operate until a date provided by TCEQ; and (3) each authorization to use a permit is subject to review at least once every six years to determine whether the authority to operate the facility authorized by the permit should be renewed. (Effective September 1, 2023.)

  According to the governor's veto message, "Senate Bill No. 1399 appears to add more bureaucracy and cost."

- **S.B. 1439 (Springer/Hefner) – Business Personal Property Tax Exemption**: provides that if a person owns income-producing tangible personal property and is a related business entity, the person's property is aggregated with the property that is owned by each other related business enterprise that composes the same unified business enterprise to determine the taxable value of the property. (Effective January 1, 2024.)

  According to the governor's veto message, "While Senate Bill No. 1439 is important, it is simply not as important as cutting property taxes. At this time, the legislature must concentrate on delivering property tax cuts to Texans. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 1916 (Parker/Shine) – Public Improvement Districts**: requires a city: (1) to post a copy of a public improvement district ("PID") service plan and certain other information on the city's website within seven days of approving, amending, or updating the plan; (2) to submit an assessment roll for each city PID to each appraisal district in which property subject to assessment is located within seven days of levying the assessment; and (3) to post on its website certain information about city PIDs. (Effective January 1, 2024.)

  According to the governor's veto message, "While Senate Bill No. 1916 is important, it is simply not as important as cutting property taxes. At this time, the legislature must

concentrate on delivering property tax cuts to Texans. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 1998 (Bettencourt/Shine) – Property Tax Rate Calculation**: this bill requires: (1) a taxing unit to calculate adjustments made to the value of taxable property due to tax revenue the taxing unit pays into a tax increment reinvestment zone fund separately for each reinvestment zone in which the taxing unit participates; and (2) the designated officer or employee of a taxing unit to include a hyperlink to a document that evidences the accuracy of an entry in the tax rate calculation form for each entry on the form, other than an entry making a mathematical calculation. (Effective January 1, 2024.)

  According to the governor's veto message, "Senate Bill No. 1998 requires data reporting on property taxes, but does nothing to cut property taxes. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 2035 (Bettencourt/Capriglione) – Local Debt**: this bill: (1) prohibits the governing body of an issuer, including a city council, from authorizing an anticipation note to pay a contractual obligation to be incurred if a bond proposition to authorize bonds for the same purpose was submitted to the voters during the preceding five years and failed to be approved; (2) provides an exception to (1), above, if: (a) the governing body of an issuer is issuing the note for: (i) a case of public calamity if it is necessary to act promptly to relieve the necessity of the residents or to preserve the property of the issuer; (ii) a case in which it is necessary to preserve or protect the public health of the residents of the issuer; or (iii) a case of unforeseen damage to public machinery, equipment, or other property; (b) to finance the cleanup, mitigation, or remediation of a natural disaster; (c) to comply with a federal court order; and (d) to comply with a state or federal law, rule, or regulation if the issuer has been officially notified of noncompliance with the law, rule, or regulation; and (3) prohibits the governing body of an issuer, including a city council, from authorizing certificate of obligation to pay a contractual obligation to be incurred if a bond proposition to authorize the issuance of bonds for the same purpose was submitted to the voters during the preceding five years and failed to be approved. (Effective September 1, 2023.)

  According to the governor's veto message, "Senate Bill 2035 has too many loopholes. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 2453 (Menendez/Hernandez) – Exceptions to Building Material Preemption**: allows a governmental entity, including a city, to adopt a regulation regarding the building the use or installation of a building product, material, or aesthetic method in construction, renovation, maintenance, or other alteration of a residential or commercial building if that product, material or method relates to: (1) certain energy codes adopted by the State Energy Conservation Office; (2) certain energy and water conservation design standards established by the State Energy Conservation Office; or (3) certain high-performance building standards approved by the board of regents of an institute of higher education. (Effective September 1, 2023.)

According to the governor's veto message, "While Senate Bill No. 2453 is important, it is simply not as important as cutting property taxes. At this time, the legislature must concentrate on delivering property tax cuts to Texans. This bill can be reconsidered at a future special session only after property tax relief is passed."

- **S.B. 2493 (Middleton/Bryant)** – **Landlord Repairs**: this bill, among other things: (1) requires that repairs made in response to a tenant's notice of intent to repair must be performed by an independent company, contractor, or repairman; and (2) provides that if the rental unit is located in a city requiring the company, contractor, or repairman to be licensed, the person or entity performing the repair must be licensed in accordance with the city's requirements. (Effective September 1, 2023.)

  According to the governor's veto message, "While updating our laws about landlord-tenant relations is important, it is simply not as important as cutting property taxes. This bill can be reconsidered at a future special session only after property tax relief is passed."

Speaker Forms Select Committee on Property Tax Relief

On Tuesday, Speaker Dade Phelan announced the creation of the House Select Study Committee on Sustainable Property Tax Relief. The new 16-member committee will be charged with examining all elements of state policy that influence the property tax burden on Texas property owners. The committee membership can be found here.

Specifically, the committee shall:

1. Evaluate the dynamic effects of tax rate compression, limits on taxable value, and homestead exemption increases to maximize savings to property owners;

2. Study the viability and sustainability of eliminating maintenance and operations taxes by 2035;

3. Examine historical rates of appraisal increases and recommend methods to reduce the tax burden of appraisal increases on all real property; and

4. Examine the long-term value of homestead exemptions to Texas homeowners in conjunction with the impact of appraisal increases.

The League will monitor and report on the committee's work.

Post-Session Update: Preemption and H.B. 2127

H.B. 2127 becomes law on September 1, 2023. As written, we know the bill does three things. First, H.B. 2127 expressly preempts certain city regulations in the Labor, Property, and Local Government Codes, while exempting specific city regulations from preemption in certain

circumstances. Second, it prohibits a city from adopting or enforcing an ordinance in a field of regulation occupied by state law in eight specific codes. Lastly, it allows a person, or a trade association representing a person, after providing a city with at least three months' notice, to sue the city for adopting or enforcing an ordinance preempted under H.B. 2127.

Moving forward, one primary unresolved question looms large: what fields of regulation does the state occupy? Quite simply, we do not know. This is a legal question that the courts must decide on a case-by-case basis. The full scope of H.B. 2127 will likely be unknown for years.

What we know H.B. 2127 preempts

H.B 2127 blends two forms of preemption – express preemption and implied field preemption.

Express Preemption. H.B. 2127 expressly preempts a city from adopting or enforcing five types of regulations:

- Regulations of employment leave, hiring practices, breaks, employment benefits, scheduling practices, and any other terms of employment that exceed or conflict with federal or state law for employers other than the city;

- New or amended predatory lending regulations;

- Regulations impeding a business involving the breeding, care, treatment, or sale of animals or animal products, including a veterinary practice, or the business's transactions if the person operating the business holds a state or federal license to perform such actions or services;

- New or amended regulations relating to the retail sale of dogs or cats; and

- Regulations involving evictions.

Field Preemption. Field preemption is a legal doctrine that exists largely to govern preemption questions between federal and state regulations. A court may find that federal law preempts state law because a federal regulatory scheme is so comprehensive that it leaves no room for additional state regulation. H.B. 2127 applies this concept to city and state regulatory interactions by providing that: "unless expressly authorized by another statute, a [city] may not adopt, enforce, or maintain an ordinance or rule that regulates conduct in a field of regulation that is occupied by a provision of this code." Any ordinance or rule that violates this provision is void and unenforceable.

But applying field preemption to state law and city ordinances is a novel concept. Texas courts have not explicitly applied field preemption to state law–city ordinance conflicts but have explained that the mere presence of a state regulation does not automatically occupy a regulatory field.

With certain exceptions, H.B. 2127 does not explain when a state occupies a field of regulation. So, whether and to what extent the state occupies a field of regulation must be determined by the courts. The bill's author stated that the bill was drafted in an open-ended way to prospectively preempt ordinances that the legislature has not considered.

The only exceptions to this ambiguity are in the Labor and Property Codes. As mentioned above, H.B. 2127 states that the state occupies the Labor Code regarding "employment leave, hiring practices, breaks, employment benefits, scheduling practices, and other term of employment that exceed or conflict with federal or state law for employers." The bill also explains that the state occupies the Property Code regarding "regulating evictions or otherwise prohibiting, restricting, or delaying delivery of a notice to vacate or filing a suit to recover the possession of the premises under Chapter 24 of the Property Code."

What H.B. 2127 does not preempt

H.B. 2127 does provide for several exceptions. The bill does not preempt city regulations related to:

- Building or maintaining a road, imposing a tax, or carrying out any authority expressly authorized by statute;
- The control, care, management, welfare, or health and safety of animals;
- Conducting a public awareness campaign;
- Negotiating the terms of a collective bargaining agreement with city employees;
- City employee policies;
- Repealing or amending an existing ordinance for the limited purposes of bringing the ordinance into compliance with the bill;
- Predatory lending ordinances adopted before January 1, 2023, and valid under the law before September 1, 2023;
- Ordinances related to the retail sale of cats or dogs adopted before April 1, 2023, until the state adopts a statewide regulation for the retail sale of dogs or cats;
- Local massage establishment regulations adopted under Chapter 455 of the Occupations Code.

The effect on general law and home rule cities

H.B. 2127 has little to no effect on general law cities because general law cities may only exercise the authority expressly granted to them by the state. However, H.B. 2127 will potentially impact

home rule city authority in a significant way. Still, the full scope of this impact is unclear and must be determined by the courts.

According to the Texas Supreme Court, the Texas Constitution gives home rule cities the power of self-government and home rule cities look to the legislature not for grants of authority, but only for limitations on their authority. So, a home rule city may adopt any ordinance or rule to exercise this power that is not inconsistent with state law. In other words, unlike a general law city that must look to state law for its authority to act, a home rule city may act unless expressly prohibited by state law.

Section 11 of the bill appears to potentially contradict the long-standing constitutional interpretation of home rule authority in Texas. This section adds Section 51.002 of the Local Government Code to provide as follows:

> "Notwithstanding Section 51.001, the governing body of a municipality may adopt, enforce, or maintain an ordinance or rule only if the ordinance or rule is consistent with the laws of this state."

This raises even more questions about the scope of the bill. If state law is silent in a certain area, can a home rule city regulate in that area? One might argue yes, since the Texas Constitution gives home rule cities the full power of self-government. But the bill certainly calls home rule authority in question in several areas. There's a real possibility that a court would determine Section 51.002 of the Local Government Code attempts to eliminate city regulatory authority in the absence of state regulation. Such an interpretation by the courts would create a direct conflict between the statute and the Texas Constitution.

One uncodified provision within H.B. 2127 clarifies that the bill may not be construed to prohibit a home rule city from providing the same services and imposing the same regulations that a general-law city is authorized to provide or impose. So, at a minimum, the bill provides a floor for the permissible scope of regulation applicable to a home rule city. The extent to which a home rule city may exceed this floor remains an open question.

Lawsuits under H.B. 2127

A person, or a trade association representing a person, may sue a city for an actual or threatened injury caused by a city adopting or enforcing an ordinance in any of the codes or statutes preempted under H.B. 2127. But before a plaintiff can file a suit, it must first provide the city with at least three months' notice of their claim, including reasonably describing the injury claimed and the ordinance or rule that is the cause of the injury.

Consequently, a city has three months from receiving notice to amend or repeal the challenged ordinance. If a city does not act within those three months, a plaintiff may file suit in the county where all or a substantial part of the alleged events happened or where the city is located. In most cases, this will be the county where the city is located. The parties can also agree to transfer the case to another venue by written consent.

The only relief that a plaintiff can only seek under H.B. 2127 is an order declaring that the challenged ordinance is preempted by state law and barring the city from being able to enforce it. And if a plaintiff wins their suit, they may also seek to recover their court costs and attorney's fees from the city. If the court finds that the plaintiff's suit was frivolous, the city can recover its court costs and attorney's fees from the plaintiff.

How should cities proceed?

As lawyers often say, it depends. H.B. 2127 will have little effect on a general law city. But for a home-rule city, how to proceed will depend on the nature of the challenged ordinances.

As detailed above, as of September 1, 2023, any city ordinances regulating employment practices, the breeding, care, treatment or sale of animals or animal products by certain businesses, and evictions are expressly preempted by state law. Further, cities will be expressly preempted from adopting or amending ordinances relating to predatory lending or the retail sale of dogs and cats.

H.B. 2127 does not automatically preempt other city ordinances falling within the eight codes impacted by the bill. Whether H.B. 2127 preempts any other ordinance must be decided by the courts on a case-by-case basis under the new field preemption concept. To bring suit under H.B. 2127, a plaintiff must provide the city with at least three months' notice of their claim. During this time, the city may repeal or amend the challenged ordinance or choose to defend it in court.

To determine what city ordinances may be subject to suit under H.B. 2127, please consult with your city attorney to identify potentially vulnerable ordinances and determine how best to proceed.

Post-Session Update: ETJ Release

Senate Bill 2038 is a significant piece of legislation that could fundamentally alter how cities interact with their extraterritorial jurisdictions (ETJs). This law authorizes residents and landowners to decide if their respective areas within a city's ETJ remain in the ETJ, offering two pathways for areas within a city's ETJ to be released: (1) through a petition filed by residents or landowners, or (2) by an election on the question of release held in the area within the ETJ.

For the first option, a resident can file a petition for release of their area from the city's ETJ. The petition must contain signatures from more than 50 percent of the registered voters or a majority in value of the titleholders of land in the area. Upon receiving a valid petition, the city secretary verifies the signatures, notifies the residents whether or not the petition contains the required number of signatures, and, if it indeed contains the required number of signatures, the city is required to immediately release the area from its ETJ.

The second pathway for release is by an election. A resident can request an election by submitting to the city a petition bearing the signatures of at least five percent of the registered voters in the area to be released. Following the election, if a majority of qualified voters in the area approve the release, the city must release the area. A city can voluntarily release an area instead of holding an election.

To be valid, a petition must fulfill specific requirements. It must be in writing, detail the area's boundaries, and include a map of the area to be released. The petition must also carry the requisite number of signatures and include each signer's printed name, signature, date of birth, voter registration number, county of registration (if the area spans multiple counties), residence address, and date of signing. For home rule cities, city charter provisions governing petition validity may also apply under certain circumstances.

S.B. 2038's ETJ release provisions do not apply to the following five areas: (1) an area within five miles of a military base boundary where active training occurs; (2) an area within 15 miles of an active military base in San Antonio's or Houston's ETJ; (3) certain areas that were voluntarily annexed into cities' ETJ in Hays County; (4) property located in an industrial district; and (5) property subject to a strategic partnership agreement as defined in Chapter 43 of the Texas Local Government Code.

Moreover, starting from January 1, 2023, the law prevents automatic ETJ expansion due to annexation. Instead, ETJ expansion can only occur if property owners who would be included in the city's ETJ request their area to be included in the ETJ when an area is annexed. The bill requires a city to release ETJ acquired from an annexation commenced after January 1, 2023 to comply with this new limitation on ETJ expansion through annexation.

S.B. 2038 may also impact agreements between cities and counties regarding the regulation of subdivisions in the ETJ under Chapter 242 of the Local Government Code. If an area that is subject to an agreement between the city and county relating to platting or subdivision authority is removed from the city's ETJ, the city retains no authority over that property and the county is the entity authorized to regulate subdivisions in the removed area.

The release of areas from the ETJ under the new legislation will impact the applicability of city regulations outside the city limits. Though cities have limited authority to regulate in the ETJ as it is, S.B. 2038 will potentially disrupt the uniform application of those limited regulations. Most notably, released areas will no longer be subject to applicable subdivision and platting regulations or sign regulations. Cities also will lose the ability to participate in the establishment of certain special purpose districts, like municipal utility districts, in areas that are released from the ETJ.

It is possible that other types of economic development measures are impacted as well, including the operation of municipal development districts and public improvement districts that include areas within the ETJ. Other city regulations, like the extension of nuisance ordinances outside the city limits for home rule cities and regulations governing the operation of city utilities likely will not be impacted, as the statutes authorizing those regulations outside the city limits do not distinguish applicability based on inclusion of the area in the city's ETJ.

S.B. 2038 takes effect on September 1, 2023.

BDO Extends Deadline for Public Survey Responses to August 31

The Texas Broadband Development Office (BDO) has extended the deadline for public surveys regarding broadband service levels around the state to **August 31, 2023**.

The BDO is in the process of developing the Texas Digital Opportunity Plan for achieving reliable and affordable broadband, device access, digital skills training, and cybersecurity awareness to expand digital opportunities for all Texans.

The BDO wants to hear from cities and their residents. To help facilitate such communication, the BDO has created two surveys: the Digital Resources Mapping Tool Survey (DRMT) and the Digital Opportunity Public Survey (DOPS).

The DRMT seeks information from cities about local broadband programs and services. The DRMT will take about 10 minutes to complete.

The DOPS seeks information from individual households about their experience with broadband internet accessibility, affordability, and adoption. The survey includes an optional speed test and is available in English, Spanish, Chinese, and Vietnamese. It is also audio-enabled to ensure that people with limited literacy, limited English proficiency, or visual impairments can head the survey questions and answers. The DOPS will take about 10 minutes to complete. Participants can email their surveys to: plan4broadband@cpa.texas.gov or mail them to the BDO at:

> Texas Comptroller's Broadband Development Office
> P.O. Box 13528
> Austin, TX 13528

The BDO has also created the Texas Digital Opportunity Public Survey Partner Toolkit to help cities engage their residents and disseminate the DOPS. The toolkit includes the survey and provides public outreach suggestions and draft communication templates.

You can find more information about the BDO and the state's broadband efforts here.

All surveys must be submitted by **August 31, 2023.**

TCEQ Seeks Applicants for Advisory Council

The Texas Commission on Environmental Quality (TCEQ) is seeking applicants to serve on the Municipal Solid Waste Management and Resource Recovery Advisory Council. The council performs several duties including:

- Reviews the effect of state policies and programs on Municipal Solid Waste (MSW) management;
- Makes recommendations to the TCEQ on matters relating to MSW management;
- Recommends legislation to encourage the efficient management of MSW;

- Recommends policies for the use or distribution of funds for the Regional Solid Waste Grants Program; and

- Recommends special studies and projects related to MSW management.

Interested city officials can find application forms and more information about the council here.

Unclaimed DOE Grant Funding Available to Eligible Cities

The Energy Efficiency and Conservation Block Grant (EECBG) administered by the Department of Energy (DOE) is a program developed under the federal Infrastructure Investment and Jobs Act. The grant program is designed to help cities reduce energy use and improve energy efficiency.

Communities that have a population of more than 35,000 are eligible for a direct formula allocation from the DOE. Many of the eligible Texas cities have not yet claimed their funding. Eligible Texas cities along with their direct allocation amount can be found here.

To claim the city's money, the EECBG Program Pre-Award Information Sheet must be submitted to DOE at eecbg@hq.doe.gov by **July 31, 2023**. DOE has provided the following resources for cities:

- EECBG Program Guidance: Eligible uses of EECBG Program funds including examples and connections to DOE technical assistance.

- EECBG Technical Assistance website: technical assistance and information on how to maximize program funds.

- EECBG Program Blueprints: Step-by-step guidance to help achieve project goals.

Federal Infrastructure Bill Update

In November 2021, the federal Infrastructure Investment and Jobs Act (IIJA) was signed into law. The IIJA is altogether a $1.2 trillion bill that will invest in the nation's core infrastructure priorities including roads, bridges, rail, transit, airports, ports, energy transmission, water systems, and broadband.

The League will monitor state and federal agencies and work with the National League of Cities (NLC) to access the latest information relating to the IIJA. We will provide periodic updates in the Legislative Update on resources for Texas cities on how to access IIJA funding for local infrastructure projects.

U.S. Department of Transportation (USDOT)

The USDOT is accepting applications for its Transportation Infrastructure Finance and Innovation Act (TIFIA) program. The TIFIA program provides low-interest loans and credit assistance to public and private entities, including local and state governments, for large-scale surface transportation improvement projects. TIFIA funding will provide financing or credit assistance at more advantageous rates than in the financial markets to help fill funding gaps and leverage co-investment opportunities.

Eligible transportation improvement projects include regional and national highway, transit, railroad, intermodal freight, and port access projects. Such projects include international bridges and tunnels, intercity passenger bus and rail vehicles and facilities, publicly owned freight rail facilities, and roadway surface improvements on or adjacent to the National Highway System. Local transportation improvement projects must be included in the applicable State Transportation Improvement Program to be eligible for funding.

The USDOT is accepting TIFIA funding applications on a rolling basis. City officials can find more information about the TIFIA program here.

U.S. Department of Agriculture (USDA)

The USDA is accepting applications for its Community Facilities Direct Loan and Grant (CFDLG) program. The CFDLG program provides direct loans and grants to public bodies, community non-profit corporations, and federally recognized tribes for developing essential communities in rural areas with a population below 20,000 residents.

The CFDLG program defines essential community facilities as facilities that provide an essential service to the local community for the orderly development of the community in a primarily rural area. Examples of essential community facilities include local health care facilities (hospitals, clinics, and assisted-living facilities), public facilities (town halls, courthouses, and street improvements), community support services facilities (child care centers, community centers, and transitional housing), public safety facilities (fire stations, police stations, and EMS vehicles), educational facilities (museums and libraries), and local food system facilities (community gardens and food panties).

CFDLG funding may be used to purchase, construct, or improve essential community facilities, necessary equipment to serve such facilities, and reasonable and necessary related project expenses.

The CFDLG program will prioritize funding projects serving communities with a population of 5,500 or fewer or low-income communities with a median household income below 80% of the state's non-metropolitan median household income.

The USDA is accepting CFDLG funding applications on a rolling basis. City officials can find more information about the CFDLG program here.

City of Lucas
City Council Agenda Request
July 6, 2023

Item No. 07

Requesters: City Council
City Manager Joni Clarke

Agenda Item Request

Consider the recruitment process for the position of City Secretary and provide guidance to the City Manager.

Background Information

The City Secretary resigned and her last day of employment with the City of Lucas was Friday, June 30, 2023 creating a vacancy. The City Manager is seeking City Council feedback regarding the recruitment process to fill the position of City Secretary.

The City of Lucas Home Rule Charter amended by election on May 1, 2021 contains the following information in § 5.01 regarding the position of City Secretary:

(1) Appointment -- The City Council shall appoint the City Secretary, by at least five (5) affirmative votes of the City Council. The City Council shall consider the City Manager's recommendations regarding the appointment of the City Secretary.

(2) Duties -- The City Secretary shall:

(A) Give notice of all official public meetings of the City Council as consistent with this Charter and State law;
(B) Attend all public meetings and hearings of the City Council;
(C) Keep the minutes of the proceedings of all public meetings and hearings of the City Council as prescribed by the City Council consistent with applicable law;
(D) Act as custodian of all official records of the City Council;
(E) Hold and maintain the seal of the City and affix this seal to all appropriate documents;
(F) Authenticate and record all ordinances, resolutions and proclamations of the City by signature and seal;
(G) Perform other duties as may be required by the City Council;
(H) Shall conduct all municipal elections;
(I) Act as agent for the purposes of serving civil process;
(J) Assist the City Manager with the maintenance and public information request of all records as directed by the City Council;
(K) Prepare and recommend to the City Council the annual budget for the office and staff of the City Secretary; and
(L) Work with the City Manager in performing additional duties, as may be necessary, to assist in carrying out the day to day functions of the City.

City of Lucas
City Council Agenda Request
July 6, 2023

(3) Compensation -- The City Council shall fix the compensation, salary and benefits of the City Secretary in accordance with the City Secretary's experience, qualifications and performance.

(4) Removal -- The City Secretary shall be removed, with or without cause, by five (5) affirmative votes of the City Council.

Once City Council feedback is received, HR Generalist Alana Cohen is prepared to advertise the position on the City of Lucas website, Texas Municipal Clerks Association job board, LinkedIn, Indeed, Glassdoor, ZipRecruiter, Texas Municipal League website, Strategic Government Resources job board, Texas Municipal Clerks Association, and Urban Management Assistants of North Texas. The recruitment brochure will also be sent out to all area Human Resources staff email lists and all area City Secretary email lists.

Attachments/Supporting Documentation

1. Draft of City Secretary Recruitment Brochure
2. City Secretary Job Description

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

City Secretary

Full-Time Exempt Position
Competitive Salary DOQ
Premium Benefit Package

Application Deadline: **Friday, August 4th, 2023 at 5:00 p.m.**

THE LUCAS COMMUNITY

Lucas, Texas is a charming bedroom community located northeast in the Dallas-Fort Worth Metroplex. The community has unique features such as appealing rural atmosphere, animal friendly neighborhoods, exceptional educational systems, proximity to retail, low crime rate, high quality housing, and large lot sizes.

With a population of over 9,000, Lucas is expected to grow steadily as people leave the more urban areas of the metroplex and seek the higher quality of life that Lucas offers it residents. Most Lucas residents work outside of the City limits and commute within the Dallas area. Lucas enjoys a stable economy and has benefited from a robust economy in the metropolitan area. Given Lucas' convenient location, proximity to higher population density areas and the high quality of home sites available, the City continues to prosper economically.

The citizens of Lucas enjoy a unique quality of life that incorporates a rural lifestyle, family-friendly atmosphere, and natural beauty which is preserved through zoning that requires homes to be built on large lots. Lucas is primarily a residential community consisting of single-family homes and some commercial areas located along the outskirts of the City. Lucas is an affluent community where the average median income is $174,500 and the average home market value is $1,025,900.

The City's excellent educational system consist of six independent school districts including the Lovejoy Independent School District (LISD) which is consistently ranked as one the best school districts in Texas. LISD has three schools located in Lucas: Joe V. Hart Elementary School, Willow Springs Middle School, and Lovejoy High School. There is also a private school, Lucas Christian Academy, that is located within the City.

Lucas has three public parks available to the public: Lucas Community Park, Kenneth R. Lewis Park, and Forest Creek Park. The Trinity Trail at Lavon Lake borders along the eastern boundaries of Lucas and is a 25-mile trail available for horse riding, hiking, running, and other recreational activities. Lucas also borders along Lavon Lake which provides convenient access for residents to enjoy activities on the lake.

Lucas continues to be a stable and attractive community due to being located outside the pressures and restrictions of intense urban life, and its convenient location relative to local and regional economic and recreational centers. Lucas continues to maintain an exceptional quality of life focused on family, a quiet country atmosphere, and surrounded by beautiful trees and open space.

THE CITY ORGANIZATION

The City of Lucas was incorporated in 1959 and is now home to over 9,000 residents. The City adopted its Home Rule Charter in 2008 and operates under the Council-Manager form of government. The City Council is composed of seven members, including the Mayor and six council members elected at-large and is responsible for enacting local legislation, adopt budgets, determine policies, and provide for the adoption and execution of the laws of the City. The City Manager is appointed by the City Council to serve as chief executive officer of the City for the proper administration of the City.

The City has an established organizational structure and a Leadership Team that reports to the City Manager. The Leadership Team includes the City Manager who appoints directors and key leaders in the organization to ensure City goals are accomplished.

The City currently has 43 full-time employees who staff departments in Administration, Finance, Development Services, Public Works/Engineering, and Fire-Rescue. Although the City does not have a police department, the City contracts with the Collin County Sheriff's Office for assigned deputies to patrol Lucas.

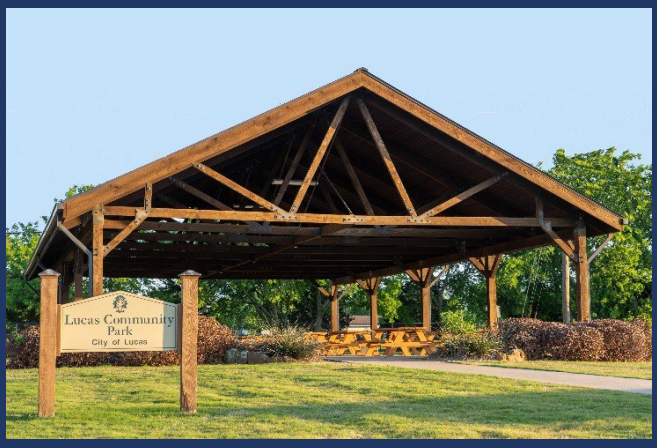
THE CITY ORGANIZATION *(continued)*

The City has established LUCAS organizational values based on the following principles to ensure the provision of extraordinary public service:

- **Leadership** - influencing the behavior of others through positive role-modeling.
- **Understanding** - exercising good judgment and being tolerant of diverse perspectives.
- **Communication** - embracing transparency through the sharing of information.
- **Aspire** - demonstrating the desire to achieve.
- **Service** - having a passion for helping others.

The City is in excellent financial position with AA+ bond rating and current annual budget of $17.3 million. The City has one of the lowest property tax rates in the Dallas-Fort Worth Metroplex. The current property tax rate is $0.268016 cents per $100 of valuation.

The City's conservative financial practices require the General Fund reserve and Water Fund reserve equal to at least six months of working capital (or 50% of expenditures). The City continues to receive the prestigious Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the twelfth consecutive year.



THE POSITION

The City Secretary is an integral member of the organization and while this position is appointed by City Council, the position reports to the City Manager. The City Secretary performs a variety of highly responsible and complex administrative work in support of the Mayor, City Council and City Manager. This position must have an ability to exercise professional judgment and initiative in support of municipal operations. The City Secretary serves as the records management officer and administers all City elections and is responsible to perform all duties as required by the Lucas City Charter and state law.

Essential Functions:

• Coordinates and ensures compliance with the Public Information Act by overseeing request for public information and ensures that all information is released according to state law.
• Serves as the Records Management Officer and is responsible for establishing, maintaining, updating and preserving all historical, public and legal records for the City in compliance with the Texas State Library Records Retention Schedule. Maintains original files for the City including contracts, bonds, agreements, litigation and legal notices.

- Prepares and posts City Council agendas, including the coordination and review of agenda back-up material, finalizing the agenda and is responsible for a quality end product. Distributes agenda materials in a timely fashion.
- Attend all City Council meetings to record meeting minutes and ensure meetings comply with mandated requirements.
- Performs follow through on items acted upon by the City Council including composing and preparing correspondence and advising various individuals of City Council actions ensuring that resolutions and ordinances are in proper format and executed, tracking committee and commission actions and preparing documents on their behalf.
- Prepares and posts Board and Commission agendas, including the coordination and review of agenda back-up material, finalizing the agenda and is responsible for a quality end product. Distributes agenda materials in a timely fashion.
- Attend all Board and Commission meetings to record meeting minutes and ensure meetings comply with mandated requirements.
- Accept board and commission applications and assist City Council in appointment process.

THE POSITION *(continued)*

- Acts as elections administrator to ensure all legal requirements are met, including coordination of all aspects of the City's General and Special Elections, and works directly with Collin County Elections for all municipal elections, monitoring election procedures during election process, ensuring compliance with Texas Local Government law and election rules and regulations.
- Creates, posts, updates, maintains and analyzes features of the City's website, and any other form of electronic communication supported by the City.
- Assists with the preparation of ordinances and resolutions as requested. Files ordinances and resolutions of the council and oversees the codification of ordinance into the municipal code.
- Prepares and advertises meeting agendas, bid and other advertisements and legal notices of public hearings and special meetings.
- Facilitates an effective communication program through the creation of the City's monthly newsletter and assists with community outreach.

Secondary Functions:

- Performs and oversees all duties related to Municipal Court, communications with the Judge, prepares dockets and disposition of cases.
- Files monthly/quarterly State required reports.
- Performs certification and recording for the City as required on legal documents and other records requiring such certification.
- Administers the issuance of alcohol permits and logo trademark documentation.
- Works on special event projects and attends special events (i.e., Founders Day, Country Christmas).
- Accepts legal documents served to the City.
- Administers oath of office to public officials.
- Serves as a notary public.
- Performs all other duties as assigned.

QUALIFICATIONS

- Minimum of seven (7) years of related experience or any equivalent combination of education and experience, equivalence to be determined by the employer.
- Prefer graduation from a college or university with a bachelor's degree in business management, public administration, or a closely related field preferred.
- Must be able to obtain Notary Public Certification within six (6) months of employment.
- Valid Texas Driver's License.

COMPENSATION & BENEFITS

Competitive salary is dependent on qualifications and experience. The City of Lucas also offers an excellent benefits package which includes:

- Health, Dental & Vision Insurance: 100% paid coverage for employee premiums.
- Life Insurance and Accidental, Death & Dismemberment (AD&D): 100% paid coverage
- $50,000 employee life insurance coverage.
- Teladoc: 100% paid coverage for employee.
- Employer provided HRA: $300 yearly.
- Long Term Disability Employee Assistance Program
- Texas Municipal Retirement System (TMRS): Full-time employee contribution is 7% and the City of Lucas matches 2 to 1.
- Deferred Compensation: A voluntary 457 Deferred Compensation Plan is available for employee participation.
- Holidays: 11 fixed holidays per year.
- Vacation Leave: Starting at 10 days (or 80 hours) per year.
- Sick Leave: 96 hours per year (max accrual of 480 hours).
- Longevity Pay: $4.00 per month upon completion of a full year of service.

HIRING PROCESS

To be considered for this outstanding job opportunity, please apply online at: www.lucastexas.us/job-opportunities.

To apply, submit the following to Human Resources:

- Application
- Resume
- Cover Letter

All applications and documents must be submitted to Human Resources by 5:00 p.m. on Friday, August 4th, 2023.

Following a review of the applications and documents received, only the most qualified candidates will be invited to participate in the interview process. Final appointment of the position will be contingent upon successful completion of a background investigation and drug screening. The City of Lucas is an equal opportunity employer.

CONTACT US

City of Lucas
Human Resources Department
665 Country Club Road
Lucas, Texas 75002
Telephone: (972) 912-1204
Email: hr@lucastexas.us Website: www.lucastexas.us

City of Lucas -- Job Description

Position Title:	City Secretary
Pay Grade:	15
Department:	Administration
FLSA Status:	Exempt
Revised:	June 30, 2022
Emergency Status:	Post Impact Recovery Assigned

Leadership

Supervisor:	City Manager
Direct Reports:	Management Analyst

Position Purpose

The City Secretary is an integral member of the organization and while this position is appointed by City Council, the position reports to the City Manager. The City Secretary performs a variety of highly responsible and complex administrative work in support of the Mayor, City Council and City Manager. This position must have an ability to exercise professional judgment and initiative in support of municipal operations. The City Secretary serves as the records management officer and administers all City elections and is responsible to perform all duties as required by the Lucas City Charter and state law.

Essential Functions

- Coordinates and ensures compliance with the Public Information Act by overseeing request for public information and ensures that all information is released according to state law.
- Serves as the Records Management Officer and is responsible for establishing, maintaining, updating, and preserving all historical, public, and legal records for the City in compliance with the Texas State Library Records Retention Schedule. Maintains original files for the City including contracts, bonds, agreements, litigation, and legal notices.
- Prepares and posts City Council agendas, including the coordination and review of agenda back-up material, finalizing the agenda and is responsible for a quality end product. Distributes agenda materials in a timely fashion.
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- Creates, posts, updates, maintains, and analyzes features of the City's website, and any other form of electronic communication supported by the City.
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- Administers the issuance of alcohol permits and logo trademark documentation.
- Works on special event projects and attends special events (i.e., Founders Day, Country Christmas).
- Accepts legal documents served to the City.
- Administers oath of office to public officials.
- Serves as a notary public.
- Performs all other duties as assigned.

Capital and/or Fiscal Responsibility

- Responsible for adhering to all City of Lucas Purchasing Policies while performing purchasing tasks.
- Develops, submits for approval to the City Manager and administers the budget for the City Secretary's Office

Credentials (minimum preferred)
Knowledge/Skills/Abilities

- Working knowledge of the principles and practices of modern public administration.
- Highly effective verbal and written communication skills including proofreading for accuracy and editing.

- Thorough knowledge of modern records management techniques, including legal requirements for recording, retention, and disclosure.
- Meeting deadlines and performing tasks efficiently; developing and completing assignments with minimal information.
- Project management skills necessary to effectively track progress of multiple initiatives and goals.
- Ability to establish and maintain effective working relationships with employees, other departments, officials, and the public.
- Expertise in the Public Information Act and Open Meetings Act to ensure organizational compliance.

Formal Education/Certification/Licenses

- Prefer graduation from a college or university with a bachelor's degree in business management, public administration, or a closely related field.
- Valid Texas Driver's License.
- Must be able to obtain Notary Public Certification within six (6) months of employment.

Prior Experience

- Seven (7) years of related experience or any equivalent combination of education and experience, equivalence to be determined by the employer.

Tools and Equipment Used

Skill in operation of listed tools and equipment: personal computer, telephone, specialized software, scanner, copy machine and fax machine. Technical expertise is highly desirable with knowledge of Microsoft Office Suite and application-based software (e.g., Laserfiche, JustFOIA, GovQA, Swagit, Zoom, and Incode).

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is frequently required to sit and talk or hear; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms. The employee is occasionally required to walk; lift and/or move up to twenty-five (25) pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Work is normally performed inside an air-conditioned office setting. The noise level in the work environment is usually quiet.

Selection Guidelines

Formal application, rating of education and experience; oral interview and reference check; job related tests may be required.

Acknowledgement

This position description does not constitute an employment agreement and is subject to change. This description is intended to indicate the types of outcomes, essential duties and levels of work difficulty required for this position. Other outcomes and/or responsibilities may be added, deleted, or changed at any time, and the discretion of Management, formally or informally, either verbally or in writing. I have read and understand the duties required of this position and further affirm that I am physically and mentally able to perform the duties as described.

Employee (print name): _____

Employee (signature): _____

Date: _____

City of Lucas
City Council Agenda Request
July 6, 2023

Item No. 08

Requester: Mayor Jim Olk

Agenda Item Request

Executive Session:

As authorized by Section 551.074 of the Texas Government Code, the City Council may convene into closed Executive Session to discuss the appointment of an Interim City Secretary. This meeting is closed to the public as provided in the Texas Government Code.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA