AGENDA
CITY COUNCIL MEETING
CITY OF LEANDER, TEXAS

Pat Bryson Municipal Hall
201 North Brushy Street - Leander, Texas
Wednesday, May 27, 2026
Workshop at 6:00 PM

Mayor – Na'Cole Thompson	**Place 4 – Annette Sponseller**
Place 1 – Stephen Chang	**Place 5 – Andrew Naudin**
Place 2 – Michael Herrera	**Place 6 – Becki Ross, Mayor Pro Tem**
Place 3 – Natomi Blair	**City Manager – Todd Parton**

The meeting will also be live-streamed at the following link: https://www.leandertx.gov/video.

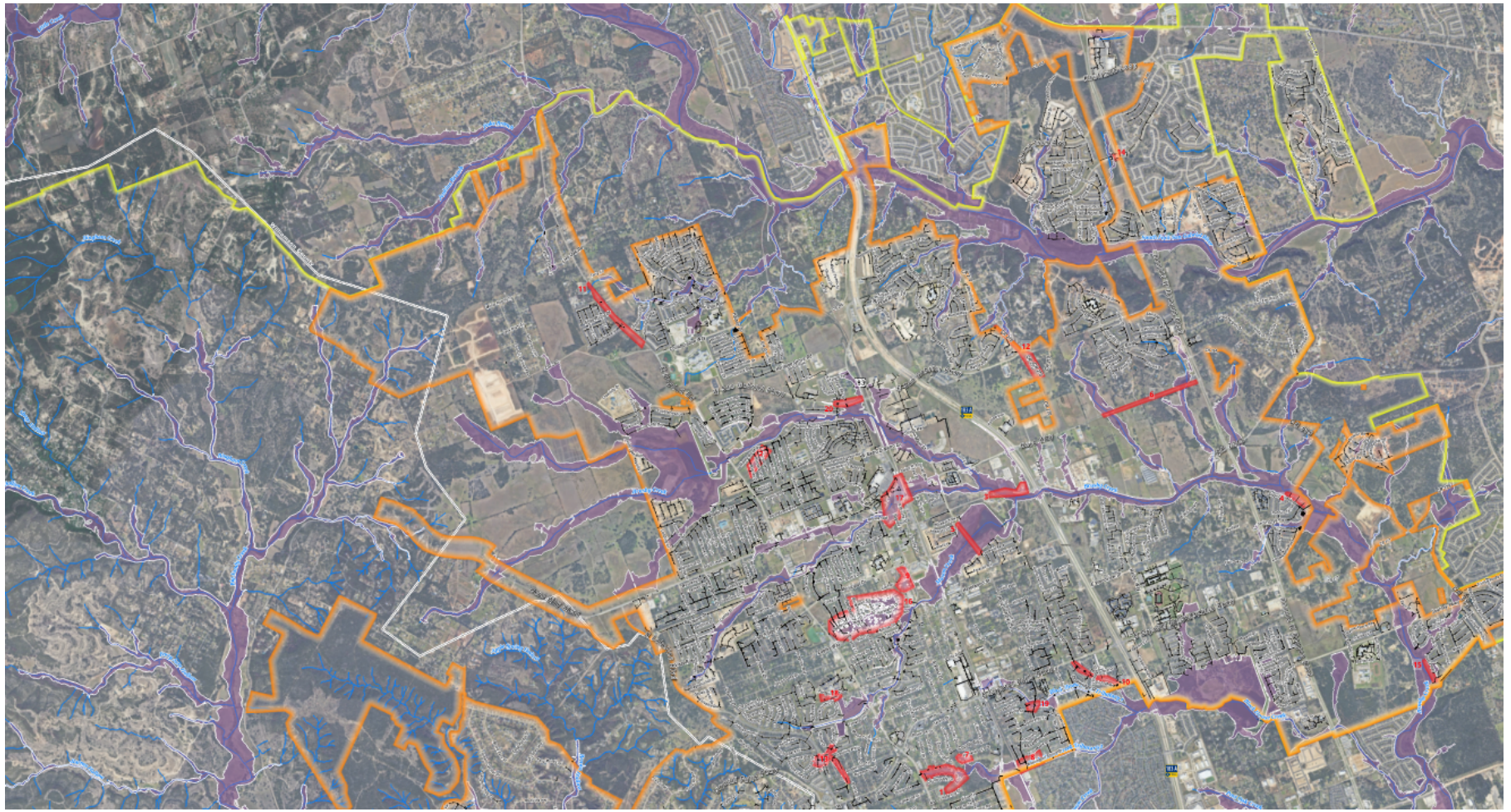
WORKSHOP - CONVENE AT 6:00 PM

1. Open Meeting.
2. Roll Call.
3. Receive a presentation from David Clark, P.E., C.F.M., with EDGE Engineering, PLLC and discuss findings and recommendations on the final draft of the City of Leander Stormwater Master Plan.
4. Review and discuss the City Council Polices and Procedures, including the City Council Rules of Procedure, City Council Social Media Policy, and the City of Leander Code of Ethics (Article 9.05 of the City of Leander Code of Ordinances).
5. Adjournment

CERTIFICATION
This meeting will be conducted pursuant to the Texas Government Code Section 551.001 et seq. At any time during the meeting the Council reserves the right to adjourn into Executive Session on any of the above posted agenda for which state law authorizes Executive Session to be held, including but not limited to Sections 551.071 [litigation and certain Consultation with attorney]. 551.072 [acquisition of interest in real property], 551.073 [prospective gift to city], 551.074 [certain personnel deliberations], 551.076 [deployment/implementation of security personnel or devices], or 551.087 [Deliberations regarding Economic Development Negotiations]. The City of Leander is committed to compliance with the American with Disabilities Act. Reasonable modifications and equal access to communications will be provided upon request. Please call the City Secretary at (512) 528-2743 for information. Hearing impaired or speech disabled persons equipped with telecommunication devices for the deaf may call (512) 528-2800. I certify that the above agenda for this meeting of the City Council of the City of Leander, Texas, was posted on the bulletin board at City Hall in Leander, Texas, on the May day of 20 2026 by 5:00 p.m. pursuant to Chapter 551 of the Texas Government Code.

Dara Crabtree

Dara Crabtree, City Secretary, TRMC



City of Leander

CITY OF LEANDER | SPRING 2026

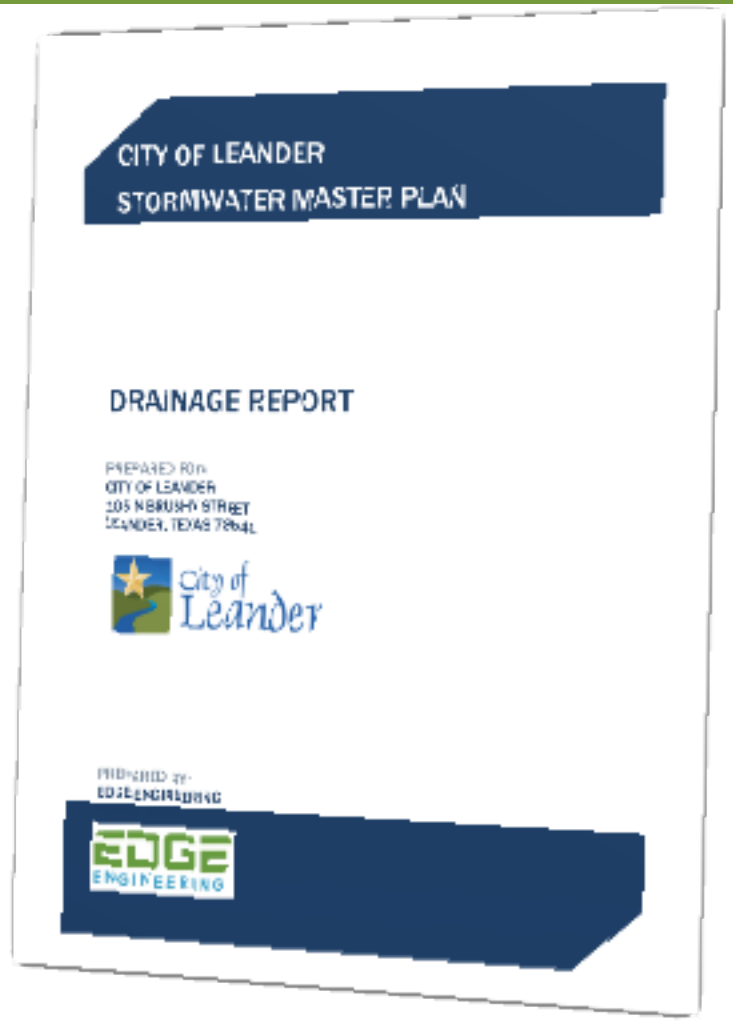
STORMWATER MASTER PLAN SUMMARY

EDGE ENGINEERING

AGENDA & OBJECTIVES

AGENDA

- **Stormwater Master Plan Objectives**
- **Elements of the Stormwater Master Plan**
  - Data Collection & Flood Study Modeling
  - Areas of Interest Identification & Prioritization
  - CIP Project Recommendations
  - Drainage Policy & Funding Recommendations

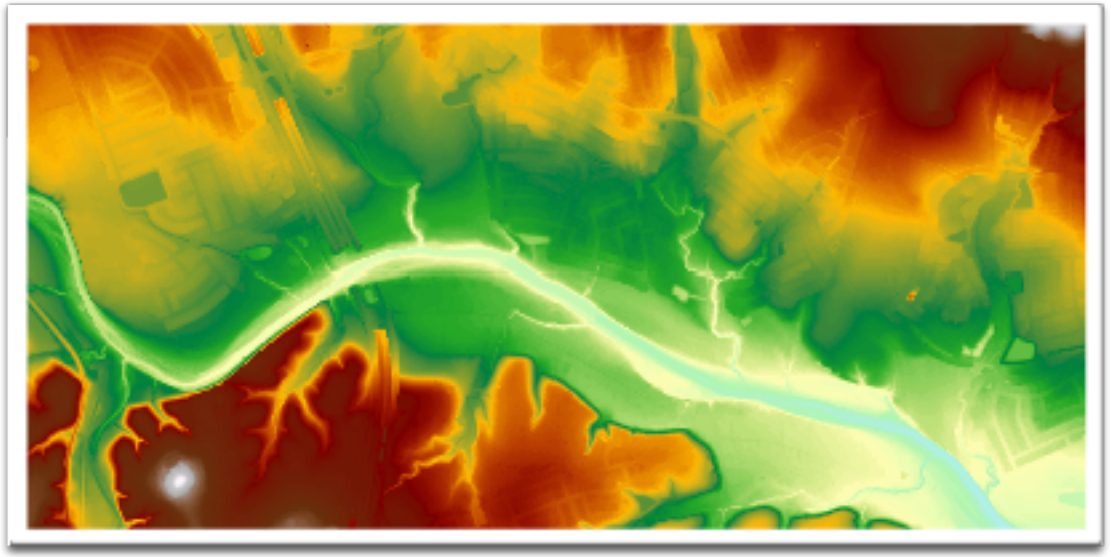


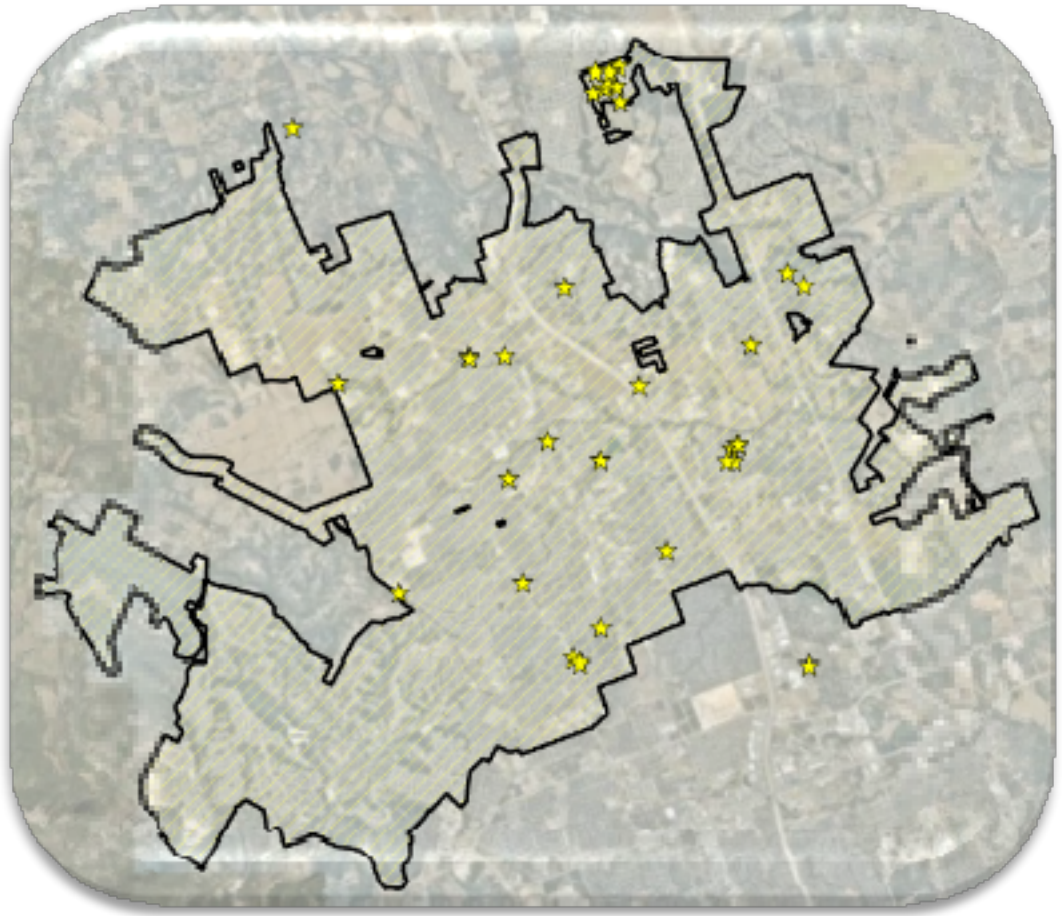
STORMWATER MASTER PLAN OBJECTIVES

- ☑ Develop comprehensive digital storm drain system GIS database
- ☑ Obtain public input for historical flooding issues across City
- ☑ Identify and prioritize Areas of Interest (AOIs) based on risk
- ☑ Develop solutions and conceptual cost estimates for potential CIP projects
- ☑ Update & re-prioritize stormwater projects for overall CIP recommendations
- ☑ Evaluate and provide recommendations for drainage policies
- ☑ Identify internal & external funding options
- ☑ Provide recommendations regarding regional detention, stormwater maintenance program, and weather gauge stations

DATA COLLECTION AND FLOOD STUDY MODELING RESULTS

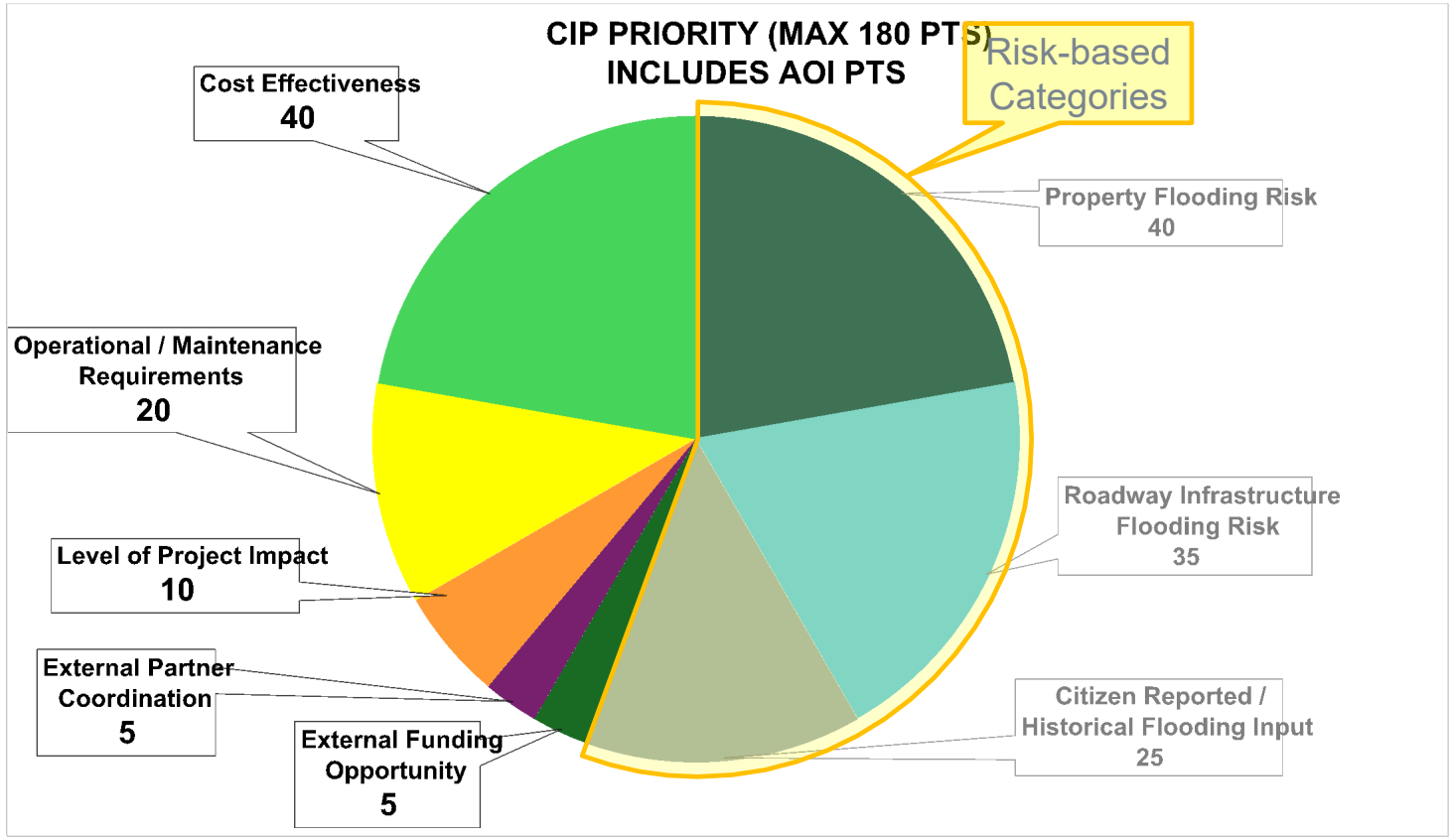
- **Areas of Interest Identification**
  - 76 High flood risk areas identified
  - 45 Areas selected for conceptual solutions
  - Top 15 AOIs selected for conceptual solutions and cost estimation
    - Recommended to become CIP Projects





STORMWATER PROJECTS PRIORITIZATION

- **Risk-based Categories**
  - Property Flooding Risk
  - ROW/Infrastructure Flooding Risk
  - Citizen Reported/Historical Flooding Risk
- **Additional CIP Project Prioritization Criteria**
  - Cost Effectiveness
  - Operational / Maintenance Requirements
  - Level of Project Impact
  - External Partner Coordination
  - External Funding Opportunity



EDGE ENGINEERING

PROPOSED CIP PROJECT CUT SHEETS

Project ID & Priority Ranking

Description of flooding concern

Category Scores & Ranking Total

Assumptions for further Engineering analysis

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

City of Leander

Project ID: SFSG-T25-1 (Rank #8) *Formerly #10*
Project Name:
Drainage Basin: BHC_110

Problem Description

A tributary of South Fork San Gabriel crosses the roadway, CR 270 and is north of a residential neighborhood, as well as south of the recently built Wildflower RV Park. The flows in the crossing flow south to north through a small culvert underneath the road and is currently undersized and does not adequately convey the incoming flow during a 25 year storm event and cause innundation to occur above the roadway.

Proposed Improvements

Replace ex. ~24" CMP with 4 - 36" RCP and PSETs, match driveway and interior culvert drainage at "CENTEX" property, channel grading & riprap along CR 270 and through CENTEX and gas tank pad site

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	15
Cost Effectiveness	24
O&M Requirements	15
Level of Proj Impact	3
External Partner Coord	1
External Funding Opp	1
Total	**84**

Project Costs

Engineering & Survey:	$ 54,000
Construction:	$ 268,054
Other:	
Total:	**$ 322,054**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6 Months

Assumptions

Development downstream of the culvert crossing CR 270 has been constructed after the creation of the best available HEC-RAS models. Proposed improvements do not significantly reduce overtopping - may need to replace second low water crossing as well

Project Photos



100-yr Existing Floodplain (CN/RAS



Proposed Improvements

Aerial Photo of Project Location

Planning-Level Solutions: Construction & Engineering Cost Estimate

Proposed Improvements

Estimated Project Cost and Duration

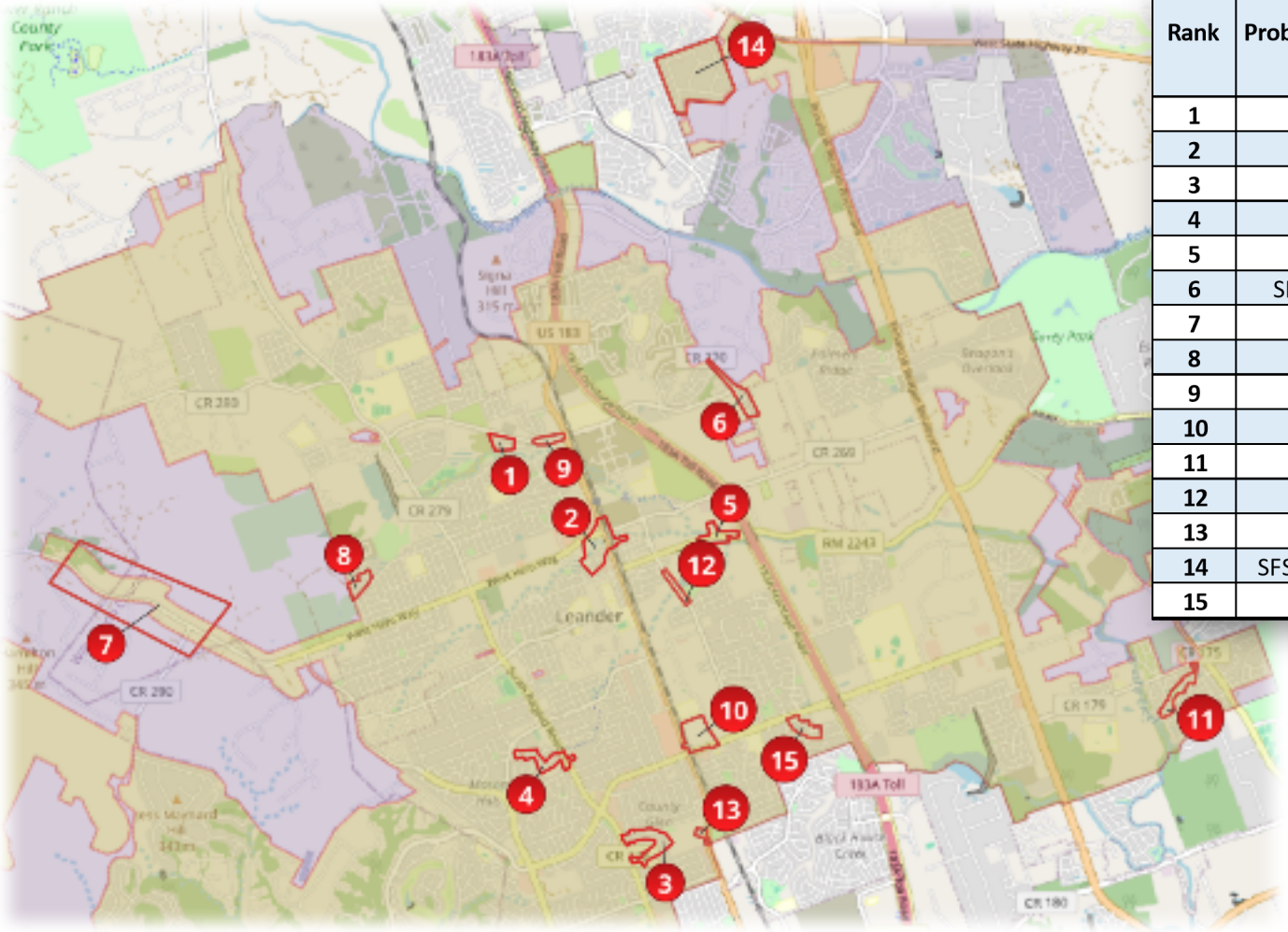
EDGE ENGINEERING

TOP 15 PRIORITY AREAS

Rank	Problem Area ID	Type	Project Area Location	Proposed Benefits	Priority Score (180 max)	Project Cost
1	NFB-2	SF Subdivision	Near Fire Station 1, Mistflower Springs	2 phases, reduce overtopping & ponding, improve conveyance	121	$ 770,000
2	SFB-1	Commerical + Rdwy	Highway 183 near W Broade St	Reduce roadway and neighborhood flooding, clear vegetation	106	$ 1,320,000
3	BLC-11	SF Subdivision	County Glen Dr & Emerald Island Dr	Reduce roadway flooding, improve conveyance east	101	$ 1,020,000
4	MC-7	SF Sub + Rdwy	Still Meadow Dr at Bagdad	3 Phases, Levee cert removes homes from FP, storm & channel imp.	97	$ 1,876,000
5	BC-6	Commerical + Rdwy	Ranch Road 2243 near 1st Baptist Church	Reduces flooding on church, increases developable land	96	$ 790,000
6	SFSG-T25-1	Roadway	CR-270 near CENTEX	Reduces frequency of overtopping & roadway maintenance/repair	84	$ 322,000
7	NFB-6	Roadway	Hero Way West near CR 290	Increased culvert capacity reduces overtopping for major evac route	82	$ 552,000
8	NFB-5	SF Subdivision	Near Waterfall Ave & Sunny Ridge Dr	Remove vegetation & improve conveyance to Devine Lake	80	$ 260,000
9	NFB-1	Roadway	San Gabriel Pkwy near US 183	Reduce overtopping and flooding either side of SGPkwy	79	$ 1,005,000
10	BLC-7	Commerical + Rdwy	Highway 183 and E Crystal Falls Pkwy	Improve conveyance across 183 & through warehouses	78	$ 1,265,000
11	BC-2	SF Subdivision	Near Echo Park Dr & Pecan Creek Dr	Reduce flooding impacts to neighborhood park, improve FP storage	74	$ 447,000
12	MC-1	Roadway	Horizon Park Blvd near Horizon Lake	Raise roadway & bridge crossing	72	$ 610,000
13	BLC-10	Roadway	S Hwy 183 near Rush Automotive	Improve FP storage, reduce overtopping of US 183	71	$ 1,446,000
14	SFSG-T28.01-1	SF Subdivision	Twinspur St in Bonnett subdivision	Improve conveyance and reduce neighborhood road overtopping	70	$ 760,000
15	BLC-3A	SF Subdivision	Rutherford Dr in Ridgewood subdivision	Ph 1 of 2 - Improve culvert crossings and channel grading along tributary	70	$ 557,000
				TOTAL ESTIMATED PROJECT COST - TOP 15 AOI:		**$13,000,000**

TOP 15 PRIORITY AREAS

LOCATION MAP



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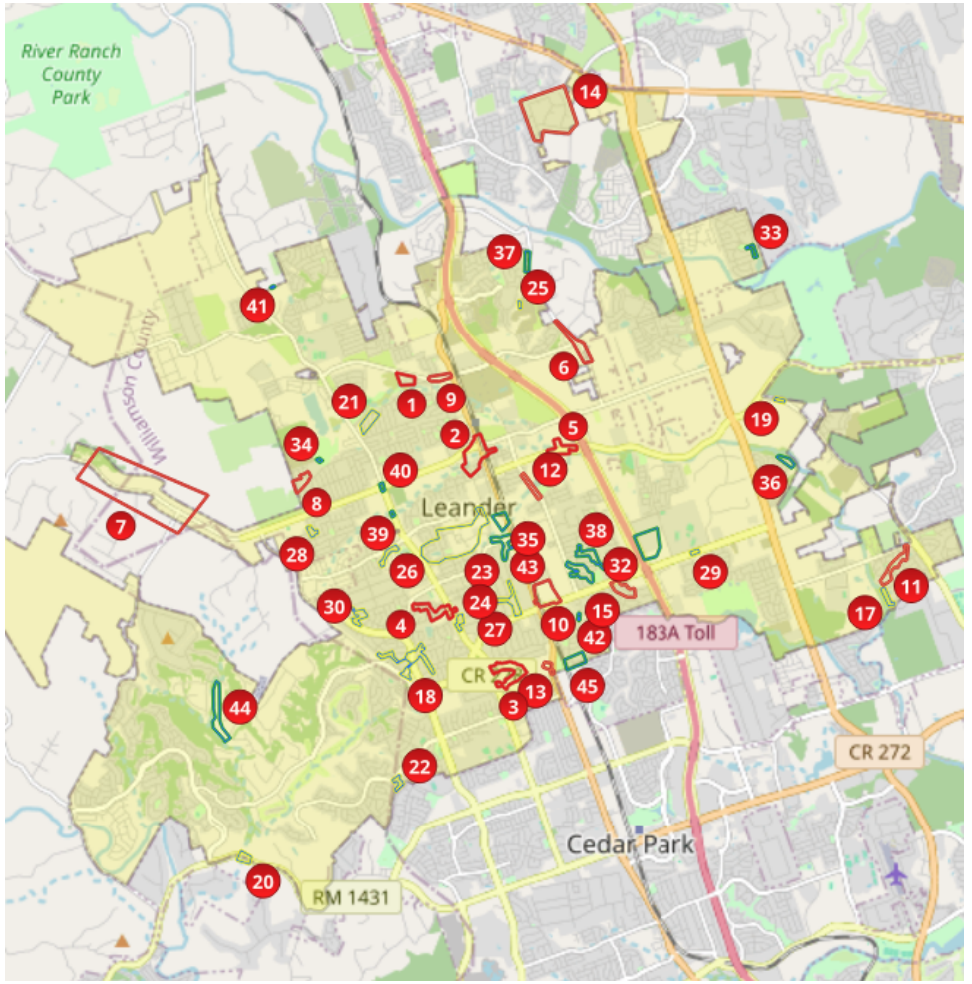
15	BLC-3A	Rutherford Dr in Ridgewood subdivision	70	$ 557,000

RECOMMENDATIONS FOR CIP PROJECT INCLUSION

- Priority Projects 1-15 are recommended for addition to CIP
  - Objective criteria and relative ranking reflect known drainage issues that need to be corrected to prevent further concerns

- Grand Total for Areas of Interest 1 through 45 is just under **$38 million**
  - Total Cost for the Top 15 projects is approx. **$13 million**
  - Total Cost for remaining projects 16-45 is approx. **$24.8 million**



EDGE ENGINEERING

STORMWATER FUNDING OPTIONS

- **Potential Funding Mechanisms:**
  - CIP – General Funds & Debt Services (Currently used)
  - Stormwater Utility Fee / Impact Fees
    - Dedicated funding source for maintenance & operations
  - External Funding
    - State and Federal grants, financial assistance programs

STORMWATER FUNDING OPTIONS

External Funding Opportunities

- Local, Federal, and State programs offer grants or assistance
  - FEMA, TDEM, TWDB, GLO
- Online Resources to help identify funding program availability & applicability
  - https://texasfloodclearinghouse.org
- Local and State stakeholder partnerships
  - Williamson & Travis County
  - TxDOT
  - NRCS

EXTERNAL FUNDING OPPORTUNITIES

Applying for Funding Programs

- Stormwater Master Plan identified 5 of the top 15 priority CIP projects that may be good candidates for FIF & CDBG grant applications
- Assemble Grant Application documents, data, and supporting analysis
  - Requires preliminary engineering, historical records of damage, and/or justification of need
  - Most projects selected for funding demonstrate a Benefit-to-Cost Ration of 1.0 or higher

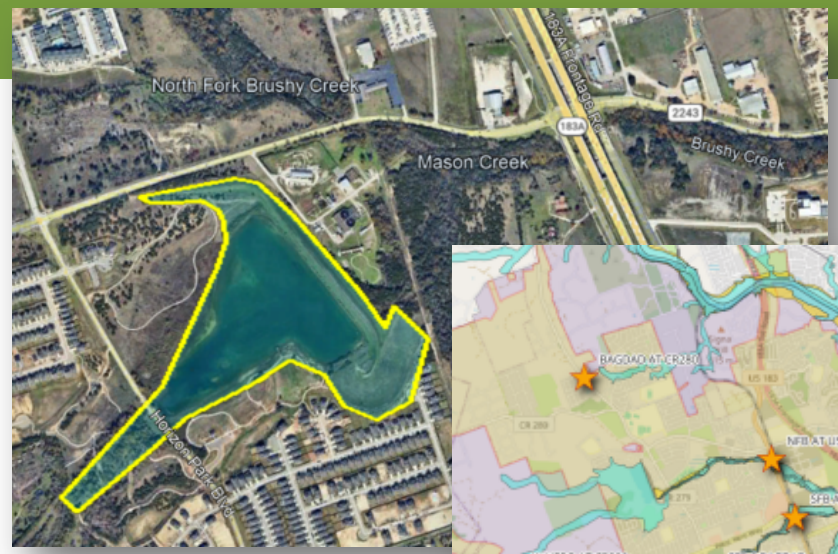


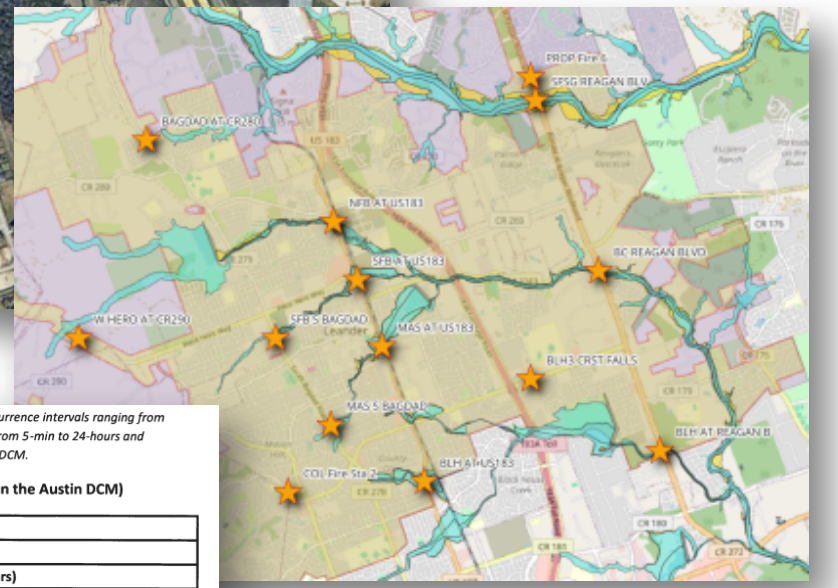


RECOMMENDATIONS

Stormwater Master Plan Implementation

- Finalization & Adoption of Stormwater Master Plan
- Future Stormwater Policy Recommendations
  - Evaluate regional detention policies
  - Drainage criteria recommendations
  - Stormwater maintenance program
  - Weather & Stream Flow Gauge Locations





The mapping tool provides data for rainfall durations from 5-min to 60-days at recurrence intervals ranging from 1-year to 1000-years. Discussions in this memorandum will be limited to durations from 5-min to 24-hours and recurrence intervals from 2-years to 100-years to match the design storms in COA's DCM.

Table 1 - Atlas 14 DDF Data for Leander (Replaces Table 2-3 in the Austin DCM)

Depth-Duration-Frequency Table									
Depth of Precipitation (inches)									
Duration	Average recurrence interval (years)								
	1	2	5	10	25	50	100	200	500
5-min	0.422	0.511	0.646	0.766	0.943	1.09	1.25	1.41	1.64
10-min	0.672	0.814	1.03	1.23	1.51	1.75	2	2.26	2.6
15-min	0.848	1.02	1.29	1.53	1.88	2.17	2.48	2.8	3.25
30-min	1.2	1.44	1.81	2.14	2.62	3.01	3.44	3.89	4.54
60-min	1.55	1.88	2.37	2.82	3.47	4.01	4.59	5.24	6.17
2-hr	1.84	2.3	2.96	3.58	4.51	5.3	6.19	7.19	8.68
3-hr	2	2.54	3.31	4.05	5.18	6.15	7.27	8.55	10.5
6-hr	2.29	2.97	3.93	4.85	6.28	7.52	8.97	10.6	13.2
12-hr	2.65	3.43	4.53	5.6	7.23	8.65	10.3	12.2	15.2
24-hr	3.05	3.92	5.17	6.36	8.16	9.72	11.5	13.6	16.9

EDGE ENGINEERING

QUESTIONS



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CITY OF LEANDER
STORMWATER MASTER PLAN

DRAINAGE REPORT

DRAFT

PREPARED FOR:
CITY OF LEANDER
105 N BRUSHY STREET
LEANDER, TEXAS 78641



PREPARED BY:
EDGE ENGINEERING



Drainage Report

CITY OF LEANDER MASTER DRAINAGE PLAN

Prepared For:

City of Leander
105 N Brushy Street
Leander, Texas 78641

–

Prepared By:

EDGE Engineering, PLLC
7000 N Mopac Expy. Suite 325
Austin, TX 78731
TBPE Firm No. 20690

This document is for interim review and not for construction, bidding or permit purposes.
Engineer: David A. Clark, PE, CFM
TBPE No. 123212
Date: April 9, 2026

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Appendix C: Areas of Interest (AOIs)
Appendix D: Project Summary Sheets
Appendix E: Opinions of Probable Construction Cost (OPCCs)
Appendix F: City-wide Inundation Maps (2D Modeling Results)
Appendix G: External Funding Opportunities
Appendix H: Stormwater Maintenance Report Template
Appendix I: Weather Station and Stream Gage Locations
Appendix J: Digital Data

DRAFT

1 GLOSSARY AND ACRONYMS

Low Water Crossing, LWC – A structure conveying flow across a roadway or railroad, not including driveway culverts

TxGIO – Texas Geographic Information Office, formerly Texas Natural Resources Information System (TNRIS)

LiDAR – Light Detection and Ranging, radar-based technology used to generate topographic and other three-dimensional terrain data

LOMR – Letter of Map Revision, actual physical flood map changes administered and published by FEMA on FIRMs for studied reaches of flooding sources.

HEC – Hydrologic Engineering Center, a division of the US Army Corps of Engineers (USACE) for water resources management

HEC-HMS – Hydrologic Modeling System, software promulgated by the USACE for hydrologic modeling

HEC-RAS – River Analysis System, software promulgated by USACE for hydraulic riverine modeling

Infoworks ICM – Integrated Catchment Modeling, software created by Autodesk InfoWorks that uses 1D and 2D components to model surface runoff and underground hydraulic networks

AOI – Area(s) of Interest

CIP – Capital Improvement Program

City – City of Leander

ETJ – Extraterritorial Jurisdiction

SWMP – Stormwater Master Plan

NOAA – National Oceanic and Atmospheric Administration

FIRM – Flood Insurance Rate Map

FEMA – Federal Emergency Management Program

USGS – United States Geological Survey

GIS – Geographic Information System

EDGE – Edge Engineering, PLLC

2 INTRODUCTION

The City of Leander (City) contracted Edge Engineering, LLC (EDGE) to perform a comprehensive city-wide drainage study to identify current drainage problems and provide short- and long-term solutions for addressing drainage concerns throughout the City limits. The Stormwater Master Plan was developed by gathering best available data, collecting public surveys, and engaging with the community in the form of public meetings and other outreach events. The limits of the study include Leander city limits and extraterritorial jurisdiction (ETJ), as reflected in **Appendix A.**

The objective of the Stormwater Master Plan is to develop a broad and all-inclusive understanding of the city-wide drainage concerns in terms of locations, causes, and risks with the purpose of facilitating the development of a drainage Capital Improvement Program (CIP). In addition to developing a Stormwater CIP, this Stormwater Master Plan will include recommendations regarding the City's current stormwater criteria, maintenance, policies, funding opportunities, and other future stormwater management considerations.

3 DATA COLLECTION

3.1 OBTAIN AND REVIEW AVAILABLE DATA

EDGE gathered and reviewed available drainage related data including existing studies, as-builts from private and municipal construction projects, hydrologic and hydraulic modeling, and GIS mapping data. **Table 1** summarizes the data sources used in this study effort.

Table 1: Data Collection Sources

Data	Year	Source
Storm Drain As-builts	Varies	City of Leander
Travis County Atlas 14 County-wide Study: Report, HEC-HMS v4.11, HEC-RAS v6.4.1, Mapping Terrain year: 2021	Study completed – May 2025	Travis County
Williamson County Atlas 14 County-wide Study: Report, HEC-HMS v4.9, HEC-RAS v6.3, Mapping Terrain year: 2015 & 2017	Study completed – April 2024	Williamson County
GIS Storm Drain Database	Varies	City of Leander
Draft Leander City-wide LOMR Study: Report, HEC-HMS v4.12, HEC-RAS v6.6, Mapping Terrain year: 2017 & 2021	Study is ongoing	City of Leander
Effective Floodplain Shapefiles	Varies	FEMA
Bexar & Travis Counties Stratmap Project	2021	TNRIS
Hays & Williamson Counties Stratmap Project	2024	TxGIO
Williamson County Atlas 14 Rainfall	2018	Williamson County Atlas 14
Travis County Master Flood Plan Atlas 14 Rainfall	2018	Travis County Atlas 14
Other hydrologic data for ICM (land use, soils, CN, Mannings)	Varies	Varies

In addition to desktop reviews of best available data, EDGE solicited and reviewed public input regarding known drainage issues throughout the City. This data collection effort is discussed in the following section.

3.2 PUBLIC INVOLVEMENT

Leander residents and business owners often have valuable firsthand experience with flooding and drainage issues that may add further context to flood risk assessments. Their input helps the development of the Master Drainage Plan with the identification of problem areas, consideration of historical drainage issues, and prioritization of solutions based on community impact.

Public engagement for this study consisted of online solicitation for public comment and in-person public meetings between 2024 and 2025.

3.2.1 PUBLIC SURVEY

Links to an online survey were made available to the public via the City's website, on City's social media accounts, and via QR Code provided in pamphlet handouts. The online Survey went live starting November 2024 with the purpose of gathering data regarding drainage concerns in and around the home or business of the participants, as well as collecting additional context and data to inform any city-wide concerns. The survey questions were designed to retrieve objective data and to solicit qualitative comments from the participants. The purpose of the survey is provided on the Stormwater Master Plan webpage, reflected in **Appendix A** with a copy of the public online survey questions and responses.

The online public survey is still open, however, data collection for the purposes of this Stormwater Master Plan were collected up to June 30th, 2025. This was done to allow enough time for the public to submit any concerns from the flash flooding events that occurred near the limits of the City of Leander in July 2025.

A total of 42 public survey responses were received, providing firsthand accounts of properties affected by various drainage issues throughout the City. Each public survey response was incorporated into a GIS database and map to generate Areas of Interest (AOIs) based on the nature of the issue observed in the response at its given spatial location. Since this Stormwater Master Plan is focused on the City of Leander, comments associated with locations outside of the City limits were not included.

The Areas of Interest (AOI) maps derived from survey responses included in **Appendix C** present all seventy-six (76) AOIs identified, the top forty-five (45) AOIs investigated for mitigation concepts, and the top fifteen (15) priority AOIs recommended for Capital Improvements Program (CIP) projects. All survey responses received were cross-referenced with modelling results to confirm potential problem areas and inform proposed improvement strategies.

3.2.2 PUBLIC MEETINGS

Public meetings were held on a quarterly basis to involve the public throughout all phases of the Stormwater Master Plan. In November 2024, the first public meeting was held to show the planning process and to solicit information from the public concerning known flooding issues. In June 2025, the second public meeting was held at the Old Town Festival where preliminary areas of interest were identified and presented to the public. During this direct engagement opportunity, the project team conducted an in-person public survey to collect responses regarding known flooding issues. Future pending meetings include a third public meeting that will be held in Winter

of 2025, to show the public proposed solutions to the areas of interest and solicit input on prioritization. Lastly, a final public meeting will be held at the beginning of 2026 to demonstrate the final Stormwater Master Plan and solicit final comments from the public.

3.3 CITY COORDINATION

As a part of data collection, meetings were held with City staff on a bi-weekly basis to incorporate their knowledge and latest records throughout the Stormwater Master Plan study phase. The knowledge and experience of City staff contributed valuable context and insight, helping to more effectively understand and document drainage issues—such as their severity, how often they recur, and the impact on maintenance efforts. Coordination with City departments such as the Engineering Department, Parks Department, Emergency Management, and Public Works Department informed key contributing factors for prioritization of areas of interest and proposed improvement strategies. Additionally, City staff discussed regional improvement concepts and opportunities for funding assistance to optimize allocated City budgets.

4 EXISTING CONDITIONS MODELING

4.1 STORMWATER GEODATABASE DEVELOPMENT

A GIS geodatabase was created to house all gathered spatial storm drain infrastructure throughout the City. The geodatabase included pertinent modeling information such as inlets, manholes, and pipes. Where available, lengths, sizes, materials, flowlines, and slopes were also included in the geodatabase. The City provided hundreds of Record Drawings for development projects from 2007 through 2024, which EDGE then georeferenced with digitized features to provide additional context regarding stormwater and water quality infrastructure. Approximately 5,400 culverts , 4,000 inlet nodes and 1,300 discharge points were added to the geodatabase. Where data gaps were identified, sizes and flowlines of drainage infrastructure were assumed using aerial imagery, LiDAR topography, and a calculated average of invert depths to ensure the geodatabase presented all available information as accurately as possible. This citywide storm drain geodatabase was used for 2D Modeling efforts to support this Master Drainage Plan.

4.2 2D HYDRAULIC MODELING FOR LOCAL STORMWATER

A 2D Hydraulic Analysis Model was developed for the entire City limits using Autodesk InfoWorks ICM, version 2025.3.0. Modeling in 2D ICM is advantageous for complex urban areas because it can represent 1D networks like storm drain, with 2D overland flow from runoff. The results of this modeling effort demonstrated potential for localized flooding in urban areas throughout the City of Leander.

4.2.1 Hydrology

EDGE investigated hydrology for all study areas for the 2-year, 10-year, 25-year, and 100-year design storm events utilizing National Oceanic and Atmospheric Administration (NOAA) Atlas 14 rainfall data. The City of Leander occupies portions of Williamson and Travis Counties, each of which provides unique Atlas 14 precipitation depth tables. Travis County has adopted the City of Austin Drainage Criteria Manual (DCM), which divides design rainfall into two zones on either side of the Colorado River. The City of Leander is north of the Colorado River and thus utilizes rainfall data for Zone 2 per DCM Section 2.3.0, Figure 2-2.

Williamson County rainfall depths are subdivided into four major watersheds: Salado Creek, San Gabriel River, Brushy Creek and Lake Creek basins. The city limits of Leander comprise portions two of these basins; the San Gabriel River basin at the extreme northern city limits and the Brushy Creek basin for most of the city limits. To simplify analysis for this high-level study, rainfall depths for the Brushy Creek watershed were used in all hydrology since these figures were slightly more conservative than the San Gabriel Basin. Rainfall depths for both Williamson and Travis counties are reflected in **Table 2 and Table 3** below.

Table 2: Williamson County Brushy Creek Zone Atlas 14 Rainfall Depths

Duration	50% AEP	10% AEP	4% AEP	1% AEP
	2-year	10-year	25-year	100-year
15-min	1.04	1.52	1.83	2.35
60-min	1.91	2.80	3.39	4.35
2-hr	2.35	3.57	4.41	5.87
3-hr	2.60	4.05	5.08	6.91
6-hr	3.05	4.86	6.18	8.61
12-hr	3.49	5.60	7.17	10.1
24-hr	3.96	3.37	8.16	11.5

Table 3: City of Austin Zone 2 (North) Atlas 14 Rainfall Depths

Duration	50% AEP	10% AEP	4% AEP	1% AEP
	2-year	10-year	25-year	100-year
15-min	1.05	1.57	1.92	2.51
60-min	1.94	2.91	3.58	4.70
2-hr	2.39	3.72	4.68	6.40
3-hr	2.65	4.23	5.40	7.56
6-hr	3.11	5.08	6.57	9.41
12-hr	3.57	5.86	7.60	10.90
24-hr	4.06	6.65	8.59	12.23

Effective hydrology models were received from Williamson and Travis County for their recent Atlas-14 flood study updates. These models were used solely to develop excess rainfall hyetographs for ICM, no changes were made to model input. Software used for the models included HEC-HMS versions 4.9 and 4.11. The excess rainfall from HEC-HMS was converted to inches per hour, and CSV files with a profile for each subbasin were created for each rain event and imported spatially into ICM. For each rain event, rain gauge boundaries were applied at all subbasin boundaries.

4.2.2 Model development

An ICM model was developed for all three watersheds within the City limits, they are: Upper Brushy Creek (UBC), South San Gabriel (SSG) and the Travis County watershed (TRACO). Additionally, the Upper Brushy Creek model was subdivided into 5 zones, labeled 1-5 to improve processing capabilities and modeling efficiency. Digital copies of existing conditions ICM modeling are included in **Appendix J.**

4.2.3 2D Zones

The 2D zone in InfoWorks ICM is used to assign a two-dimensional mesh surface which consists of a series of contiguous triangles and mesh elements. The mesh maximum triangle area was defined to be 1000 ft^2 and minimum mesh element size set to be 250 ft^2. The elevation of each vertex on each triangle is derived from a ground model.

4.2.4 Terrain

The terrain in InfoWorks ICM is represented as a ground model comprised of topography within Williamson and Travis Counties. The Williamson County terrains used for the ground model utilize LiDAR topography from the Hays and Williamson County Stratmap Project by TxGIO published in 2024. The horizontal datum is the NAD 83 Texas State Plane Coordinates in US feet (2011), and the vertical datum is NAVD88. The Travis County terrains used for the ground model utilize LiDAR topography from the Bexar and Travis Counties Stratmap Project by TNRIS published in 2021. The horizontal datum also uses the NAD 83 Texas State Plane Coordinates in US feet (2011), and the vertical datum is NAVD88.

4.2.5 Manning's Roughness

Roughness zones are used to specify varying Manning's roughness coefficients (Manning's n-values) in areas of overland flow within the 2D zone. The roughness coefficients used in the ICM model were 0.02 for pavement and 0.06 for all unpaved areas in the 2D Zone.

4.2.6 Buildings

Building footprints were incorporated in the 2D mesh as mesh zones. The mesh zones were used to modify the ground elevations to imitate a slab structure. Building finish floor elevations were estimated to be approximately a foot higher than the roadway elevation at each structure.

4.2.7 Model results

Inundation depths for the 2-, 10-, 25-, and 100-year events are reflected on city-wide maps, included with this report in **Appendix F.** Mapping indicates the degree of inundation along major creeks, rivers, and tributaries in addition to highlighting localized ROW and residential flooding.

While the drainage parameters used in 2D modeling were relatively conservative, these model results help identify "hot spots", or areas where substantial flooding occurs frequently. This data was analyzed along with survey responses and citizen feedback to help prioritize known flooding issues city-wide.

Model results were checked for reasonableness and compared to documented drainage complaints, photos of flooding, and high-water marks. Modeling also indicated several residential developments which were constructed prior to the publication of Atlas 14 precipitation data whose pipe networks may not have adequate capacity to meet current drainage criteria. Since the lower pre-Atlas 14 rainfall depths were the basis of design level of service at the time they were completed, flooding caused by these undersized storm networks may result in additional maintenance burden for the City or potential flood risk for residents.

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4.3 ATLAS-14 RIVERINE MODELS

Effective hydraulic models were received from Williamson and Travis County for their Atlas-14 flood study update. Floodplain mapping results of these studies were used as best available data for riverine flooding throughout the City of Leander and serve as the basis from which the conceptual improvement projects have been compared to reduce flood risk. Digital copies of existing HEC-RAS modeling used in the Areas of Interest analysis are included in **Appendix J.**

5 AREAS OF INTEREST IDENTIFICATION

The data gathered during the process, detailed in **Section 0**, and the existing conditions modeling, detailed in **Section 4**, was reviewed to assess the source and extent of each drainage concern. All georeferenced public input from the online survey were compared to model results to validate concerns and determine if it could be considered an area of interest.

Most public input concerns were validated by the results of the models. Eight (8) public comments cited stormwater complaints that were not reflected in modeling results, six (6) of which were located in a privately maintained gated neighborhood and, therefore, could not be confirmed as areas of interest (AOI).

Historical input from City staff was also used to identify potential AOIs. Email correspondence, drone footage, and road closure logs of areas that had experience repetitive flooding were incorporated into the overall data set to assist with AOI identification. Overtopping of roadways, flooded buildings, and homes impacted by flooding were identified by using the 25- and 100-year floodplain results of the ICM models and Atlas-14 Riverine models.

A GIS database of the AOIs was created to serve as an inventory and tracking tool for drainage problems to develop a comprehensive view of the flooding issues facing the City. A total of seventy-six (76) AOIs were identified. More than half of the AOIs identified, 62%, were related to flooding of single-family subdivisions, individual homes, or multifamily buildings. Twenty-four percent (24%) of the AOIs were related to roadway flooding. The remaining AOIs were related to flooding of commercial buildings, mixed use development, parks, or yards.

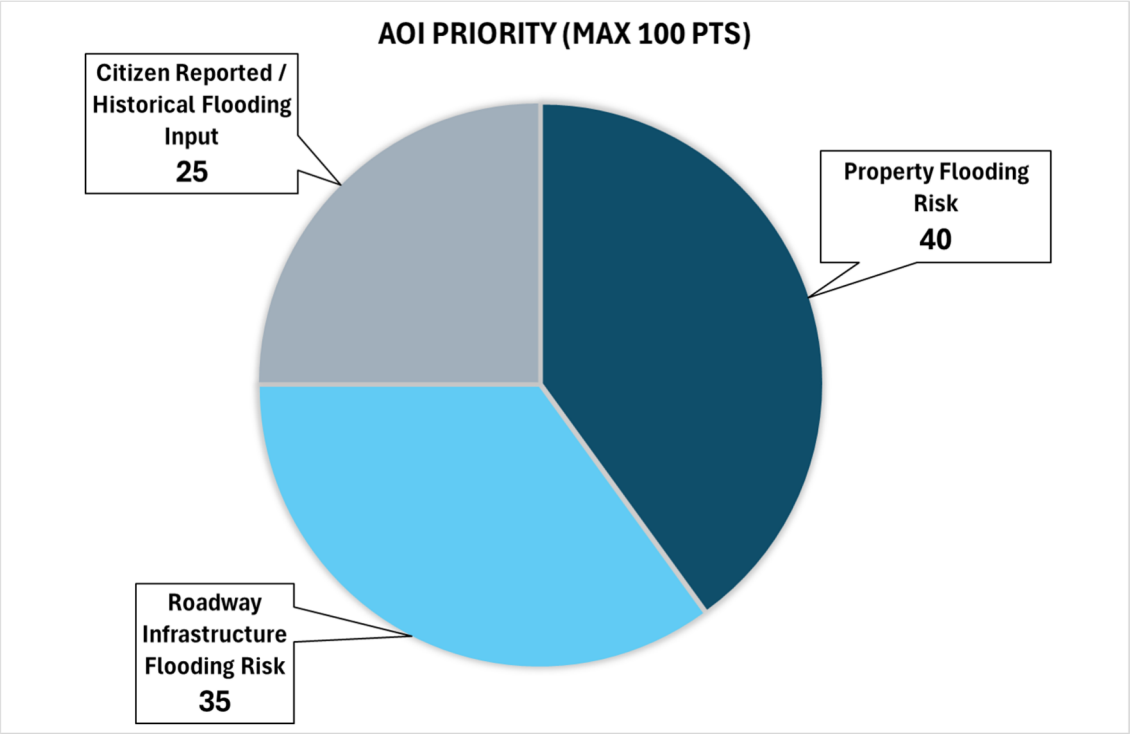
6 AREAS OF INTEREST PRIORITIZATION

The City's primary goals for the Stormwater Master Development Plan were to address current flooding issues for private property owners based on citizen feedback as well as mitigate known flooding issues within public ROW, open spaces, and easements. Meetings were held with City staff to discuss criteria and methodology for the ranking assessment. A City-specific scoring method was developed to systematically compare the AOIs and objectively prioritize them based on their degree of flood risk.

Three (3) categories were identified based on discussions of community risks, benefits and frequency of fooding. The criteria used for these categories focus solely on flooding impacts to identify the City's major and repetitive flood risk areas and ensure that AOIs were prioritized corresponding to their degree of risk.

The three criteria chosen were Property Flooding Risk, Citizen Reported/Historical Flooding Input, and Roadway Infrastructure Flooding Risk. A weight for each criterion was developed where the maximum score would be 100 points, as reflected below in .

Figure 1: Area of Interest Flood Risk Category Weights



6.1 Property Flooding Risk

Property Flooding and Roadway Infrastructure Flooding Risk were considered the two most impactful categories of flooding to all citizens. Therefore, these criteria were assigned higher scores, with a slightly higher score for private property impacts over roadway flooding risk.

Scoring for Property Flooding Risk was assigned based on quantity of structures at risk and structure type. Only habitable structures were quantified since other types of structures would not be qualify for flood insurance claims. Critical structures providing public or essential services such as schools, hospitals, fire stations and police stations were also quantified and assigned the highest scoring value, as reflected below inTable 4: **Table 4**.

Table 4: Property Flooding Risk Score Values

Value (max. 25)	Description
0	No developed property at risk
5	Yard flooding only
10	At least 5 habitable structures at risk
20	Between 6-15 habitable structures at risk
30	Between 16-30 habitable structures at risk
40	30+ habitable structures at risk OR critical structures

6.2 Roadway Flooding Risk

Scoring for Roadway Infrastructure Flooding Risk was based on roadway classifications, as determined by the City of Leander Master Thoroughfare plan, and the event of frequency overtopped. Flooding due to roadway overtopping was only quantified for areas where overtopping occurred in the 2-year, 10-year, and 25-year events in accordance with the current City of Leander drainage criteria.

Higher scores were given to roadways that exhibited a higher frequency of overtopping. Roadways identified as the only means of ingress and egress to properties or neighborhoods were given the highest range of scoring values to ensure appropriate assessment of risk to life and property. Please note that scores on **Table 5** are non-cumulative.

Table 5: Roadway Infrastructure Flooding Risk Score Values

Roadway Infrastructure Flooding Risk			
	2-YR	10-YR	25-YR
LOCAL	20	15	10
COLLECTOR	25	20	15
ARTERIAL	30	25	20
ONLY ACCESS	35	30	25

6.3 Citizen Reported and Historical Flooding Concerns

Citizen Reported and/or Historical Flooding was designated as the third category to assess flooding risk by acknowledging known flooding issues and concerns expressed by the public that may not be apparent in modeling. While the criteria used to assign scores in the Property and Roadway Flooding Risk categories utilize quantitative assessments of the structures and roadway classifications impacted by flooding, the Citizen Reported and/or Historical Flooding category represents qualitative information based on direct observations by property owners as well as known challenges experience by City staff. This category directly incorporates feedback from public involvement efforts detailed in Section 3.2 of this report.

The scores reflected in **Table 6** below were assigned based on quantity of citizen input and whether the AOI involves a previous or ongoing City-known flooding issue.

Table 6: Citizen Reported and Historical Flooding Input Score Values

Value (max. 25)	Description
0	No input was received
5	1 citizen provided input
10	2 citizens provided input
15	Known historical flooding issue
25	3+ citizens provided input, known flooding issue

All 76 AOIs were scored based on the above criteria, and the resulting prioritized list can be found in **Appendix E**. A factor was applied to the scores based on the model source of the floodplain results. ICM 2D modeling is not as reliable for riverine flood results, being better suited for local urban storm system flooding analysis. Riverine flooding is better represented in HEC-RAS 1D models. For this reason, a model source factor of 0.7 was assigned to flood results obtained from

2D ICM modeling and a factor of 1 was used for flooding results obtained from HEC-RAS 1D riverine modeling. This would allow AOIs that experienced riverine flooding to have a slightly higher score.

The top 45 AOIs have a mix of Single Family (SF) Subdivision areas as well as Roadway and some Commercial. AOIs that received a score of zero were areas located within privately maintained gated community, areas that were resolved during developer construction, or roadways that are permanently closed.

7 DRAINAGE CIP DEVELOPMENT

All communities face the challenge of prioritizing demands to make the best use of their finite resources. The prioritization process identifies the projects which maximize benefit to the community according to the value criteria established but the community. The purpose of the stormwater master plan is to develop a drainage Capital Improvement Plan (CIP) identifying the top priority projects within the City. The proposed improvements included in each drainage CIP project are based on preliminary level engineering and high-level topographic information; these are not detailed engineering analysis or design. The following sections discuss the drainage CIP development process and prioritization.

7.1 PROJECT DEVELOPMENT

The top 45 AOIs were assessed based on known flooding issues, citizen feedback, and apparent flood risk indicated by modeling city-wide. ICM modeling was used to develop improvement concepts that would reduce flooding issues within storm drain infrastructure networks. Preliminary design of proposed solutions was performed using the flows from ICM modeling and iterative design alternatives using HEC-RAS, HY-8, Launch Express tools, and other culvert modeling software to quantify and estimate costs for proposed improvements.

Proposed mitigation improvements were developed for the top 15 AOIs (ranked based solely on flooding risk) to optimize post-project flood risk reduction, project feasibility, and anticipated benefits for surrounding private properties and public ROW. These mitigation concepts reflect planning-level modifications to existing storm drainage infrastructure based on existing conditions modeling and available as-built construction plans. Further refinement of proposed improvement concepts (by others) will be required during project design development prior to construction to optimize performance and project scope.

Examples of flood risk mitigation concepts include:

- Replacing undersized storm drain conduit with larger pipes for increased capacity
- Clearing overgrown vegetation in major stream flow paths to improve conveyance
- Augmenting or replacing existing low water crossings to reduce the depth and frequency of roadway overtopping in flooding events. In some cases, existing culvert crossings are proposed to be replaced by single-span bridges to maximize conveyance.

AOIs ranked 16 through 45 were then reviewed and evaluated to develop high-level solution concepts. Since the flood risk associated with these AOIs is significantly lower than the top 15 AOIs, the proposed mitigation strategies for AOIs 16 through 45 are less detailed and may therefore require additional feasibility assessment prior to design and execution.

7.2 FINAL CIP PRIORITIZATION

In addition to the three flood-risk-based categories used to identify AOIs, five (5) additional categories were introduced to evaluate proposed mitigation project costs, potential synergy with other planned projects, and the level of coordination with outside agencies that would be needed. Improvement projects were prioritized and ranked using the following additional categories:

- Cost Effectiveness
- Operations & Maintenance
- Project Impact
- External Coordination
- External Funding Opportunity

7.2.1 Cost Effectiveness – 40 points maximum

Planning level cost estimates have been provided in **Appendix E** and are considered a significant contributing factor for AOI priority ranking. Opinions of Probable Construction Cost (OPCCs) broadly estimate major construction line items like storm drain conduit, headwall and outfall structures, channel earthwork, pavement replacement, and erosion control items. For comparison purposes, projects were scored based on ranges of cost rather than specific dollar values to provide reasonable contingency and standardize ranking considerations across various types of improvement concepts.

The Cost Effectiveness category evaluates the overall project cost anticipated with each proposed improvement project. In addition to cost of construction, engineering and survey costs were estimated as roughly 10-15% of construction costs. Projects whose construction elements or engineering solutions are more complex were estimated to have higher overall project costs. Though project duration does not directly impact the scoring for this category, estimated durations in months are also included in the project description exhibits in **Appendix D** and OPCCs in **Appendix E** for informational and planning purposes.

For projects that may require land or easement acquisition, additional cost was estimated on a pro-rata basis at approximately $50,000 per acre. Projects whose cost was minimized earned higher priority scoring (near the maximum of 40 points), reflecting a favorable balance of project cost to address flooding concerns. Conversely, projects with high estimated costs earned a lower score. See **Table 7** below reflecting Cost category scores based on estimated project cost ranges.

Table 7: Cost Category Score Ranges

Points (max. 40)	Lower Limit	Upper Limit
4	$2,000,000	-
8	$1,500,000	$1,999,999
12	$1,000,000	$1,499,999
16	$750,000	$999,999
20	$500,000	$749,999
24	$250,000	$499,999
28	$200,000	$249,999
32	$150,000	$199,999
36	$100,000	$149,999
40	-	$99,999

7.2.2 Operations and Maintenance – 20 points maximum

This category evaluates the degree of difficulty, ease of access, and special equipment required for City crews to maintain and operate the proposed improvements for each area of interest. Projects with lower operation and maintenance challenges generally employ passive systems to reduce flood risk, requiring little to no direct interaction for adequate operations and minimal maintenance activities such as mowing, minor repairs, removal of debris and vegetation, and occasional structural reinforcement.

Projects with minor operation and maintenance challenges received higher priority scoring, reflecting solutions that require minimal ongoing effort to continue reducing flood risks. Conversely, projects which require more hands-on maintenance activities or require coordination with outside parties for vehicle, equipment, and/or crew access received lower scores. **Table 8** below reflects Operations and Maintenance category scoring values.

Table 8: Operations and Maintenance Category Score Values

Points (max. 20)	Description of Evaluation Criteria
0	Levee inspections or repairs likely
5	Regular maintenance required including special equipment (vacuum truck, etc.)
10	Regular mowing and clearing required with limited access
15	Regular mowing and debris removal with easy access
20	Maintained by others

7.2.3 Project Impact – 10 points maximum

This category evaluates if any proposed improvement projects may benefit from concurrent construction or planning with CIP projects previously identified in the City's FY 2024 CIP plan. Additionally, if more than one Area of Interest evaluated in this study is near to or overlaps the proposed improvement project, the combination of these two improvement efforts may be of benefit to City staff and consultants.

EDGE reviewed planned projects produced by several City departments such as Transportation, Municipal facilities, Parks and Recreation, Water, and Wastewater to determine if their proximity to the AOIs in this study could potentially offer efficiency in the planning and/or construction phases. Projects within close proximity to one or more planned FY24 CIP projects or other Stormwater Master Plan CIP projects were scored favorably depending on the number of coincident project footprints. Several proposed improvement projects did not overlap with any planned CIP projects and were thus given a score of zero (0). Proposed improvement projects with one or more CIP projects nearby were scored according to **Table 9** below.

Table 9: Project Impact Category Score Ranges

Points (max. 10)	Description of Evaluation Criteria
0	Does not overlap with CIP project footprint
3	Overlaps with at least 1 CIP project or other Area of Interest
6	Overlaps with at least 2 CIP projects or other Areas of Interest
10	Overlaps with 3 or more CIP projects or other Areas of Interest

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7.2.4 External Coordination – 5 points maximum

This category accounts for projects whose footprint falls within the jurisdiction of entities other than the City of Leander. Drainage improvements often lie within or across roadways, rail networks, and other transportation systems. Coordination with the ROW owner includes additional effort to ensure design standards align with their regulations, regular progress meetings with the ROW owner, and possible impacts to cost or schedule. Scoring for this category indicates preference for minimal or non-existent coordination constraints while projects that require coordination with County or State jurisdictions receive lower scores. See **Table 10** below reflecting consideration criteria and scoring.

Table 10: Outside Coordination Category Score Ranges

Points (max. 5)	Description of Evaluation Criteria
0	Coordination with railroad
1	Coordination with TxDOT and/or Williamson, Travis County
3	Coordination with School District
5	No coordination necessary

7.2.5 External Funding Opportunities – 5 points maximum

The last category contributing to aggregate prioritization ranking considers opportunities for external funding. Some proposed improvement projects may be good candidates to apply for local, state, or federal grant programs or funding assistance based on factors such as the nature of the flood risk, impacts to adjacent property owners, and the type of drainage improvement proposed. External funding programs and recommendations are discussed further in **Section 9.2** of this report.

Scoring for this category favors projects that may qualify for local, state, or federal grant consideration. Other projects that will likely be the financial responsibility of the City of Leander were given lower scores. See **Table 11** below reflecting consideration criteria and scoring.

Table 11: External Funding Opportunity Category Score Ranges

Points (max. 5)	Description of Evaluation Criteria
0	No potential external funding
3	Potential funding from ISD, TxDOT, or Wilco/Travis County
5	Potential funding from State or Federal grant program

These categories further refined the ranking associated with the top 15 priority sites as well as qualitatively prioritizing the remaining sites 16 through 45. Where project ranking yielded identical composite scores, projects were qualitatively compared and re-scored to prioritize those with higher flood risks and/or lower project costs. AOIs ranked 46 through 76 were not evaluated for proposed mitigation actions at this time, and thus the scoring shown in **Appendix C** reflects only the flood risk values associated with the lowest priority sites.

8 POTENTIAL REGIONAL DETENTION

Regional detention benefits the City and its residents by helping to reduce increased runoff resulting from new impervious cover. Additionally, regional ponds ease the burden on individual developers and property owners to mitigate increases in discharge that ultimately reduces their developable land. The existing Soil Conservation Service Reservoirs and Dams throughout the City of Leander offer passive regional stormwater detention. These include Site 1 on North Fork Brushy Creek (also called Devine Lake), Site 2 on Mason Creek (also called Horizon Lake), and Site 3 on Block House Creek (also called Lake Lakewood).

Analysis was conducted on the feasibility and effectiveness of potential regional detention locations. Rough sizing and locations where detention could give the most effective flood mitigation benefit were:

- **South Fork Brushy Creek** – In conjunction with proposed improvement project ranked 39 near the corner of South Bagdad Rd and Hero Way W. The proposed pond footprint is approximately 10 acres with approximately 825 acres of contributing area. Subject properties are WCAD ID Nos. R032157, R032150, R512383, and R412895.
- **Houghton Creek** – In conjunction with proposed improvement projects ranked 3 and 13, between Emerald Island Drive and South US Highway 83. The proposed pond footprint is approximately 12 acres with approximately 467 acres of contributing drainage area. Subject property is WCAD ID No. R403528.

Appendix B, section B11.1.1 of the Williamson County Subdivision Regulations discusses detention exempt stream reaches throughout the county. This section reflects a peak discharge timing analysis commissioned by the County that identifies portions of major streams and rivers which are exempt from providing new stormwater detention. In these reaches, the delay in peak discharge from a detention pond may arrive at the receiving waterway too close to the peak discharge from the remaining upstream watershed, potentially causing higher discharges and therefore higher flood risk for downstream reaches.

Studies suggest that allowing the undetained discharge to peak and recede prior to the source's upstream watershed peak presents the least potential for impacts downstream. Those who request detention waivers citing this section of the regulations are required to analyze the specific drainage scenarios applicable to their proposed development prior to County approval of the detention waiver request. If detention requirements are not entirely waived in some cases, the County may indicate that detention of a more frequent event (i.e. 2-year storm or 1-2" rainfall event) may suffice to prevent impacts on neighboring properties.

In the vicinity of Leander, the list of detention exempt stream reaches includes portions of South Fork San Gabriel River. Other detention exempt stream reaches in Williamson County lie outside the boundaries of Leander city limits and ETJ. Watersheds for many of the major creeks that traverse Leander (Mason Creek, North & South Fork Brushy Creek, Block House Creek, etc.) originate within or just outside of city limits, resulting in much smaller upstream contributing drainage area discharging through each creek. Therefore, the potential for coincident peak timing is not as high as with South Fork San Gabriel River, Berry Creek, and others exempted by the County, each of which drain dozens of square miles.

9 DRAINAGE POLICY & FUNDING RECOMMENDATIONS

9.1 DRAINAGE CRITERIA ASSESSMENT

9.2 FUNDING OPPORTUNITIES

Sources of funding for capital improvements and maintenance programs range from local taxes, bonds, and other municipal utility fees as well as state and federal assistance programs. Non-governmental entities partner with local, state, and federal administrators to oversee the review, selection, and implementation of plans and projects proposed by communities to identify, plan for, and mitigate flood risk.

9.2.1 State and Federal Grant Programs

Multiple state and federal funding programs are available to offset the cost of drainage infrastructure improvements depending on a variety of factors such as cost of improvements needed, severity of flooding, impact to residents, and other benefit-cost criteria. Each program has its own application and verification process, but all require preliminary engineering efforts to quantify project costs as well as potential post-project benefits.

The proposed improvement projects developed in this study are not intended to provide complete application-ready materials for grants or other funding applications, but many of the considerations evaluated for each project in this study may help the City identify candidate projects that could qualify for external funding and support.

Generally, grant program committees select projects for funding by evaluating applications and supporting documentation that reflects the number of residents affected, the severity and frequency of flooding, past flood damage claims, and benefit-to-cost ratios (BCRs). Other factors may significantly impact a project's selection such as social vulnerability index of adjacent neighborhoods, impacts on low to moderate income populations, and reliance on evacuation routes that would be adversely affected by flooding events.

Application packages will consolidate schematics and calculations produced during preliminary engineering, forecasted total project cost estimates, historical flooding documentation including photos, a narrative discussing how the proposed improvements would address the known flooding risks, and BCR calculators like FEMA's BCA v6.0 Toolkit to demonstrate the project's ability to efficiently and effectively reduce flooding impacts to the community.

EDGE researched available state and federal financial assistance opportunities published by the Texas Flood Information Clearinghouse (TFIC), a repository of funding opportunity information organized by the Texas Water Development Board (TWDB), Texas General Land Office (GLO), and the Texas Division of Emergency Management (TDEM). Grants and assistance programs are administered by various agencies including TDEM, TWDB, GLO, and the Texas Commission on Environmental Quality (TCEQ). See **Appendix G** for a matrix of available funding programs organized by project type.

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The Flood Infrastructure Fund (FIF) administered by the TWDB provides financial assistance in the form of grants or loans funded by the state of Texas for flood mitigation plans and projects. Abridged applications are solicited and reviewed for prioritization within the given cycle's allocated budget, then the selected applications are invited to submit full financial assistance applications with more detailed information and engineering background.

TWDB publishes an Intended Use Plan that details how available state funding will be prioritized across several distinct categories through which applicants seek assistance with flood mitigation projects and plans. Generally, scoring for FIF projects favors areas where a significant flood risk is present and/or a large percentage of the population is affected in the 100-year storm.

Only Flood Management Evaluations (FME), Flood Mitigation Projects (FMP), and Flood Management Strategies (FMS) that are approved by the TWDB in an amended regional flood plan are eligible to submit for financial assistance through the FIF program. Each type of application is reviewed and ranked based on various criteria that quantify risk, need, benefits, and costs associated with the submitted project or plan.

- **FMEs** primarily consist of studies that assess and quantify current flood risk and recommend potential solutions to reduce that risk. Ranking criteria for FMEs focus on evaluating existing flooding risk in a community by quantifying the number of structures, population, critical facilities, public ROW, and agricultural properties that are impacted in the 100-year flooding event.
- **FMP** ranking categories consider the same elements as FME but focus on the degree to which proposed mitigation project improvements will reduce flood risk for the 100-year event. FMP ranking also considers the ratio of benefit to cost associated with the improvements, the project's synergy with nature-based solutions and water supply, and socioeconomic factors that contribute to the overall need for the improvements.
- **FMS** applications propose flood risk reduction activities that do not belong in the FME or FMP categories. These typically include warning systems, low water crossing barriers, flood depth gages, or other improvement projects that may be implemented quickly with immediate results. FMS applications may also include activities that do not propose new construction such as public education and/or outreach campaigns, enhancements to current flood-related regulations, or property buyout programs. Scoring categories are similar to FME criteria, with additional points assigned based on the nature of the strategy.

Other factors like Social Vulnerability Index (SVI) and Low-to-Moderate Income (LMI) populations further inform the project scoring to prioritize impacted areas that may be disproportionately affected by flood risk. When applying for the appropriate FIF application avenue, it may be advisable to combine two or more stormwater projects into a single FME that represents the overall elevated flood risk borne by a community. A comprehensive matrix of FIF ranking criteria and weight (as published in the 2024-2025 IUP) is included in **Appendix G.**

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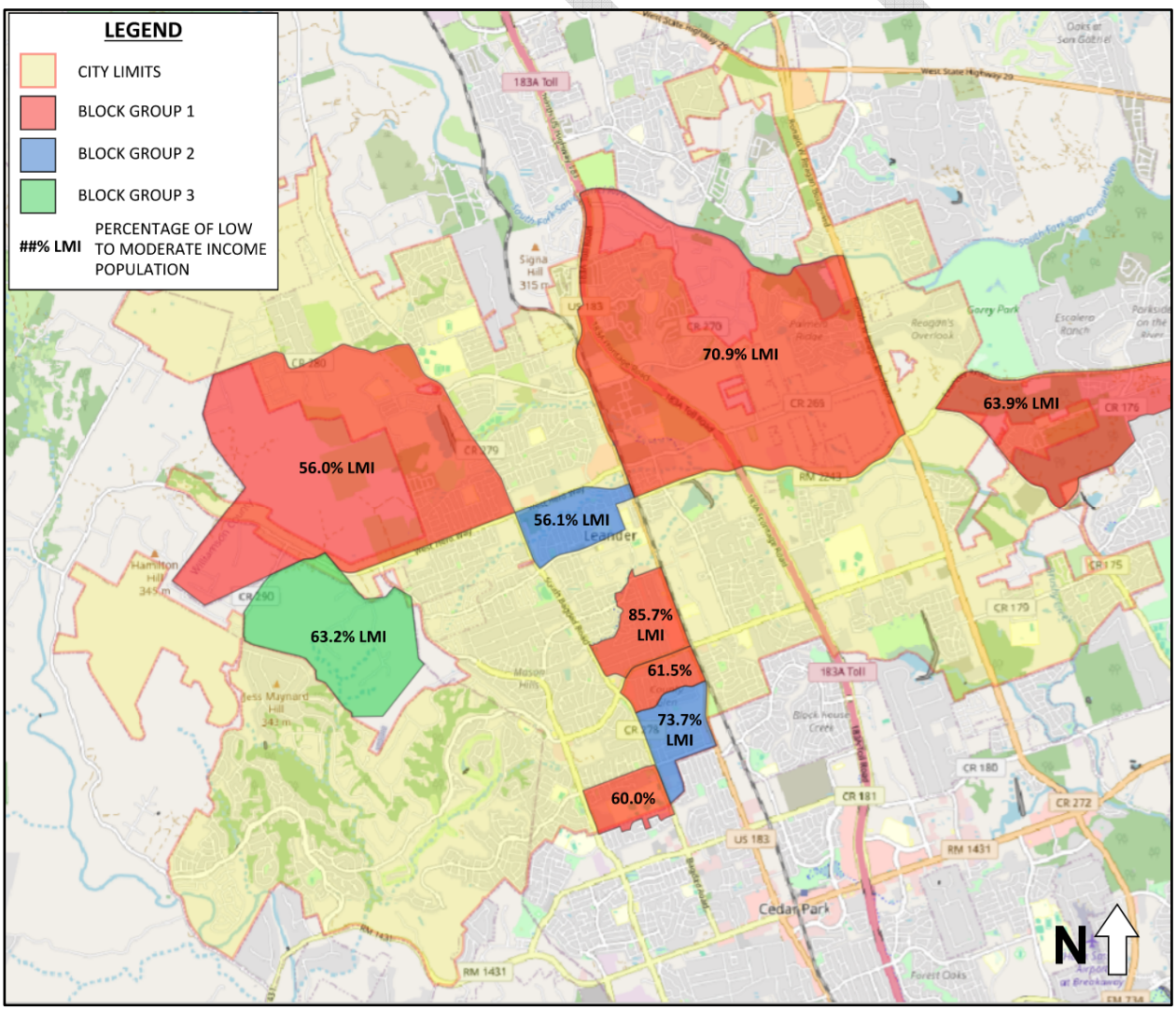
The Community Block Development Grant (CDBG) program is administered by the U.S. Department of Housing and Urban Development (HUD) with state oversight by the Texas GLO. The CDBG program is intended to provide financial assistance for projects that improve infrastructure, housing, planning, and flood mitigation projects that result in more resilient communities.

Categories within the CDBG program consider various elements that build resilience in communities, but the two categories that focus on flood risk are Mitigation (denoted by "MIT") and Disaster Relief (denoted by "DR"). Generally, MIT projects address flooding issues or sub-standard drainage infrastructure to mitigate the potential for future disasters or losses. Conversely, DR projects focus on helping communities recover from Presidentially declared disasters that have already taken place.

Like FIF scoring, the CDBG program places emphasis on serving LMI or socially vulnerable populations within the community. **Figure 2** below reflects the percentage of LMI population within Leander's Census Block Groups 1, 2, and 3.

Figure 2: Low-to-Moderate Income Population Percentages within Leander



Using the CIP project prioritization matrix, proposed improvement descriptions, and estimated impacts to residents, EDGE identified several projects within the top 15 AOIs that may be good candidates for various funding application programs:

- TWDB's Flood Infrastructure Fund (FIF) – Due to the locations of the proposed improvements and adjacent property owners potentially impacted by elevated flood risk, the following projects may be good candidates to combine into an FME application:
    - #2 SFB-1 at Hwy 183 & W Broade St: Bridge improvements, general earthwork and stream restoration
    - #4 MC-7 at Still Meadow Dr & S Bagdad Rd: Levee certification, pond and channel improvements (excluding storm drainage replacement phase)
- GLO's CDBG-MIT – Based on conceptual project costs, anticipated beneficiaries, and impacts to evacuation routes, the following projects may be good candidates for GLO's CDBG-MIT program:
    - #5 BC-6 at RR 2243: Replacement of culvert with bridge
    - #7 NFB-6 at Hero Way West: Culvert replacement
    - #13 BLC-10 at Hwy 183: Culvert improvements and channel/floodplain storage

    Please note, these projects should be coordinated with TxDOT and/or Williamson County, who may have identified roadway improvements for one or more of the project areas.

The Hazard Mitigation Grant Program (HMGP) administered by FEMA is another potential source of federal funding that may be used for flood risk mitigation efforts. Similar to the CDBG-DR program, this funding is made available following Presidentially declared disasters. Communities are only eligible for funding through the HMGP if they have developed and adopted a Hazard Mitigation Plan (HMP). The following communities in the vicinity and ETJ of Leander have adopted HMPs:

- Travis County updated their adopted HMP in 2023.
- Williamson County adopted their HMP in 2025.
- The City has adopted the FEMA-approved 2024 HMP.

Applications for state and federal financial assistance require substantial planning, preparation and review time, and preliminary engineering efforts before projects are selected by grant administration entities. It is common for the project selection and funding process to take 1-2 years, followed by another 1-3 years for bid, award, construction, and final acceptance, depending on the project scope and complexity. The City must consider the nature and degree of flood risk associated with the proposed CIP projects to determine the best use of available budgets, flood risk, and timing for project implementation.

To advance any projects to the grant application phase, EDGE recommends the City designate a Grants Administrator or retain a grant administration consultant to facilitate preliminary engineering studies and application assembly. AOIs with high scores in the three flood risk categories but low priority ranking due to high project cost are good examples of projects that may be considered for outside funding assistance. In this way, higher priority projects with lower estimated costs may be implemented sooner through City or other local budgets sooner than projects that may rely on state or federal funding allocation.

9.2.2 Local Funding Opportunities

Aside from State and Federal funding opportunities, another method to finance stormwater improvement projects would be the implementation of a stormwater utility fee to City of Leander residents. Stormwater impact fees are typically used to augment maintenance and construction budgets for municipalities with limited resources, complex maintenance challenges, or to mitigate rapidly increasing impervious cover due to development.

Based on the anticipated costs for repair, maintenance, and replacement of critical stormwater infrastructure, the City would determine a fee to be assessed by each property owner on a pro-rata basis related to impervious cover or as a flat fee based on land use categories. Stormwater utility fees are typically assessed using Equivalent Residential Units (ERUs), defined as the impervious cover associated with the average residential lot. A detailed study is necessary to quantify the value of ERUs specific to the City of Leander to ensure equitable considerations for residential, commercial, and other land uses throughout the City.

Implementation of a stormwater utility fee will likely be established by ordinance and may require one or more public hearings to ensure legal and equitable establishment of the program. Public hearings are important to solicit citizen feedback, identify responsible parties, outline methodology for calculating and administering utility fees, and plan for regular reporting on fees collected and distributed for construction activities. Provisions within the Texas Local Government Code, Chapter 552 govern the establishment and administration of utility fees for municipalities. Additionally, Texas Government Code, Chapter 1502.070 provides further legal basis for management and control of utility systems including stormwater utilities.

Since the City has identified improvement projects for multiple departments through its FY 2026 Capital Improvements Program, stormwater utility fees should be considered as well as other traditional municipal budget funding allocations like improvement bonds to determine which would be more appropriate and effective with regards to specific stormwater infrastructure improvement projects. Texas Local Government Code, Chapter 395 provides guidance for financing capital improvements for Texas municipalities.

9.3 MAINTENANCE PLAN

In addition to the proposed CIP projects to mitigate known flooding issues, periodic inspection and maintenance of stormwater assets and natural creeks is essential to prevent future flooding issues. With the implementation of a stormwater utility fee, a portion of the funds generated could be designated for ongoing maintenance efforts and periodic conditions assessments.

Anticipated maintenance activities include regular mowing of dry detention pond areas and drainage easement, removal of debris and vegetation in major creeks, periodic conditions assessments for bridges and culverts, and inspection of stormwater infrastructure assets within ROW or easements management via GIS to ensure any elements that have exceeded their design life are earmarked for possible replacement.

Successful maintenance operations rely on complete and timely documentation of all inspection, maintenance, and repair activities. Documentation also provides transparent oversight of funds used in maintenance related efforts. It is recommended that the City develop and adhere to a regular inspection and maintenance schedule for critical flooding sources and stormwater infrastructure.

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At a minimum, the following fields are recommended for inclusion in inspection reports:

- Date(s) of inspection – if inspections take more than one day, consider listing a start date and end date.
- Location – street address, subdivision, cross street, latitude and longitude, and/or County tax parcel ID are all useful entries that can allow for georeferencing of inspection reports.
- Inspector – name, role, and/or employee ID. If combining inspection reports with maintenance logs, include spaces for all maintenance personnel engaged.
- Weather conditions – inspection and maintenance activities may be hampered by inclement weather, but these are often good opportunities to observe the stormwater asset in action and determine appropriate corrective actions or adjustments.
- Stormwater Infrastructure Element Inspected – describe in a few words what specific type of infrastructure is being inspected.
    - E.g. storm conduit, detention pond, channel, low water crossing, etc.
- Corrective Actions Required – Describe what actions are necessary to maintain the stormwater asset(s)
    - E.g. remove silt or debris from pond, clear overgrown vegetation from flowpath, remove litter and large debris from pond outfall structures, etc.
    - If combining inspection reports with maintenance logs, provide a separate log or report document to record the actual materials, personnel, and equipment used each day to ensure transparency of maintenance costs.
- GIS Processing Block – Allow space at the top or bottom of each form for GIS personnel to log, track, and mark completion of georeferencing inspection and maintenance reports.

In addition to the elements listed above, other useful fields include any additional notes the inspector wishes to record like interactions with neighboring property owners, whether the stormwater asset is located within a drainage easement or ROW, potential for erosion or other damage, vandalism, and next scheduled maintenance date. City staff should consult with GIS personnel to determine if any additional fields or different types of input should be included in reports before adopting these reports as part of the overall Stormwater Maintenance Plan. A sample stormwater asset inspection report is included as **Appendix H.**

Table 12 below reflects recommended intervals for various types of inspection and maintenance activities.

Table 12: Recommended Inspection and Maintenance Schedule

Stormwater Feature	Inspection Frequency	Maintenance Activity	Maintenance Frequency
Natural Streams, Creeks, & Rivers	6 months	Vegetation clearing, mowing, debris removal	12 months
Storm Sewer Networks	6 months	Sediment Removal, CCTV inspection of older assets	12 months
Low Water Crossings	6 months	Sediment removal, minor pavement repairs	12 months
Ponds, Levees, & Reservoirs	3 months	Mowing, minor outfall repairs, erosion abatement	3 months

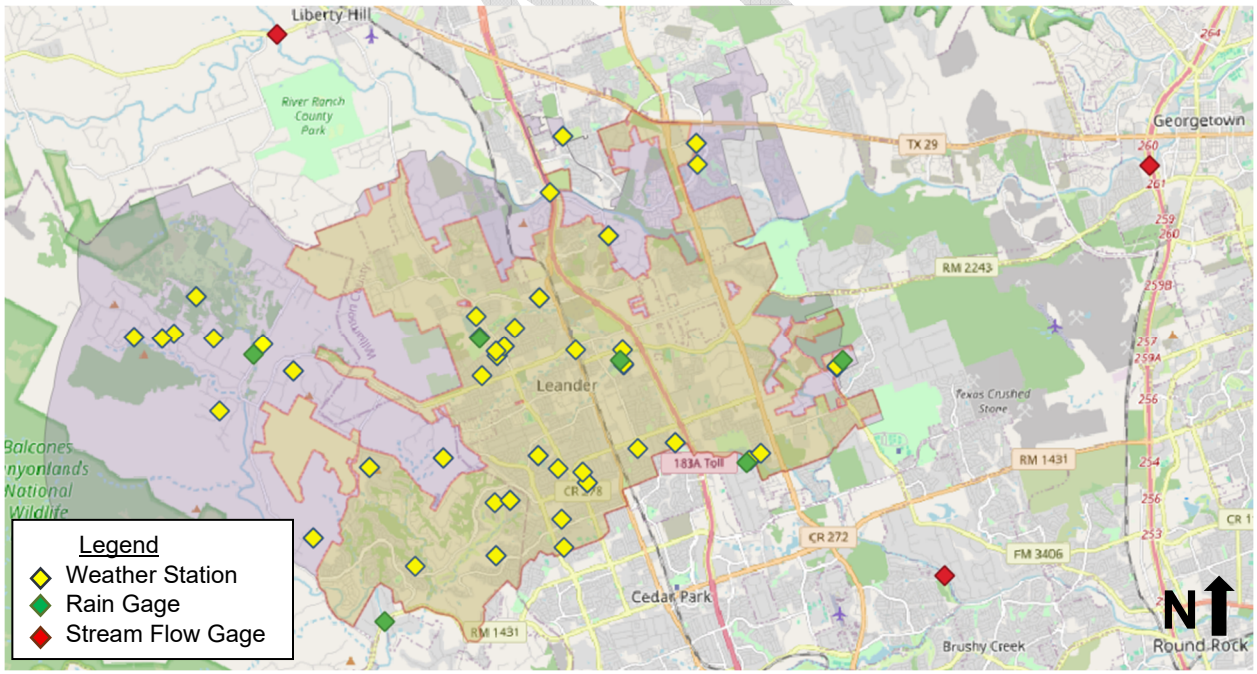
9.4 WEATHER GAUGE STATIONS

Existing weather stations and gage locations were identified from multiple sources throughout Leander city limits including the Water Data for the Nation program administered by USGS, NOAA's Global Historical Climatology Network (GHCN), the Hydrometeorological Automated Data System (HADS) also operated by NOAA, and a non-profit volunteer-run program called Community Collaborative Ran, Hail & Snow Network (CoCoRaHS).

Based on modeling results and known flooding issues, EDGE identified additional locations where improved monitoring and data collection would benefit the City. These recommended locations are intended to provide a more complete picture of flood risk for City staff and emergency personnel during future flooding events. The recommendations in the following sections for new weather stations and gage locations are not exhaustive, but the proposed locations are intended to provide additional data points for areas of the city and ETJ where apparent gaps in current data collection networks exist.

Three types of gage stations are considered in this analysis: Rain Gages, Weather Stations, and Stream Flow Gages. See **Figure 3** below reflecting existing weather stations, rain gages, and stream flow gages in and around Leander. Existing and proposed locations of weather and gage stations are reflected in **Appendix I.**

Figure 3: Existing Weather Stations, Rain Gages, and Stream Gages near Leander, TX



9.4.1 Rain Gages

Rain gages provide official measurements of recorded rainfall that may be used in assessing annual chance exceedance for flooding events and determining potential flood risk with existing modeling. A total of five (5) USGS Rain Gages lie within Leander city limits and ETJ. One of the five gages is located near Bingham Creek at Round Mountain Road in the west ETJ of Leander. The four remaining stations are located at Soil Conservation Services (SCS) reservoir Sites 1, 2, 3, and 5. While the type of data collected by these gages is relevant to reservoir operations,

additional precipitation gages near the upper reaches of major creek watersheds may help provide more robust flood risk data. Adding rain gages near the outskirts of city limits would also be beneficial since new development is more likely in these areas and existing coverage may be sparse.

Precipitation data can provide useful measurements for storm events and flood-related studies, but weather stations typically include rain gage measurements in their suite of meteorological tools. Rather than proposing new rain gage locations distinct from weather stations or stream flow gages, EDGE recommends that any new weather station locations discussed in the next section include precipitation measurement apparatus to make efficient use of funding spent on data collection improvements.

9.4.2 Weather Stations

In addition to accumulated precipitation, weather stations gather different sets of meteorological measurements like wind speed and direction, humidity, temperature, hail size, and other weather data. The level of detail and scope of measurements varies by location and operating organization, but all stations work in concert to provide a robust network of weather-related data. Many of these weather stations report at regular intervals to central data processing administrators who analyze and publish the data online through various tools like TexMesoNet operated by the TWDB, ATX Floods operated by the City of Austin, Weather Underground, and various NOAA and USGS web viewer sites.

A total of sixty-five (65) weather stations span Leander and its ETJ, operated and monitored by various agencies:

- 34 CoCoRaHS stations
- 4 HADS stations
- 19 GHCN stations
- 8 USGS stations

Though this quantity of weather stations may appear substantial, there are a few gaps in their distribution across city limits and ETJ that may be remedied by installing additional stations at strategic locations. Generally, the northwest, northeast, and far east portions of Leander city limits appear to be underrepresented. To minimize cost of installation as well as ensure ease of access and operation, EDGE recommends adding weather gages within City ROW or at existing Leander municipal facilities or properties.

EDGE recommends additional weather stations at or near the following areas:

- **Leander Fire Station 4** (10964 E Crystal Falls Pkwy) benefits the eastern portion of city limits.
- **Leander Fire Station 5** (2800 Travisso Pkwy) benefits a significant portion of the City within Travis County. This facility is near the confluence of Bloody Hollow, Bee Cave Hollow, and Big Sandy Creek.
- **Proposed Fire Station 6** (FY24 CIP ID No. M.9 to be located near Ronald Regan Blvd) would serve the northeastern limits of Leander near new development.

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- **North Bagdad Rd** (CR 279) north of CR 280 would benefit the northwestern portion of city limits. No city facilities are apparent in this area, but Leander ISD campuses for Stacy K Nanielson Middle School and Glenn High School are within the vicinity.
- **West Hero Way** (old FM 2243) near CR 290 at North Fork Brushy Creek benefits a stretch of ROW that extends generally west northwest near the Williamson -Travis County line.

9.4.3 Stream Flow Gages

No stream flow gages exist within Leander city limits or ETJ. Two of the three nearest gages monitor flow for the South Fork San Gabriel River near Liberty Hill and again in Georgetown north of Leander. The third flow gage monitors Brushy Creek along the boundary between Cedar Park and Round Rock roughly three miles southeast of Leander.

Many of the major streams throughout Leander are ephemeral, meaning they are not spring-fed and/or may by dry between rain events. However, stream flow gages provide meaningful flood stage information during heavy rain events that emergency service personnel can use to determine if closures, evacuations, or other actions must be taken to prevent loss of life or property.

EDGE reviewed flood inundation modeling, citizen flooding complaints, and known drainage issues to identify areas within city limits with significant risk of flooding impacts due to roadway overtopping at creek crossings. At many major intersections throughout the city, the railroad running parallel to US 183 appears to be a limiting factor in creek conveyance, creating a higher potential for flood risk immediately upstream. Many of the creeks with high flood risk potential cross both Bagdad Rd and US 183. For these creeks, cost of new gages may be reduced by placing new gages at either the upstream location (Bagdad Rd) or downstream location (US 183).

EDGE recommends adding stream flow gages at the following major creek crossings due to their impact on major city streets and arterial roadways:

- **South Fork San Gabriel River at Ronald Reagan Blvd**
- **North Fork Brushy Creek at US 183 near San Gabriel Pkwy**
- **Brushy Creek at Ronald Reagan Blvd**
- **South Fork Brushy Creek at US 183 near W Broade Street**
- **South Fork Brushy Creek at South Bagdad Rd**
- **Mason Creek at South Bagdad Rd**
- **Mason Creek at South US 183 near Leander Middle School**
- **Houghton Creek at South US 183 near Knight Fields**
- **Block House Creek Tributary 3 at East Crystal Falls Pkwy**
- **Block House Creek at Ronald Reagan Blvd near city limits boundary with Cedar Park**

Costs to install new rain, weather, and stream gage locations throughout the city depend on the type of station, precision and scope of measurements to be recorded, and physical space constraints specific to the proposed site. Coordination with NOAA, USGS, and other weather-related agencies is encouraged to ensure new stations are seamlessly integrated into existing, well-established monitoring networks. If residents wish to participate in the CoCoRaHS network by training and volunteering to host weather stations in their back yard, the City may consider education campaigns or facilitating training workshops.

10 APPENDICES

Appendix A – Overall Project Area Map

Appendix B – City of Leander Stormwater Master Plan Webpage and Public Online Survey

Appendix C – Areas of Interest (AOIs)

Appendix D – Project Summary Sheets (Top 45 AOIs)

Appendix E – Opinions of Probable Construction Cost (Top 15 AOIs)

Appendix F – City-wide Inundation Maps (2D Modeling Results)

Appendix G – External Funding Opportunities and Resources

Appendix H – Stormwater Maintenance Report Templates

Appendix I – Weather Station and Stream Gage Locations

Appendix J – Digital Data

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Appendix A: Overall Project Area Map

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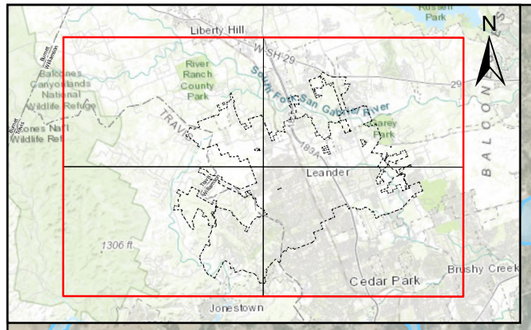

KEY MAP

0 3,500 7,000 Feet

N

Legend

- ETJ
- FEMA Floodplain
- City Limits
- County

LIBERTY HILL

CEDAR PARK

S Fork San Gabriel River

N Fork Brushy Creek

S Fork Brushy Creek

Mason Creek

Block House Creek

Brushy Creek

Big Sandy Creek

Brown Hollow

Bee Cave Hollow

Bloody Hollow

Williamson

Travis

US 183A

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

Hero Way

Bagdad Rd

Crystal Falls Pkwy

N Lakeline Blvd

DATE: APRIL 2026

APPENDIX A

OVERALL PROJECT AREA MAP

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Appendix B: City of Leander Stormwater Master Plan Webpage and Public Online Survey

- Public Online Survey Questions
- Survey Responses
- Map of Survey Respondents

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Leander Stormwater Master Plan

City of Leander is developing a Stormwater Master Plan, which will identify, prioritize, and guide implementation of stormwater-related Capital Improvement Projects (CIPs) in the city. An important part of the process is gathering citizen feedback through public meetings and an online survey. The plan will be completed in late 2025.

Citizen Survey

The online citizen survey allows residents to provide input to the City of Leander about flood or draining problem areas in the city.

CLICK HERE
FOR THE
CITIZEN SURVEY

Public Input

City of Leander will hold three opportunities for residents to provide feedback on stormwater issues in the city. The City held a public meeting on Wednesday, Nov. 13,, 2024, from 5 p.m. to 7 p.m. at the Leander City Council Chambers, The next opportunity for public input will be at a booth during the Old Town Street Festival on June 7, 2025.

PLEASE VISIT US FROM 11 AM TO 7 PM AT THE OLD TOWN FESTIVAL ON JUNE 7, 2025.

The City also will hold another public hearing at a later date.

Stormwater Master Plan: An introduction

Stormwater Master Plan: An Introduction

Why do we need one?

Funding agencies require a plan

FEMA

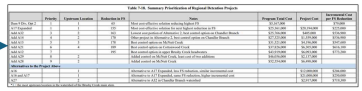
Texas Water Development Board

A major flood can happen any year, and Central Texas is susceptible to flash floods



What does it entail?

Need a list of prioritized flood mitigation capital improvement projects

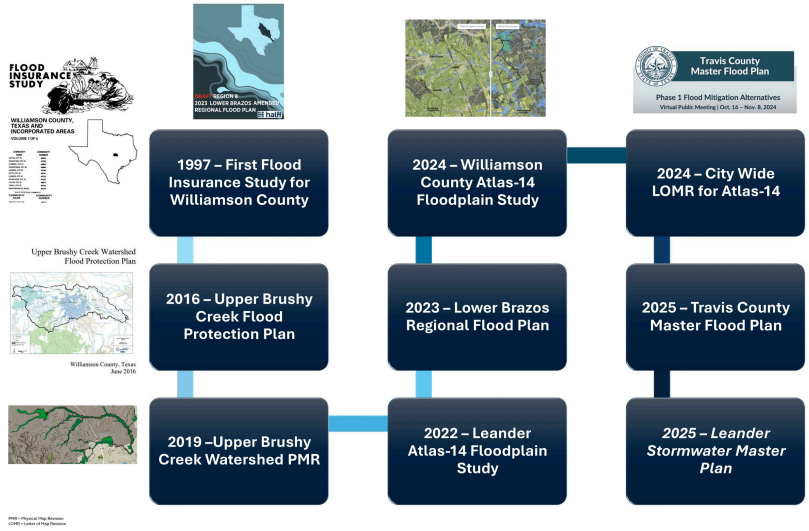


Comprehensive flood study needed



Evaluate flood risk at areas between the streams

History of Flood Studies in Leander



Historic Flooding in Leander

Historic Flooding in Leander

Tropical Storm Hermine
September 8, 2010

Over 12" of rain fell in a 24-hour span across Leander.
For large rivers, creeks, and dams, this is around the 1% annual chance event!





Local Flood
October 16, 2018

A Leander school bus crosses barricades and is swept downstream.



Colorado River Flood
April 24, 2019

Over 1" of rain fell in a 5-minute span along Bagdad Rd.
For small neighborhoods and local roads, this is around the 2% annual chance event!





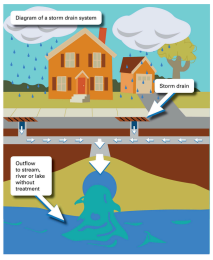
Flood Mitigation Alternatives

Flood Mitigation Alternatives

Crossing Structure Upgrades
- Bridges
- Culverts
- Warning Systems

Storm Drain Improvements
- New Systems
- Pipe Sizing

Diversions
- Creek Diversions
- Off-Channel Detention



Buyouts
- Inundated Structures
- Acquisition Costs

Regional Detention
- Ponds
- Dams

Grading Improvements
- Overland Drainage

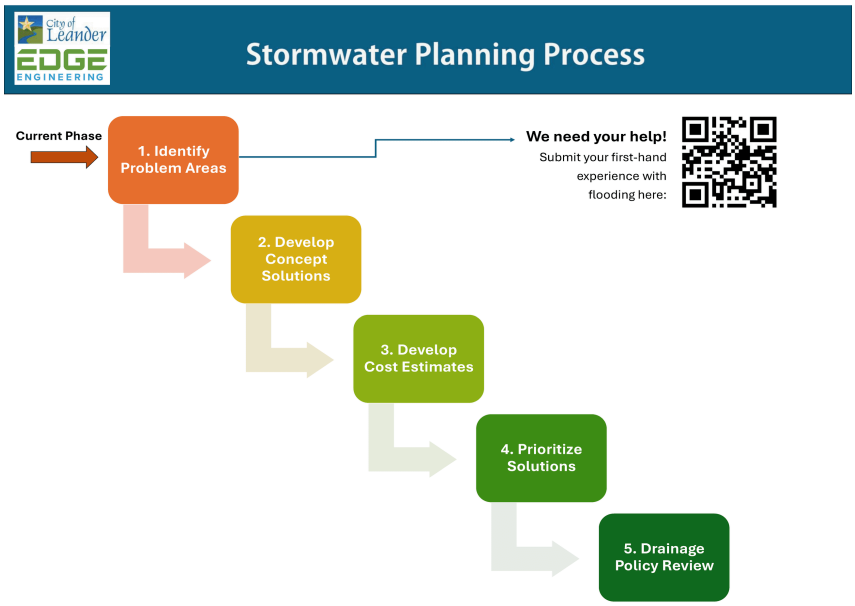




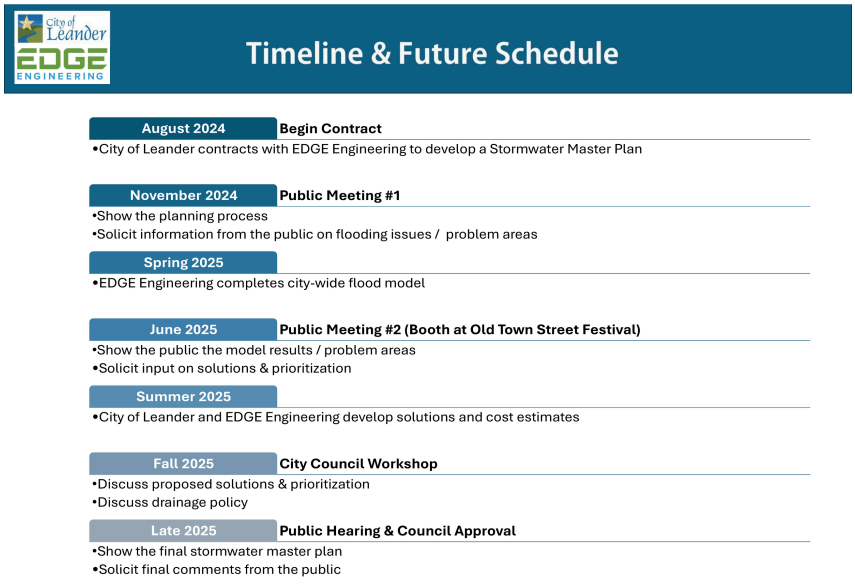




Stormwater Planning Process



Timeline and Future Schedule



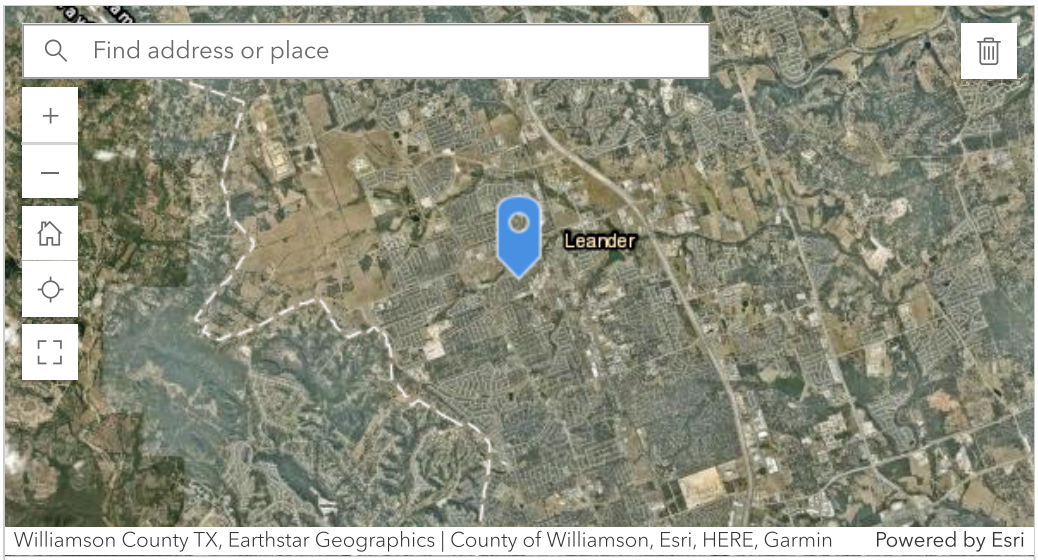
City of Leander Stormwater Master Plan - Citizen Survey

Please complete this survey one time for each known flood or drainage problem area. If you wish to describe multiple problem areas, please complete and submit this survey once for each area.

For technical assistance, please contact Colin Slagle at cslagle@civil-edge.com.

1) Where have you experienced a flood or drainage issue within the City of Leander?

(Add a single point for known flood problem. Use address search bar, if needed. For general flood issues, please add description in Item 4 below)



Lat: 30.574106 Lon: -97.861961

2) How frequently do you experience flooding issues at this location?

(select one)

- ○ Every rainfall event
- ○ Multiple times per year
- ○ Every 1-5 years
- ○ Every 5-10 years
- ○ Extreme events only
- ○ Other/Unknown

3) What are typical flood depths at this location?

(select one)

- ○ 1-3 inches
- ○ 3-6 inches
- ○ 6-12 inches
- ○ 1-3 feet
- ○ More than 3 feet
- ○ Other/Unknown

4) What are the typical flood impacts at this location?

(select multiple as appropriate)

- ☐ Roadway Flooding
- ☐ Property/Yard Flooding
- ☐ Flooding in Homes/Businesses
- ☐ Erosion
- ☐ Sedimentation/Debris
- ☐ Other

5) Please provide additional details on this flooding or drainage problem area.

(nature of flooding, dates of past flood events, impacts to local residents and businesses, closed roadways, known or estimated damages, environmental impacts, concerns, etc.)

1000

6) Upload Relevant Photos

(please upload images of past flood events)

1 Drop image here or select image (maximum number of files allowed: 15)

7) How would you rate the City of Leander's stormwater management performance and capabilities?

(1 - Poor, 5- Satisfactory, 10-Excellent)

1 10

Reset

8) Additional Feedback

(please add any other relevant input on the City's stormwater management program)

1000

Your Name

Your Email

(optional)

Submit (repeat for additional problem areas)

Powered by ArcGIS Survey123

City of Leander Stormwater Master Plan - Online Public Survey Responses

Response # of 42	GlobalID	CreationDate	x	y	2) How frequently do you experience flooding issues at this location?	3) What are typical flood depths at this location?
1	f4c02729-6568-4f36-889d-efb242b63ede	11/13/2024 23:12:30.729	-97.8209	30.5784903	Every rainfall event	1-3 inches
2	4adfc1fb-97e4-41e9-840f-3b4ca09ad5ab	11/24/2024 20:31:21.324	-	-	Multiple times per year	1-3 inches
3	f68dc3fb-6390-4f0e-811b-d94a404bc984	11/24/2024 20:33:21.172	-	-	Every rainfall event	1-3 inches
4	3b014d88-35ae-4f7f-819f-3696fcc0aaae	11/24/2024 21:16:10.395	-	-	Every rainfall event	1-3 inches
5	36d18ef8-a5ac-4910-8bc0-deff7407fdc8	11/24/2024 21:46:03.180	-97.822	30.5779068	Multiple times per year	3-6 inches
6	729d5c77-151a-4e25-89a4-02fe394bd54f	11/26/2024 18:28:56.499	-97.8092	30.5446119	Every 1-5 years	1-3 feet
7	4c39e698-3a6c-4597-8a99-ef87ce009e11	11/27/2024 00:12:53.901	-	-	Every rainfall event	3-6 inches
8	3ecb0457-1921-46c9-8e72-241a83a424c7	12/17/2024 01:42:00.746	-97.8383	30.5879774	Every rainfall event	6-12 inches
9	d297d226-a750-4b1e-83c8-a37d777404a5	01/16/2025 17:09:59.766	-	-		
10	d6108e8b-1708-4e2f-83a3-09252ee68cd4	01/16/2025 18:22:44.622	-97.8217	30.5760135	Every rainfall event	3-6 inches
11	8d9a6b14-f649-41a7-89d3-fb84118f34bc	01/16/2025 18:27:41.202	-	-	Every rainfall event	3-6 inches
12	c70b8bf4-b904-445b-8370-3db9cc5af306	01/17/2025 21:15:42.719	-97.8512	30.6033863	Every rainfall event	3-6 inches
13	2f3f1696-a034-41a2-8d5a-5065e4326f2c	01/18/2025 00:08:51.680	-97.8622	30.5930523	Multiple times per year	1-3 feet
14	3ed073e7-62e1-4117-86b3-a92a96b29204	01/22/2025 01:26:41.740	-97.8212	30.5786964	Every rainfall event	1-3 inches
15	8ef4b0ec-a591-4ca0-849f-80386f1b542a	01/22/2025 05:20:04.673	-	-	Every rainfall event	1-3 inches
16	6894f44e-bb37-4b49-88ea-fcf6c0954ba6	01/24/2025 23:57:56.991	-	-	other	other
17	ab03c260-8b42-4a46-8028-07200e19566a	01/29/2025 03:54:01.389	-97.8209	30.5786216	Multiple times per year	1-3 inches
18	4cabecb4-134d-49f2-8449-4637b061e9ce	02/04/2025 22:49:09.163	-97.8461	30.5508584	Every rainfall event	3-6 inches
19	299f632d-b0ec-42b1-83a1-17ce58fdde78	02/17/2025 13:31:12.733	-97.8456	30.5766534	Every 1-5 years	1-3 inches
20	c763ab3f-f2c5-4dae-8b93-11fc76f95e9f	02/19/2025 19:05:52.306	-97.8183	30.5939015	Extreme events only	3-6 inches
21	e6fe3a7c-776f-44dd-800f-bec3caae209b	02/28/2025 18:43:52.413	-97.8115	30.6048457	Every 1-5 years	1-3 inches
22	56fa27fb-c7ec-475d-854a-cb2fd7e0ac1f	03/05/2025 20:04:18.812	-97.8455	30.5766311	Extreme events only	1-3 feet
23	9b8099d3-43cb-4c89-8b06-d386e707617f	05/16/2025 22:03:15.942	-	-	other	other

City of Leander Stormwater Master Plan - Online Public Survey Responses

Response # of 42	GlobalID	4) What are the typical flood impacts at this location?	5) Please provide additional details on this flooding or drainage problem area.	6) Upload Relevant Photos
1	f4c02729-6568-4f36-889d-efb242b63ede	Property/Yard_Flooding,Erosion,other, Slow drainage along the length of the culdesac that collects algae for months.	Retaining wall behind Vinaros is experiencing a lot of stormwater overflow, both over the wall and through. This is flooding the backyards of the homes for months and creating marsh like conditions. In addition, the culdesac is slow flowing water to the inlet across the street and accumulating for months (causing a standing alage). Cabrera Drive has a sink hole which Pacesetter development did not confidently say was resolved. Homeowners are seeing the sinkhole reappear on the street.	
2	4adfc1fb-97e4-41e9-840f-3b4ca09ad5ab	Property/Yard_Flooding,Flooding_in_Homes/Businesses,Erosion, Sedimentation/Debris	Water clogs for multiple days resulting in mosquitoes and dead flora	
3	f68dc3fb-6390-4f0e-811b-d94a404bc984	Property/Yard_Flooding		
4	3b014d88-35ae-4f7f-819f-3696fcc0aaae	Roadway_Flooding,Property/Yard_Flooding		
5	36d18ef8-a5ac-4910-8bc0-deff7407fdc8	Property/Yard_Flooding	We see occasional flooding in the yard with big rains. The Marbella community is located on a grade and with the city approving additional new development across rouse high school the water absorption is going to do down and more will flow in. Would be good to under stand what plans the city has in protecting properties instead of continuing to approve all new developments around.	
6	729d5c77-151a-4e25-89a4-02fe394bd54f	Roadway_Flooding,Property/Yard_Flooding, Flooding_in_Homes/Businesses,Sedimentation/Debris	Lakewood trail at post oak creak.	
7	4c39e698-3a6c-4597-8a99-ef87ce009e11	Property/Yard_Flooding	Back yard looks likes small pond	
8	3ecb0457-1921-46c9-8e72-241a83a424c7	Roadway_Flooding	This is right by a fire hydrant and every time it rains it floods and you can’t see the water on the road at night. It will literally lift the vehicle off the road when	
9	d297d226-a750-4b1e-83c8-a37d777404a5		I live in Reagan’s Overlook and we have not experienced any flooding at all.	
10	d6108e8b-1708-4e2f-83a3-09252ee68cd4	Roadway_Flooding,Property/Yard_Flooding		
11	8d9a6b14-f649-41a7-89d3-fb84118f34bc	Property/Yard_Flooding,Erosion,Sedimentation/Debris		
12	c70b8bf4-b904-445b-8370-3db9cc5af306	Property/Yard_Flooding	Drainage problems start in the backyard. As water starts to raise it flows towards the front yard. Unable to keep grass on the side of the house or mulch in flo	
13	2f3f1696-a034-41a2-8d5a-5065e4326f2c	Roadway_Flooding,Property/Yard_Flooding,Erosion,Sedimentation/Debris	Any downpour causes rushing water overspilling culverts: new shopping center, child care center, gas station planned for corner of San Gabriel, broade, and light at bell (183) is a major concern, as vegetation removal in favor of concrete will only add as an additional major flooding prone area. Old country vet has been a good neighbor to prevent major flooding. Current heavy traffic at light on normal days, could turn into disaster on rain days !	
14	3ed073e7-62e1-4117-86b3-a92a96b29204	Property/Yard_Flooding	Property back yard flooding and drains to the front of the house for several days after the rain and causing algae near the front of the house. Grading poorly	
15	8ef4b0ec-a591-4ca0-849f-80386f1b542a	Property/Yard_Flooding,Erosion,Sedimentation/Debris	We constantly experience flooding in our backyard during the rains. There is water caused erosion and our backyard is mostly unusable	
16	6894f44e-bb37-4b49-88ea-fcf6c0954ba6	other		
17	ab03c260-8b42-4a46-8028-07200e19566a	Property/Yard_Flooding,other,Ponding near retaining wall and street outlet of French drain in cul-de-sac.	We live in Vinaros Ct and have our property backyard facing a retaining wall. Surface water problem: During heavy rainfall there is significant downpour from the top of the wall eroding the yard and also pooling water in yard. There is also significant water output from the retaining wall weep holes and pipes. Ground water problem: We have heavy ponding in backyard under the retaining wall. After numerous complaints, our builder GFO added a French drain my property covering retaining wall, which reduced the yard ponding significantly , but from under wall flowing through that drain for weeks after a rain. The drain outlet into streets have to take the full ciuldesac before reaching storm drain on the end. This causes pooling and constant algae for us and our neighbors in the cul-de-sac street raising safety and sanitation issues.	
18	4cabecb4-134d-49f2-8449-4637b061e9ce	Roadway_Flooding,Property/Yard_Flooding,Erosion		
19	299f632d-b0ec-42b1-83a1-17ce58fdde78	Roadway_Flooding	There’s a low spot near the edge of the road near the pond south of rm2243	
20	c763ab3f-f2c5-4dae-8b93-11fc76f95e9f	Roadway_Flooding,Property/Yard_Flooding,Erosion	Hero Way is a main route to schools and to 183A. Any type of obstacle to the flow of traffic results in major delays to Ronald Reagan. Traffic build up occurs e	
21	e6fe3a7c-776f-44dd-800f-bec3caae209b	Roadway_Flooding,Property/Yard_Flooding,Flooding_in_Homes/Businesses	no flood water flow area	
22	56fa27fb-c7ec-475d-854a-cb2fd7e0ac1f	Roadway_Flooding	The last flooding event was before the housing was built. I do not know the impact there will be now.	
23	9b8099d3-43cb-4c89-8b06-d386e707617f	Roadway_Flooding	Low water crossings. Developers for sub-divisisions in Leander should have to put in retention ponds to handle the biggest flood that has been recorded for Leander, TX. Those who purchase homes should know they are in a flood zone no exceptions.	

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Response # of 42	GlobalID	7) How would you rate the City of Leander's stormwater management performance and capabilities?	8) Additional Feedback
1	f4c02729-6568-4f36-889d-efb242b63ede	6	As a homebuyer, there is a certain expectation of standards. Development companies are most likely building to code and homeowners have no recourse when they bring up concerns from resultant improper stormwater drainage. Our hope is the city will raise the standard to protect homeowners in the future. We shouldn't expect homeowners to live with standing algae in front of their house or have a flooded backyard for months or to live in fear of a sinkhole endangering their property.
2	4adfc1fb-97e4-41e9-840f-3b4ca09ad5ab	4	
3	f68dc3fb-6390-4f0e-811b-d94a404bc984	1	
4	3b014d88-35ae-4f7f-819f-3696fcc0aaae	1	
5	36d18ef8-a5ac-4910-8bc0-deff7407fdc8	1	
6	729d5c77-151a-4e25-89a4-02fe394bd54f	3	
7	4c39e698-3a6c-4597-8a99-ef87ce009e11		
8	3ecb0457-1921-46c9-8e72-241a83a424c7	7	I think overall the city does a good job. This area not so much. A total miss on drainage.
9	d297d226-a750-4b1e-83c8-a37d777404a5		
10	d6108e8b-1708-4e2f-83a3-09252ee68cd4		
11	8d9a6b14-f649-41a7-89d3-fb84118f34bc	6	
12	c70b8bf4-b904-445b-8370-3db9cc5af306	4	Interested in suggestions to improve water drainage.
13	2f3f1696-a034-41a2-8d5a-5065e4326f2c	2	Overbuilding will result in major catastrophic flooding in near future
14	3ed073e7-62e1-4117-86b3-a92a96b29204	3	
15	8ef4b0ec-a591-4ca0-849f-80386f1b542a	3	
16	6894f44e-bb37-4b49-88ea-fcf6c0954ba6		
17	ab03c260-8b42-4a46-8028-07200e19566a	7	We live in Marbella community. Our HOA is in contact with Leander Stormwater management for assistance.
18	4cabecb4-134d-49f2-8449-4637b061e9ce	3	
19	299f632d-b0ec-42b1-83a1-17ce58fdde78	5	We've lived here for almost 12 years and we can't remember any flooding problems other than the low spot on horizon park blvd south of rm2243 where the pond borders the road in a low spot.
20	c763ab3f-f2c5-4dae-8b93-11fc76f95e9f	4	
21	e6fe3a7c-776f-44dd-800f-bec3caae209b	6	
22	56fa27fb-c7ec-475d-854a-cb2fd7e0ac1f	9	
23	9b8099d3-43cb-4c89-8b06-d386e707617f	2	City of Leander should be pro-active and make sure the developers have an adequate plan in place before any new subdivision is built. The same applies for our water supply - no new developments until this is addressed.

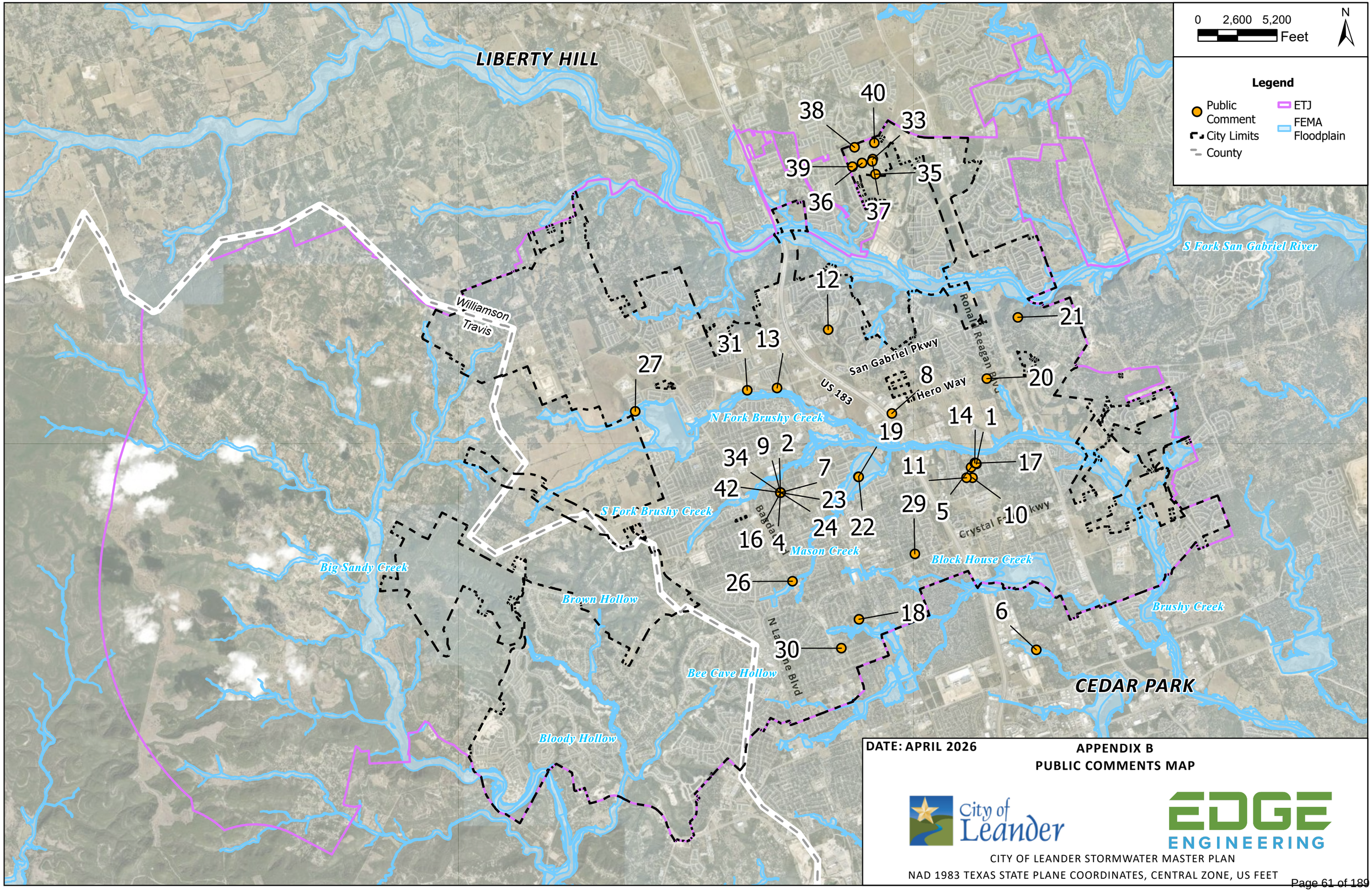
City of Leander Stormwater Master Plan - Online Public Survey Responses

Response # of 42	GlobalID	CreationDate	x	y	2) How frequently do you experience flooding issues at this location?	3) What are typical flood depths at this location?
24	864c41ec-0680-46c3-80c1-c3260ee98015	05/24/2025 20:56:03.574	-	-	other	None
25	122e80e8-5e01-4f55-8915-d06b0d3e1fb0	05/25/2025 22:11:48.340	-	-	Multiple times per year	1-3 inches
26	a87966d8-cf06-473d-809e-57ef073d96b1	05/30/2025 08:20:16.795	-97.8599	30.558018	Every 1-5 years	1-3 feet
27	88458854-658b-43dc-8c52-dcca38957152	06/09/2025 09:41:54.289	-97.8919	30.5893943	Every rainfall event	3-6 inches
28	578c5fdf-bc3f-42a6-876a-24199cf6b58f	06/09/2025 10:01:25.630	-	-	Every rainfall event	1-3 inches
29	7cd4a7b4-521a-47fe-88e0-baac9569577f	06/10/2025 03:24:52.775	-97.8341	30.5624756	Extreme events only	other
30	e3638966-99ec-478b-807e-a6cea0d6fac7	06/10/2025 14:14:58.385	-97.85	30.5457185	Every rainfall event	6-12 inches
31	c5f841fe-bd6c-452d-8890-3b40799afa38	06/10/2025 17:44:10.898	-97.8684	30.5927554	Every rainfall event	1-3 inches
32	128e9ead-fcf1-4ec0-8a5b-750013ca7a0a	06/18/2025 22:39:03.599	-	-	other	Have not had any
33	37eb86c4-5d6f-4db9-8dbf-146e1c07d039	06/26/2025 18:42:59.865	-97.8411	30.6340797	Every rainfall event	3-6 inches
34	fbcba720-203d-46d4-8b53-7f4acce93e0a	06/27/2025 02:32:50.956	-	-	Every rainfall event	3-6 inches
35	0118c6a2-a256-48d0-81a7-dd896987afeb	06/27/2025 15:51:01.186	-97.8406	30.6313394	Multiple times per year	1-3 inches
36	7450d526-952e-4e45-86d3-8a6f795a7e75	07/01/2025 02:56:06.428	-97.8434	30.6334261	Multiple times per year	1-3 feet
37	9bdad206-7b5e-4ff8-8e1c-56a29fcfea30	07/04/2025 13:40:26.655	-97.8412	30.6336655	Every rainfall event	other
38	bb789a76-30d0-4981-8f15-0e2438657ab4	07/05/2025 01:06:09.002	-97.8449	30.6362877	Every rainfall event	3-6 inches
39	d69722c7-025a-4dae-81e1-3c6ad1bfe264	07/05/2025 13:47:14.761	-97.8454	30.6327946	other	3-6 inches, During extend heavy rainfall
40	22493fb5-6f34-4fb3-8872-528b80aeba71	07/05/2025 14:12:58.448	-97.8407	30.6370124	Every rainfall event	6-12 inches
41	b78a0276-daef-4199-8664-75f6e225e35d	07/05/2025 14:30:19.491	-	-	Multiple times per year	3-6 inches
42	4b5bc840-3e29-41f4-80ee-edec9f89db3d	07/05/2025 15:20:27.266	-	-	Every rainfall event	3-6 inches

Response # of 42	GlobalID	4) What are the typical flood impacts at this location?	5) Please provide additional details on this flooding or drainage problem area.	6) Upload Relevant Photos
24	864c41ec-0680-46c3-80c1-c3260ee98015			
25	122e80e8-5e01-4f55-8915-d06b0d3e1fb0	Property/Yard_Flooding,Erosion	I live at 718 Ruby Isle Drive. The duplexes that were built directly behind me have no rain gutters or water diversions. I have lived here since before the duplexes were built and never had issues. After they were built water flows heavily off their roofs and has been eroding our backyard.	
26	a87966d8-cf06-473d-809e-57ef073d96b1	Sedimentation/Debris,other,Walkway around soccer fields.	Water rises up along bridge at roadway.	
27	88458854-658b-43dc-8c52-dcca38957152	Erosion,other,Bridge sank	Bridge sank as well as entire storm drain system at this location required builder to close off the road, stop home construction for four months while they lifted all the drainage access points and the bridge itself with thousands of pounds of new concrete..	
28	578c5fdf-bc3f-42a6-876a-24199cf6b58f	Roadway_Flooding	Poor drainage on Lakeline from Hero Way to Crystal Falls.Every time it rains. It's been this way since it opened.	
29	7cd4a7b4-521a-47fe-88e0-baac9569577f	Property/Yard_Flooding,other,Lat: 30.562476 Lon: -97.834146 Standing water, insects, overgrowth, vermin	This same property is presently a drainage problem area. Several years back the water level in this stormwater detention pond was changed/deepened by a city contracted entity. Many years ago there was an opinion shared by a former Leander city engineer that this property very likely has underground springs. The closest residents to this property are concerned and maintenance is challenging for grounds keepers under regulations they have to follow due to weight of their necessary equipment. Estimated impact or damage is too difficult to determine, and no solution has been found. Trees have been witnessed to grow to maturity.	
30	e3638966-99ec-478b-807e-a6cea0d6fac7	Property/Yard_Flooding,Erosion,Sedimentation/Debris	We live on the corner of Shannon Circle and Ruby Isle Dr. in County Glen. Our address is on Shannon Circle but our house faces Ruby Isle. The culvert under c	
31	c5f841fe-bd6c-452d-8890-3b40799afa38	Roadway_Flooding,Property/Yard_Flooding, Flooding_in_Homes/Businesses,Erosion,Sedimentation/Debris,other		
32	128e9ead-fcf1-4ec0-8a5b-750013ca7a0a	other, none	None at my address	
33	37eb86c4-5d6f-4db9-8dbf-146e1c07d039	Roadway_Flooding,Property/Yard_Flooding, Flooding_in_Homes/Businesses,Erosion,Sedimentation/Debris,other	The whole neighborhoods experiencing massive water flooding, we are one of the worst.	
34	fbcba720-203d-46d4-8b53-7f4acce93e0a	Roadway_Flooding,Erosion,Sedimentation/Debris	Our lot was not done properly. We love it here but the developer should have done something in that lot to prevent the drainage from running like it does.	
35	0118c6a2-a256-48d0-81a7-dd896987afeb	Property/Yard_Flooding,Erosion,Sedimentation/Debris	The electric company put in an underground line perpendicular to the direction of water drainage. The spot they dug is now raised up and stops the natural flow of water because they put too much dirt down over where they dug. My yard floods as a result of this. I'd like the electric company to fix this because it's a serious issue. There's essentially a dam in my yard left over from them that runs perpendicular to the natural flow of rainwater draining off my yard (see pictures).	
36	7450d526-952e-4e45-86d3-8a6f795a7e75	Property/Yard_Flooding,Erosion,Sedimentation/Debris	The ditch that is part of my property has excessive erosion and the ditch sides not stable. My yard has erosion on it as water goes across it to the ditch.	
37	9bdad206-7b5e-4ff8-8e1c-56a29fcfea30	Property/Yard_Flooding,Erosion,Sedimentation/Debris	Every time when it rains little harder we are getting flooding water from our neighbors. The drainage system for water flow is poorly laid out by the home builder and city planning. We have a rain water drainage in our yard, it quickly fills up and water over flows to the property and lawn. The water reaches to the garage and foundation on the house. The main reason is our backyard neighbors are on an elevated hill and water just runs through. I kindly request your attention to check on this.	
38	bb789a76-30d0-4981-8f15-0e2438657ab4	Roadway_Flooding,Erosion,Sedimentation/Debris	Every single time it rains it causes a flood at the front of the house and it causes a lot of erosion. I've had to go to court in order to get rid of some rocks that	
39	d69722c7-025a-4dae-81e1-3c6ad1bfe264	Property/Yard_Flooding,Erosion	Water from roadway flows thru neighbors yard and floods ours	
40	22493fb5-6f34-4fb3-8872-528b80aeba71	Property/Yard_Flooding,Erosion,Sedimentation/Debris	Heavy erosion that has taken away several feet of my yard near my house and washed away the back of my yard, happens every rain	
41	b78a0276-daef-4199-8664-75f6e225e35d	Roadway_Flooding,Property/Yard_Flooding,Erosion	In our area (Bonnet community) near HEB on Ronald Reagan Blvd & Hey 29, there is always drainage water in the culvert of many houses. This needs to be addressed soon, please..	
42	4b5bc840-3e29-41f4-80ee-edec9f89db3d	Property/Yard_Flooding,Erosion,Sedimentation/Debris	Soil erosion is a bigger problem. Water flows very rapidly in the ditch ways and all self attempts to avoid erosion have seen little success. Yard gets flooded fre	

City of Leander Stormwater Master Plan - Online Public Survey Responses

Response # of 42	GlobalID	7) How would you rate the City of Leander's stormwater management performance and capabilities?	8) Additional Feedback
24	864c41ec-0680-46c3-80c1-c3260ee98015	9	
25	122e80e8-5e01-4f55-8915-d06b0d3e1fb0	7	
26	a87966d8-cf06-473d-809e-57ef073d96b1	6	Our home sits in a relatively low area across the street from the Library. I am concerned about flooding from the nearby stream (by the soccer field
27	88458854-658b-43dc-8c52-dcca38957152	4	
28	578c5fdf-bc3f-42a6-876a-24199cf6b58f	4	
29	7cd4a7b4-521a-47fe-88e0-baac9569577f	4	After reviewing the City provided website photos, what would be the possibility of a redesign based on historic and current knowledge of spring augmented stormwater detention ponds.
30	e3638966-99ec-478b-807e-a6cea0d6fac7	3	
31	c5f841fe-bd6c-452d-8890-3b40799afa38	3	We need a detention pond near San Gabriel Fire Station in addition to a 30 inch drainage pipe to redirect waterflow 100 feet further back west from our fences. Fire Department parking lot rain water drains thru four of our lots on the culdesac and has damaged our fences and comes very close to entering our back porches. The city is planning to build a school in back of our lots which will increase waterflow to our lots. Additional construction across San Gabriel Blvd continues to add to increased drainage issue and flooding to our homes. Thank you for your time and allowing us to provide our feedback. We are available anytime to discuss in person and walk the area to Pinpoint out areas that can be improved.
32	128e9ead-fcf1-4ec0-8a5b-750013ca7a0a	10	
33	37eb86c4-5d6f-4db9-8dbf-146e1c07d039	1	These lots needed curbs above and storm drains put in
34	fbcba720-203d-46d4-8b53-7f4acce93e0a	9	
35	0118c6a2-a256-48d0-81a7-dd896987afeb	6	
36	7450d526-952e-4e45-86d3-8a6f795a7e75	4	
37	9bdad206-7b5e-4ff8-8e1c-56a29fcfea30	5	Appreciate if you can put a paved stones or concert to make sure the water flows quickly.
38	bb789a76-30d0-4981-8f15-0e2438657ab4	9	
39	d69722c7-025a-4dae-81e1-3c6ad1bfe264	8	
40	22493fb5-6f34-4fb3-8872-528b80aeba71	4	
41	b78a0276-daef-4199-8664-75f6e225e35d	8	We request you to please work with the builder (Milestone) and provide us long-term solution. Thanks
42	4b5bc840-3e29-41f4-80ee-edec9f89db3d	1	City should have built drain system like how it was in urban areas. Open drain ways are draining our pockets with little avail.



DATE: APRIL 2026

APPENDIX B
PUBLIC COMMENTS MAP

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Appendix C: Areas of Interest (AOIs)

- Summary of All 76 AOIs
- C.1 - All 76 AOIs
- C.2 - Top 45 AOIs
- C.3 - Top 15 AOIs

DRAFT

Area of Interest Prioritization - All 76

Rank	Problem Area ID	Type	Project Area Location	Proposed Benefits	Priority Score (180 max)	Project Cost
1	NFB-2	SF Subdivision	Near Fire Station 1, Mistflower Springs	2 phases, reduce overtopping & ponding, improve conveyance	121	$ 770,000
2	SFB-1	Commerical + Rdwy	Highway 183 near W Broade St	Reduce roadway and neighborhood flooding, clear vegetation	106	$ 1,320,000
3	BLC-11	SF Subdivision	County Glen Dr & Emerald Island Dr	Reduce roadway flooding, improve conveyance east	101	$ 1,020,000
4	MC-7	SF Sub + Rdwy	Still Meadow Dr at Bagdad	3 Phases, Levee cert removes homes from FP, storm & channel imp.	97	$ 1,876,000
5	BC-6	Commerical + Rdwy	Ranch Road 2243 near 1st Baptist Church	Reduces flooding on church, increases developable land	96	$ 790,000
6	SFSG-T25-1	Roadway	CR-270 near CENTEX	Reduces frequency of overtopping & roadway maintenance/repair	84	$ 322,000
7	NFB-6	Roadway	Hero Way West near CR 290	Increased culvert capacity reduces overtopping for major evac route	82	$ 552,000
8	NFB-5	SF Subdivision	Near Waterfall Ave & Sunny Ridge Dr	Remove vegetation & improve conveyance to Devine Lake	80	$ 260,000
9	NFB-1	Roadway	San Gabriel Pkwy near US 183	Reduce overtopping and flooding either side of SGPkwy	79	$ 1,005,000
10	BLC-7	Commerical + Rdwy	Highway 183 and E Crystal Falls Pkwy	Improve conveyance across 183 & through warehouses	78	$ 1,265,000
11	BC-2	SF Subdivision	Near Echo Park Dr & Pecan Creek Dr	Reduce flooding impacts to neighborhood park, improve FP storage	74	$ 447,000
12	MC-1	Roadway	Horizon Park Blvd near Horizon Lake	Raise roadway & bridge crossing	72	$ 610,000
13	BLC-10	Roadway	S Hwy 183 near Rush Automotive	Improve FP storage, reduce overtopping of US 183	71	$ 1,446,000
14	SFSG-T28.01-1	SF Subdivision	Twinspur St in Bonnett subdivision	Improve conveyance and reduce neighborhood road overtopping	70	$ 760,000
15	BLC-3A	SF Subdivision	Rutherford Dr in Ridgewood subdivision	Ph 1 of 2 - Improve culvert crossings and channel grading along tributary	70	$ 557,000
16	BLC-3B	SF Subdivision	Ridgewood Dr in Ridgewood subdivision	Ph 2 of 2 - Replace and add storm infrastructure in public ROW	70	$ 867,000
17	BC-1A	SF Subdivision	Steece Way	Steece Way	70	$ 385,000
18	MC-9	SF Subdivision	N Lakeline Blvd	N Lakeline Blvd	70	$ 480,000
19	BC-4	Roadway	CR-175	CR-175	69	$ 675,000
20	BLH-1	Roadway	FM1431	FM1431	68	$ 1,380,000
21	NFB-3	SF Subdivision	Henderson Dr	Henderson Dr	67	$ 760,000
22	BCH-1	SF Subdivision	Granite Hill Cv	Granite Hill Cv	66	$ 395,000
23	MC-4	Mixed use	Near Horseshoe Dr	Near Horseshoe Dr	65	$ 1,500,000
24	MC-6	SF Sub + Rdwy	S Bagdad Rd	S Bagdad Rd	66	$ 610,000
25	SFSG-T27-2	SF Subdivision	Mollie McBride Ln	Mollie McBride Ln	64	$ 365,000
26	MC-5	SF Subdivision	Cerezo Dr	Cerezo Dr	62	$ 850,000
27	BLC-8	SF Subdivision	S West Dr	S West Dr	62	$ 525,000
28	SFB-4	SF Subdivision	Ran Rd	Ran Rd	61	$ 530,000
29	BC-1B	Roadway	E Crystal Falls Pkwy	E Crystal Falls Pkwy	61	$ 740,000
30	MC-8	SF Subdivision	Stinnett Ln	Stinnett Ln	60	$ 1,050,000
31	BLC-5	SF Subdivision	Birch Brook Ln	Birch Brook Ln	59	$ 770,000
32	BLC-2	Commerical	NE of TX-183A Toll S and E Crystal Falls Pkwy	NE of TX-183A Toll S and E Crystal Falls Pkwy	59	$ 365,000
33	SFSG-1	SF Subdivision	Mongolian Dr	Mongolian Dr	59	$ 695,000
34	NFB-4	Roadway	Maple Creek Dr	Maple Creek Dr	59	$ 765,000
35	MC-2B	Roadway	S Hwy 183	S Hwy 183	58	$ 1,120,000
36	BC-3	SF Subdivision	Rabbits Tail Dr	Rabbits Tail Dr	57	$ 410,000
37	SFSG-T27-1	Roadway	CR-270	CR-270	56	$ 1,010,000
38	BLC-4	SF Subdivision	Willow Creek Dr	Willow Creek Dr	55	$ 950,000
39	SFB-3	Roadway	N Bagdad Rd	N Bagdad Rd	54	$ 1,660,000
40	SFB-2	Roadway	N Bagdad Rd	N Bagdad Rd	53	$ 1,025,000
41	SFSG-T34-1	Roadway	Mockingbird HI	Mockingbird HI	52	$ 730,000
42	BLC-6	Roadway	Horizon Park Blvd	Horizon Park Blvd	51	$ 930,000
43	MC-2A	Mixed use	Sonny Dr	Sonny Dr	50	$ 1,350,000
44	BLH-2	SF Subdivision	High Lonesome	High Lonesome	49	$ 835,000
45	BLC-9	SF Subdivision	Washington Square Dr	Washington Square Dr	45	$ 1,030,000
46	*BHC_060*	SF Subdivision	Oro Belle Way to Oak Hollow Drive	*Not Evaluated; See Note 3*	14	$ -
47	*NFB_110*	SF Subdivision	Brimhurst near Heritage Grove	*Not Evaluated; See Note 3*	14	$ -
48	*SFB_010*	SF Subdivision	Tinto St near Vista Ridge Dr	*Not Evaluated; See Note 3*	14	$ -
49	*BCH_010*	SF Subdivision	Buffalo Gap & Arroyo	*Not Evaluated; See Note 3*	14	$ -
50	*MAS_040*	SF Subdivision	Laurel Ln at Deepwoods Trail	*Not Evaluated; See Note 3*	14	$ -
51	*SSG_3790*	SF Subdivision	Indian Apple Way, Pleasant Hill Rd, & Brueggerh	*Not Evaluated; See Note 3*	14	$ -
52	*SSG_3920*	SF Subdivision	Wind River Trail near Lakota	*Not Evaluated; See Note 3*	14	$ -
53	*NFB_060*	SF Subdivision	Greatwood Trail	*Not Evaluated; See Note 3*	14	$ -
54	*BLH_090*	SF Subdivision	Venezia View to Parisio Court	*Not Evaluated; See Note 3*	14	$ -
55	*BHC_110*	SF Subdivision	Hernandos Loop	*Not Evaluated; See Note 3*	12	$ -
56	*SFB_010*	SF Subdivision	Pinot Noir Street	*Not Evaluated; See Note 3*	10	$ -
57	*UBC_200*	Homes	Journey Pkwy at Brushy Creek	*Not Evaluated; See Note 3*	10	$ -
58	*UBC_020*	Commercial	CR 269 near RM 2243	*Not Evaluated; See Note 3*	10	$ -
59	*UBC_110*	SF Subdivision	Fair Oaks St	*Not Evaluated; See Note 3*	10	$ -
60	*SFB_040*	Multifamily	Leander Senior Village	*Not Evaluated; See Note 3*	10	$ -
61	*SFB_010*	SF Subdivision	Mountain Sky Bend	*Not Evaluated; See Note 3*	10	$ -
62	*UBC_080*	Homes	Ronald Reagan Pkwy near RM 2243	*Not Evaluated; See Note 3*	10	$ -
63	*UBC_020*	Homes	E Hero Way near CR 270	*Not Evaluated; See Note 3*	10	$ -
64	*UBC_130*	Homes	Trail near CR 176 and Brushy Creek	*Not Evaluated; See Note 3*	10	$ -
65	*BHC_120*	Commercial	Knight Fields at US 183	*Not Evaluated; See Note 3*	10	$ -
66	*NFB_100*	SF Subdivision	Weatherford Lane	*Not Evaluated; See Note 3*	7	$ -
67	*SFB_010*	SF Subdivision	Deerpath St and Gordon Parker Ct	*Not Evaluated; See Note 3*	7	$ -
68	*BCH_060*	SF Subdivision	Spyglass Hill & Palos Verdes	*Not Evaluated; See Note 3*	7	$ -
69	*UBC_020*	Roadway	Hero Way at US 183A NBFR	*Not Evaluated; See Note 3*	5	$ -
70	*BLH_070*	Yards	Bloody Hollow at Roaring Fork	*Not Evaluated; See Note 3*	5	$ -
71	*BLH_020*	Yards	Bloody Hollow at Laughing Dog	*Not Evaluated; See Note 3*	5	$ -
72	*NFB_120*	Parks	North Fork Brushy Creek at The Standard	*Not Evaluated; See Note 3*	5	$ -
73	*UBC_030*	Private/ Gated	Ibiza Dr to Balearic Dr	*Not Evaluated; See Note 3*	0	$ -
74	*NFB_050*	Developer Construction	Devine Lake Bend	*Not Evaluated; See Note 3*	0	$ -
75	*UBC_150*	Closed Road	CR 176 at Brushy Creek	*Not Evaluated; See Note 3*	0	$ -
76	*BRH_040*	Private/ Gated	High Lonesome LWC at Brown Hollow	*Not Evaluated; See Note 3*	0	$ -

Notes:

1) A model source factor of 0.7 was assigned to flood results obtained from 2D ICM modeling. A factor of 1 was used for flooding results obtained from HEC-RAS 1D model.

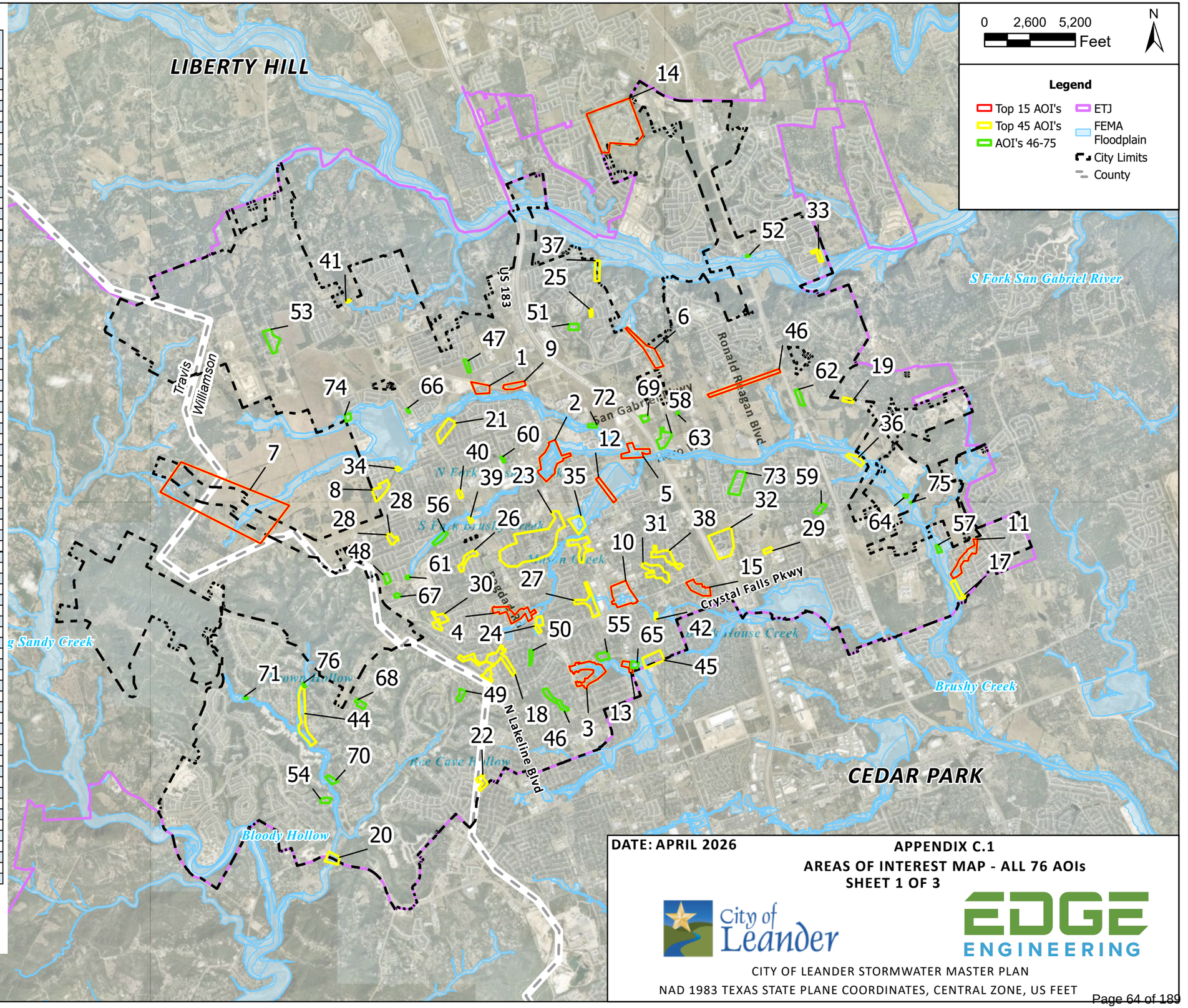
2) Roadways were flagged as areas of interest if they did not meet 25 yr Level of Service.

3) AOIs ranked 46-74 were scored based solely on flood risk categories (Property, ROW, Historic Flooding). These AOIs were not evaluated for proposed improvement mitigation concepts. IDs reflect model subbasins.

Area of Interest Prioritization - All 76

Rank	Problem Area ID	Project Area Location	Priority Score (180 max)	Project Cost
1	NFB-2	Near Fire Station 1, Mistflower Springs	121	$ 770,000
2	SFB-1	Highway 183 near W Broade St	106	$ 1,320,000
3	BLC-11	County Glen Dr & Emerald Island Dr	101	$ 1,020,000
4	MC-7	Still Meadow Dr at Bagdad	97	$ 1,876,000
5	BC-6	Ranch Road 2243 near 1st Baptist Church	96	$ 790,000
6	SFSG-T25-1	CR-270 near CENTEX	84	$ 322,000
7	NFB-6	Hero Way West near CR 290	82	$ 552,000
8	NFB-5	Near Waterfall Ave & Sunny Ridge Dr	80	$ 260,000
9	NFB-1	San Gabriel Pkwy near US 183	79	$ 1,005,000
10	BLC-7	Highway 183 and E Crystal Falls Pkwy	78	$ 1,265,000
11	BC-2	Near Echo Park Dr & Pecan Creek Dr	74	$ 447,000
12	MC-1	Horizon Park Blvd near Horizon Lake	72	$ 610,000
13	BLC-10	S Hwy 183 near Rush Automotive	71	$ 1,446,000
14	SFSG-T28.01-1	Twinspur St in Bonnett subdivision	70	$ 760,000
15	BLC-3A	Rutherford Dr in Ridgewood subdivision	70	$ 557,000
16	BLC-3B	Ridgewood Dr in Ridgewood subdivision	70	$ 867,000
17	BC-1A	Steece Way	70	$ 385,000
18	MC-9	N Lakeline Blvd	70	$ 480,000
19	BC-4	CR-175	69	$ 675,000
20	BLH-1	FM1431	68	$ 1,380,000
21	NFB-3	Henderson Dr	67	$ 760,000
22	BCH-1	Granite Hill Cv	66	$ 395,000
23	MC-4	Near Horseshoe Dr	65	$ 1,500,000
24	MC-6	S Bagdad Rd	66	$ 610,000
25	SFSG-T27-2	Mollie McBride Ln	64	$ 365,000
26	MC-5	Cerezo Dr	62	$ 850,000
27	BLC-8	S West Dr	62	$ 525,000
28	SFB-4	Ran Rd	61	$ 530,000
29	BC-1B	E Crystal Falls Pkwy	61	$ 740,000
30	MC-8	Stinnett Ln	60	$ 1,050,000
31	BLC-5	Birch Brook Ln	59	$ 770,000
32	BLC-2	NE of TX-183A Toll S and E Crystal Falls Pkwy	59	$ 365,000
33	SFSG-1	Mongolian Dr	59	$ 695,000
34	NFB-4	Maple Creek Dr	59	$ 765,000
35	MC-2B	S Hwy 183	58	$ 1,120,000
36	BC-3	Rabbits Tail Dr	57	$ 410,000
37	SFSG-T27-1	CR-270	56	$ 1,010,000
38	BLC-4	Willow Creek Dr	55	$ 950,000
39	SFB-3	N Bagdad Rd	54	$ 1,660,000
40	SFB-2	N Bagdad Rd	53	$ 1,025,000
41	SFSG-T34-1	Mockingbird HI	52	$ 730,000
42	BLC-6	Horizon Park Blvd	51	$ 930,000
43	MC-2A	Sonny Dr	50	$ 1,350,000
44	BLH-2	High Lonesome	49	$ 835,000
45	BLC-9	Washington Square Dr	45	$ 1,030,000
46	*BHC_060*	Oro Belle Way to Oak Hollow Drive	14	$ -
47	*NFB_110*	Brimhurst near Heritage Grove	14	$ -
48	*SFB_010*	Tinto St near Vista Ridge Dr	14	$ -
49	*BCH_010*	Buffalo Gap & Arroyo	14	$ -
50	*MAS_040*	Laurel Ln at Deepwoods Trail	14	$ -
51	*SSG_3790*	Indian Apple Way, Pleasant Hill Rd, & Brueggerh	14	$ -
52	*SSG_3920*	Wind River Trail near Lakota	14	$ -
53	*NFB_060*	Greatwood Trail	14	$ -
54	*BLH_090*	Venezia View to Parisio Court	14	$ -
55	*BHC_110*	Hernandos Loop	12	$ -
56	*SFB_010*	Pinot Noir Street	10	$ -
57	*UBC_200*	Journey Pkwy at Brushy Creek	10	$ -
58	*UBC_020*	CR 269 near RM 2243	10	$ -
59	*UBC_110*	Fair Oaks St	10	$ -
60	*SFB_040*	Leander Senior Village	10	$ -
61	*SFB_010*	Mountain Sky Bend	10	$ -
62	*UBC_080*	Ronald Reagan Pkwy near RM 2243	10	$ -
63	*UBC_020*	E Hero Way near CR 270	10	$ -
64	*UBC_130*	Trail near CR 176 and Brushy Creek	10	$ -
65	*BHC_120*	Knight Fields at US 183	10	$ -
66	*NFB_100*	Weatherford Lane	7	$ -
67	*SFB_010*	Deerpath St and Gordon Parker Ct	7	$ -
68	*BCH_060*	Spyglass Hill & Palos Verdes	7	$ -
69	*UBC_020*	Hero Way at US 183A NBFR	5	$ -
70	*BLH_070*	Bloody Hollow at Roaring Fork	5	$ -
71	*BLH_020*	Bloody Hollow at Laughing Dog	5	$ -
72	*NFB_120*	North Fork Brushy Creek at The Standard	5	$ -
73	*UBC_030*	Ibiza Dr to Balearic Dr	0	$ -
74	*NFB_050*	Devine Lake Bend	0	$ -
75	*UBC_150*	CR 176 at Brushy Creek	0	$ -
76	*BRH_040*	High Lonesome LWC at Brown Hollow	0	$ -

Notes:
1) A model source factor of 0.7 was assigned to flood results obtained from 2D ICM modeling. A factor of 1 was used for flooding results obtained from HEC-RAS 1D model.
2) Roadways were flagged as areas of interest if they did not meet 25 yr Level of Service.
3) AOIs ranked 46-74 were scored based solely on flood risk categories (Property, ROW, Historic Flooding). These AOIs were not evaluated for proposed improvement mitigation concepts. IDs reflect



DATE: APRIL 2026

APPENDIX C.1
AREAS OF INTEREST MAP - ALL 76 AOIs
SHEET 1 OF 3

City of Leander

EDGE ENGINEERING

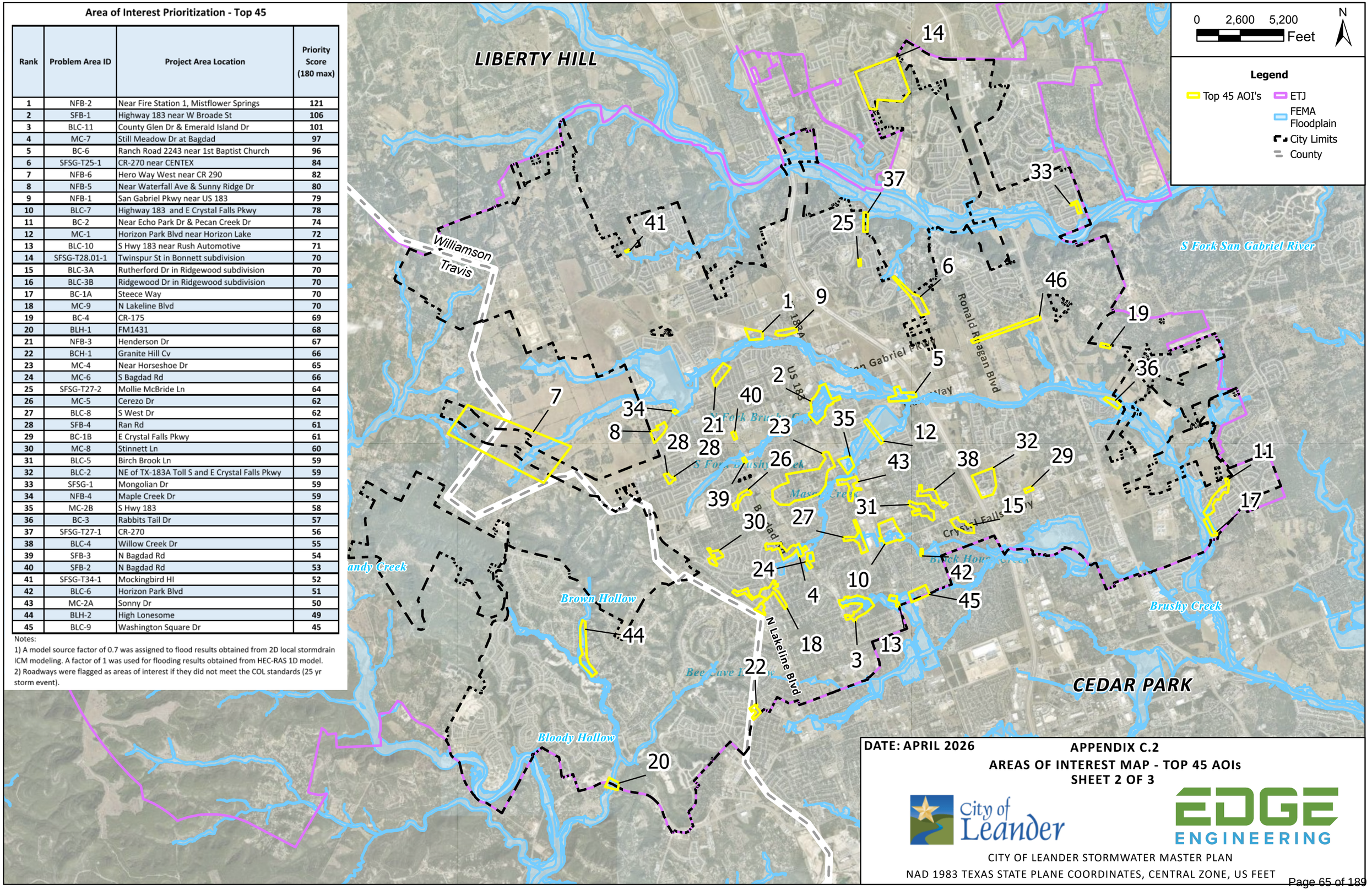
CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Area of Interest Prioritization - Top 45

Rank	Problem Area ID	Project Area Location	Priority Score (180 max)
1	NFB-2	Near Fire Station 1, Mistflower Springs	121
2	SFB-1	Highway 183 near W Broade St	106
3	BLC-11	County Glen Dr & Emerald Island Dr	101
4	MC-7	Still Meadow Dr at Bagdad	97
5	BC-6	Ranch Road 2243 near 1st Baptist Church	96
6	SFSG-T25-1	CR-270 near CENTEX	84
7	NFB-6	Hero Way West near CR 290	82
8	NFB-5	Near Waterfall Ave & Sunny Ridge Dr	80
9	NFB-1	San Gabriel Pkwy near US 183	79
10	BLC-7	Highway 183 and E Crystal Falls Pkwy	78
11	BC-2	Near Echo Park Dr & Pecan Creek Dr	74
12	MC-1	Horizon Park Blvd near Horizon Lake	72
13	BLC-10	S Hwy 183 near Rush Automotive	71
14	SFSG-T28.01-1	Twinspur St in Bonnett subdivision	70
15	BLC-3A	Rutherford Dr in Ridgewood subdivision	70
16	BLC-3B	Ridgewood Dr in Ridgewood subdivision	70
17	BC-1A	Steece Way	70
18	MC-9	N Lakeline Blvd	70
19	BC-4	CR-175	69
20	BLH-1	FM1431	68
21	NFB-3	Henderson Dr	67
22	BCH-1	Granite Hill Cv	66
23	MC-4	Near Horseshoe Dr	65
24	MC-6	S Bagdad Rd	66
25	SFSG-T27-2	Mollie McBride Ln	64
26	MC-5	Cerezo Dr	62
27	BLC-8	S West Dr	62
28	SFB-4	Ran Rd	61
29	BC-1B	E Crystal Falls Pkwy	61
30	MC-8	Stinnett Ln	60
31	BLC-5	Birch Brook Ln	59
32	BLC-2	NE of TX-183A Toll S and E Crystal Falls Pkwy	59
33	SFSG-1	Mongolian Dr	59
34	NFB-4	Maple Creek Dr	59
35	MC-2B	S Hwy 183	58
36	BC-3	Rabbits Tail Dr	57
37	SFSG-T27-1	CR-270	56
38	BLC-4	Willow Creek Dr	55
39	SFB-3	N Bagdad Rd	54
40	SFB-2	N Bagdad Rd	53
41	SFSG-T34-1	Mockingbird Hl	52
42	BLC-6	Horizon Park Blvd	51
43	MC-2A	Sonny Dr	50
44	BLH-2	High Lonesome	49
45	BLC-9	Washington Square Dr	45

Notes:
1) A model source factor of 0.7 was assigned to flood results obtained from 2D local stormdrain ICM modeling. A factor of 1 was used for flooding results obtained from HEC-RAS 1D model.
2) Roadways were flagged as areas of interest if they did not meet the COL standards (25 yr storm event).



DATE: APRIL 2026

APPENDIX C.2
AREAS OF INTEREST MAP - TOP 45 AOIs
SHEET 2 OF 3

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

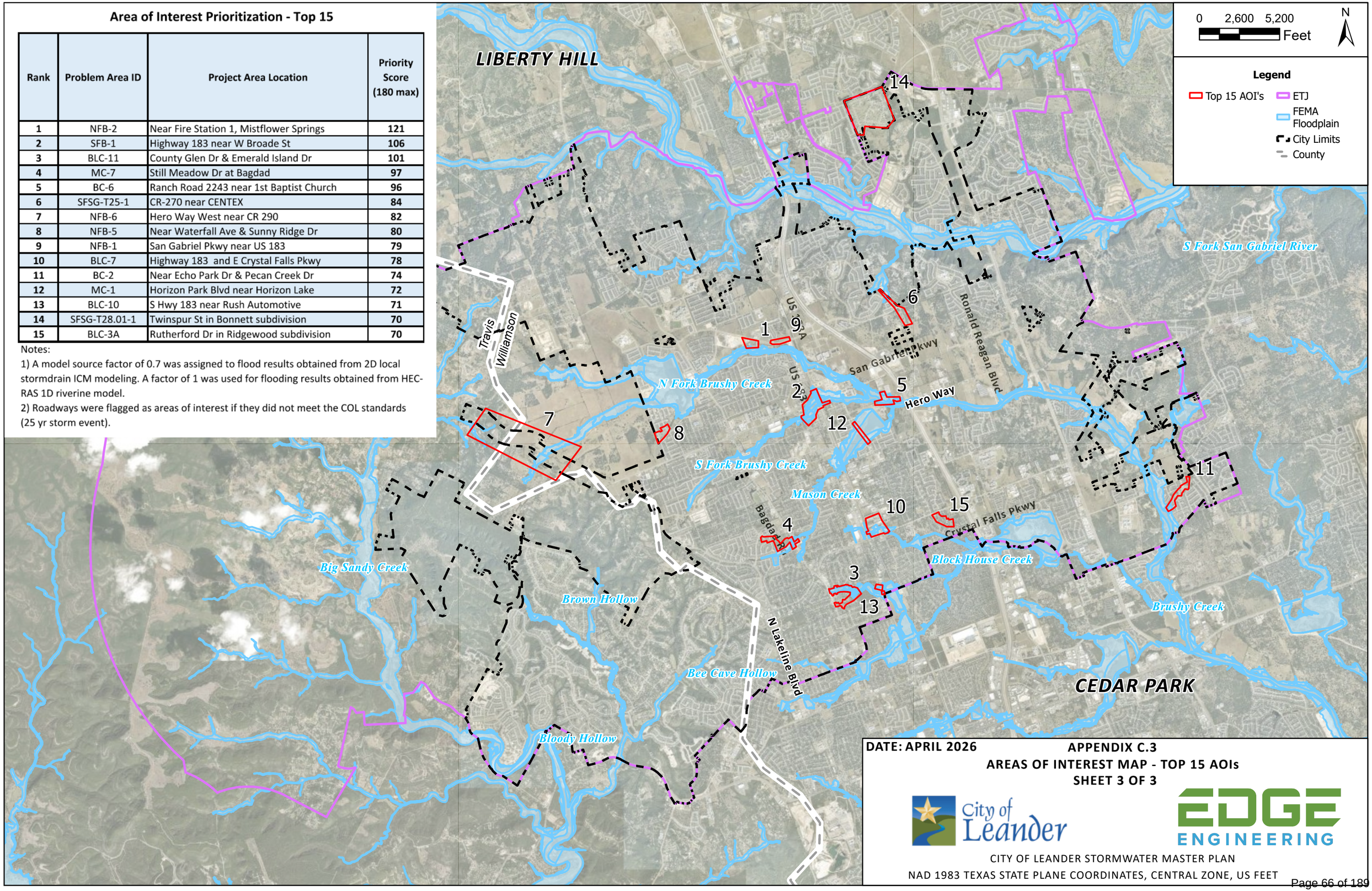
Area of Interest Prioritization - Top 15

Rank	Problem Area ID	Project Area Location	Priority Score (180 max)
1	NFB-2	Near Fire Station 1, Mistflower Springs	121
2	SFB-1	Highway 183 near W Broade St	106
3	BLC-11	County Glen Dr & Emerald Island Dr	101
4	MC-7	Still Meadow Dr at Bagdad	97
5	BC-6	Ranch Road 2243 near 1st Baptist Church	96
6	SFSG-T25-1	CR-270 near CENTEX	84
7	NFB-6	Hero Way West near CR 290	82
8	NFB-5	Near Waterfall Ave & Sunny Ridge Dr	80
9	NFB-1	San Gabriel Pkwy near US 183	79
10	BLC-7	Highway 183 and E Crystal Falls Pkwy	78
11	BC-2	Near Echo Park Dr & Pecan Creek Dr	74
12	MC-1	Horizon Park Blvd near Horizon Lake	72
13	BLC-10	S Hwy 183 near Rush Automotive	71
14	SFSG-T28.01-1	Twinspur St in Bonnett subdivision	70
15	BLC-3A	Rutherford Dr in Ridgewood subdivision	70

Notes:

1) A model source factor of 0.7 was assigned to flood results obtained from 2D local stormdrain ICM modeling. A factor of 1 was used for flooding results obtained from HEC-RAS 1D riverine model.

2) Roadways were flagged as areas of interest if they did not meet the COL standards (25 yr storm event).



DATE: APRIL 2026

APPENDIX C.3

AREAS OF INTEREST MAP - TOP 15 AOIs

SHEET 3 OF 3

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Appendix D: Project Summary Sheets

- Top 15 AOI Project Summary Sheets
- AOIs 16-45 Project Summary Sheets

DRAFT

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: NFB-2 (Rank #1)
Project Name: Mistflower Springs Dr Culvert & Channel Improvements
Drainage Basin: NFB_110

Problem Description

Existing earthen channels west and through the SF subdivision appear to be undersized and several homes are inundated in the 100-yr event. The culverts under Mistflower Spring Dr appear to be undersized and the channel's right bank does not contain which causes a low area to flood in the right overbank. The low area flooding extends through several residential structures and overflows onto Mistflower Springs Dr overwhelming the storm drain system.

Proposed Improvements

Ph 1 - Fire Station No. 1 Improvements, Phase 2 project described below:

- 230 linear feet of concrete channel improvements.
- 700 linear feet of earthen channel improvement
- Replacement of 100 linear feet of 8x3 RCB at crossing along Mistflower Springs Drive
- 190 linear feet of concrete berm.
- Addition of 90 linear feet of 30" RCP at open space area with low elevation for yard drainage.

CIP Ranking Criteria

	Score
Property Flooding	42
Roadway Flooding Risk	0
Citizen Input/Historical	40
Cost Effectiveness	16
O&M Requirements	15
Level of Project Impact	3
External Partner Coord	5
External Funding Opp	0
Total	**121**

Project Costs

Engineering & Survey:	$ 100,000
Construction:	$ 666,900
Other:	
Total:	**$ 766,900**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	4-6 Months

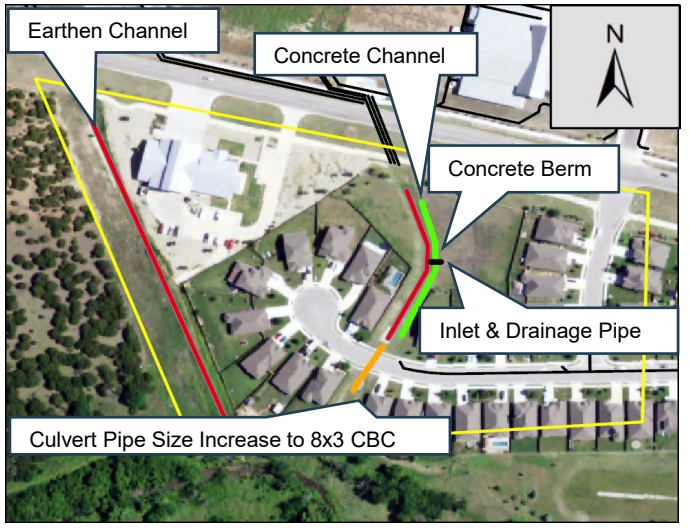
Assumptions

- ICM 100-year overtopping is conservative and should be evaluated during detailed design us more detailed H&H methods.

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: SFB-1 (Rank #2)
Project Name: W Broade St at Mason Creek Conveyance Improvements
Drainage Basin: SFB_030

Problem Description

The two culvert crossings at South Fork Brushy and its tributary at W Broade St and N Highway 183 are undersized which leads to inundation of residential homes in the 25-yr storm event.

Proposed Improvements

- Culvert to bridge at W Broade Street and raise the roadway elevation by 3.5' with upstream and downstream channel modifications
- 1,208 feet of channel improvements along South Fork Brushy Creek from W Broade St to N Highway 183.

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	30
Citizen Input/Historical	5
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	10
External Partner Coord	1
External Funding Opp	3
Total	**106**

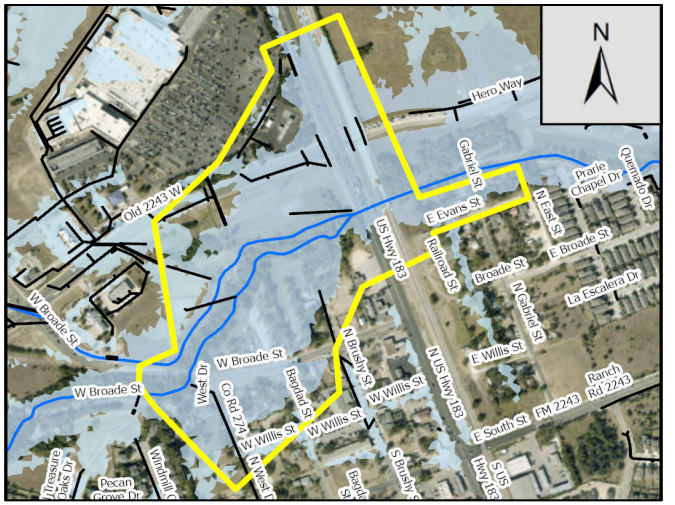
Project Costs

Engineering & Survey:	$ 172,000
Construction:	$ 1,147,900
Other:	
Total:	**$ 1,319,900**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	3 Months

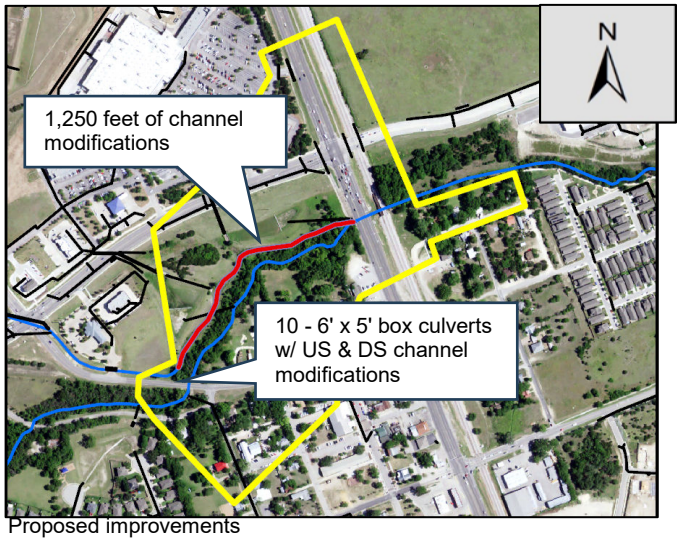
Assumptions

Inundation in the South Fork Brushy Creek HEC-RAS model is more accurate than the model for South Fork Brushy Tributary A for the area of interest.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BLC-11 (Rank #3)
Project Name: County Glen St & Emerald Isle Dr Storm Improvements
Drainage Basin: BLC_110

Problem Description

The existing drainage for this subdivision primarily consists of roadside ditches and driveway culverts. The ditches and driveway culverts are undersized and localized modeling shows a high probability to residential flooding.

Proposed Improvements

- 650 LF of 36" storm sewer to convey flow along County Glen Drive and into Wicklow Drive.
- 265 LF of 4'x3' box culvert from Wicklow Dr to trib outfall.
- Replace 2-24" CMP low water crossing at Emerald Isle Dr with 2 - 4' x 3' box culverts
- 250 linear feet of channel widening downstream to east property line.

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	0
Citizen Input/Historical	40
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**101**

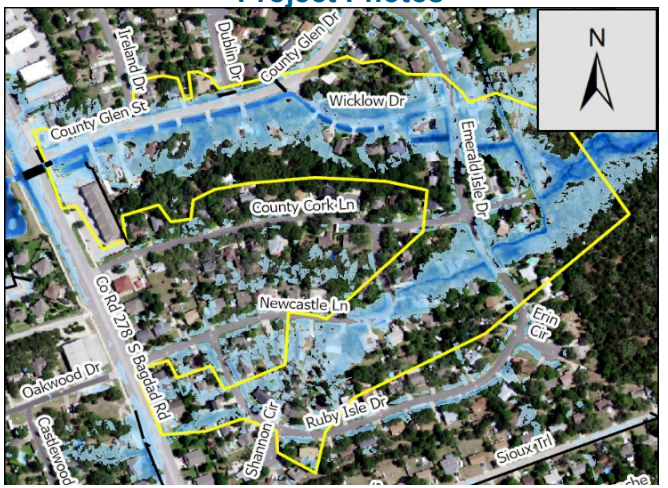
Project Costs

Engineering & Survey:	$ 133,000
Construction:	$ 886,275
Other:	
Total:	**$ 1,019,275**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	9-12 Months

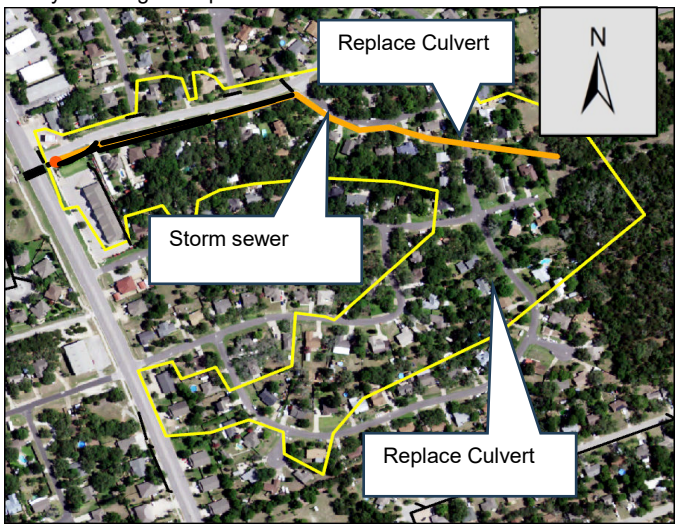
Assumptions

- Storm drain & box culverts add capacity to existing ditch system which will remain.
- Cross culverts discharge downstream to tributary.

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

Project ID: MC-7 (Rank #4)
Project Name: Mason Ranch Storm & Conveyance Improvements
Drainage Basin: MAS_030

Problem Description

A tributary of Mason Creek flows through an initial culvert system at Volente St (2 - 36" RCP) and south through the residential neighborhood in an open ditch. Flow from the ditch goes through a second culvert system (2 - 8' x 4' box culverts) and into a detention pond flowing east and out of a third culvert system (1 - 42" and 3 - 60" circular culverts) underneath S Bagdad Road. The first two culvert systems and the open ditch are undersized which potentially causes residential flooding.

Proposed Improvements

- **Recommend 3 Phases: Ph 1 - Levee Certification (no construction); Ph 2 - clearing & channel s downstream improvements; Ph 3 - Neighborhood Storm Improvements**
- 874 feet of channel improvements
- Replace the 2 - 36" culverts with 6 - 3' x 3' box culverts and upstream channel modifications
- Replace and upsize 2,270 linear feet of storm sewer. Sizes range from 24" to 60" pipes

CIP Ranking Criteria

	Score
Property Flooding	40
Roadway Flooding Risk	30
Citizen Input/Historical	0
Cost Effectiveness	8
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**97**

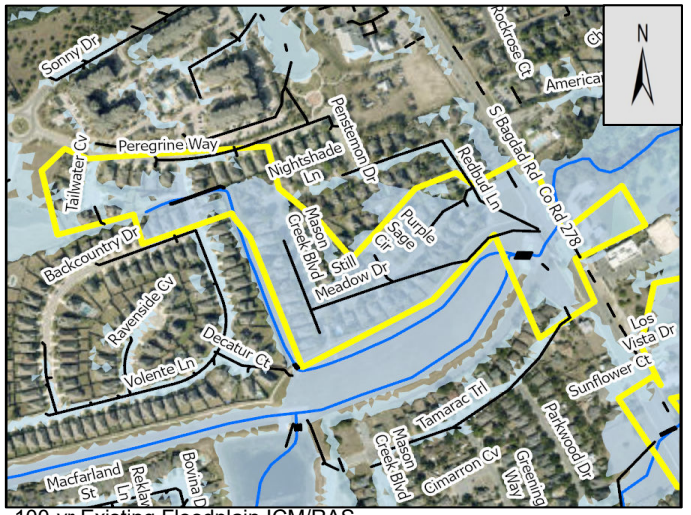
Project Costs

Engineering & Survey:	$ 313,000
Construction:	$ 1,562,678
Other:	
Total:	**$ 1,875,678**
Conceptual Cost Range:	$1.5M - $2M
Estimated Construction Duration:	18-24 Months

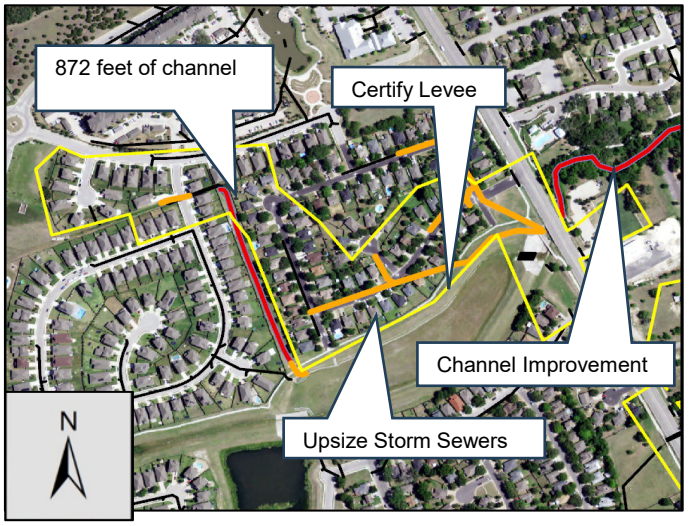
Assumptions

- Levee certification removes homes from floodplain without construction
- Storm improvements conveys drainage offsite more efficiently

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BC-6 (Rank #5)
Project Name: RR 2243 at Brushy Creek Low Water Crossing
Drainage Basin: UBC_010

Problem Description

Brushy Creek crosses RR 2243 through 2 - 8' x 4' box culvert and 5 - 7' x 4' box culverts. The culvert system is undersized which causes significant inundation and structural flooding north of RR 2243 in the 25 year storm event.

Proposed Improvements

- Raise RR 2243 roadway elevation by approximately 4-ft
- Replace culvert system with a 90-ft span bridge

CIP Ranking Criteria

	Score
Property Flooding	10
Roadway Flooding Risk	35
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	20
Level of Project Impact	6
External Partner Coord	1
External Funding Opp	4
Total	**96**

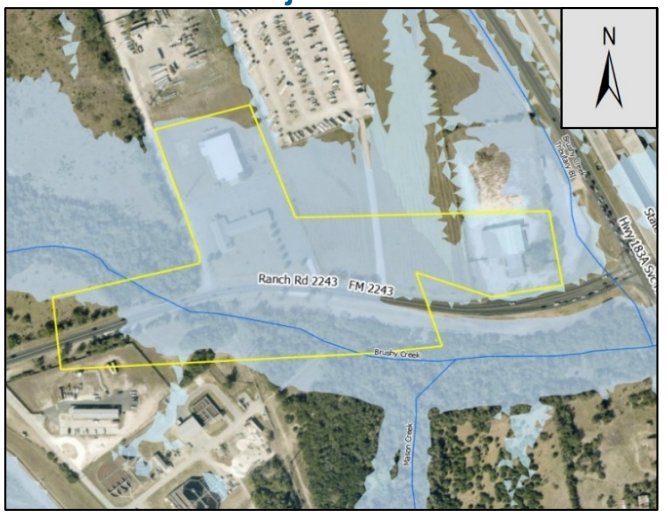
Project Costs

Engineering & Survey:	$ 103,000
Construction:	$ 687,063
Other:	
Total:	**$ 790,063**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12-18 Months

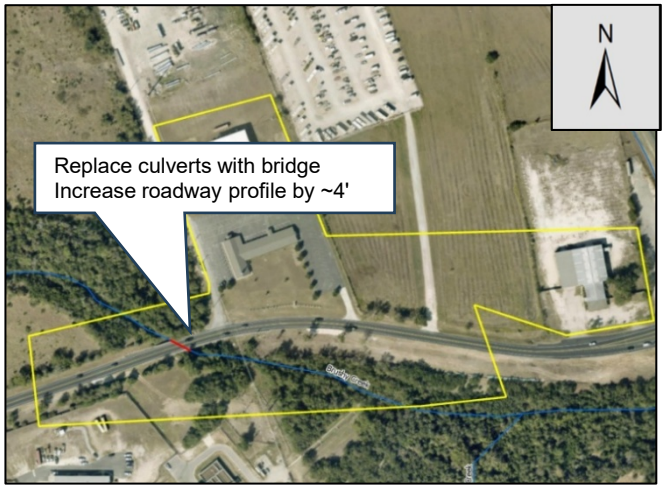
Assumptions

- Extended project duration due to traffic phasing
- Investigate potential downstream impacts during detailed design phase.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: SFSG-T25-1 (Rank #6)
Project Name: CR 270 Low Water Crossing
Drainage Basin: BHC_110

Problem Description

A tributary of South Fork San Gabriel crosses CR 270 adjacent to a residential neighborhood and the recently built Wildflower RV Park. The culvert crossing at CR 270 is undersized and does not adequately convey the 25 year storm event and cause inundation of the adjacent residential area.

Proposed Improvements

- Replace existing 24" CMP with 4 - 36" RCP
- Channel grading & riprap along CR 270 and through CENTEX and gas tank pad site

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	15
Cost Effectiveness	24
O&M Requirements	15
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	1
Total	**84**

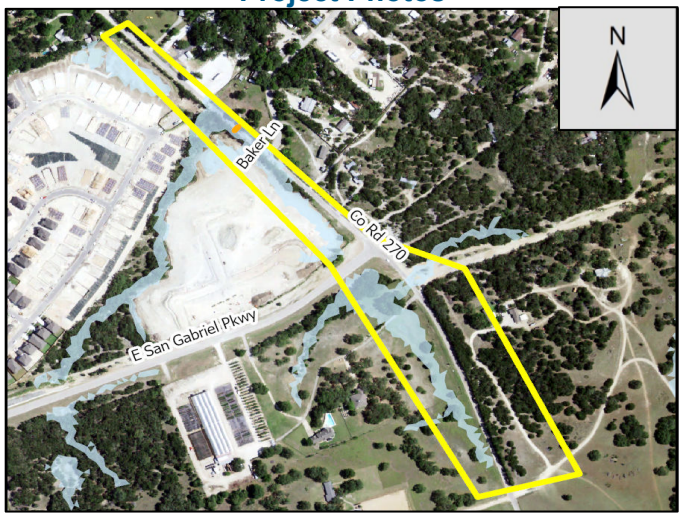
Project Costs

Engineering & Survey:	$ 54,000
Construction:	$ 268,054
Other:	
Total:	**$ 322,054**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6 Months

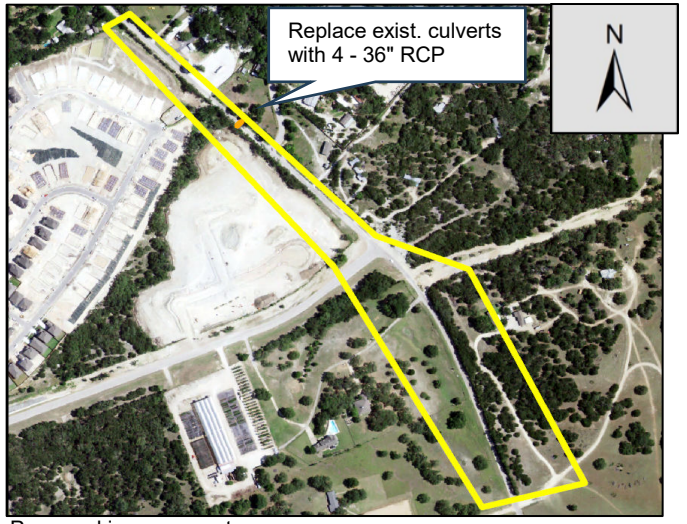
Assumptions

Development downstream of the culvert crossing CR 270 has been constructed after the creation of the best available HEC-RAS models. If proposed improvements do not significantly reduce overtopping, may need to replace second low water crossing as well.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: NFB-6 (Rank #7)
Project Name: Hero Way West Culvert Improvements
Drainage Basin: NFB_010

Problem Description

North Fork Brushy Creek crosses Hero Way West (RM 2243) through 2 - 5' x 5' box culverts. The culverts are undersized and do not adequately convey the 25 year storm event which causes the roadway to overtop and pose a safety risk.

Proposed Improvements

- Add two additional 5' x 5' box culverts for a total of 4 - 5' x 5' box culverts
- Channel improvements at the upstream and downstream ends of the culverts

CIP Ranking Criteria

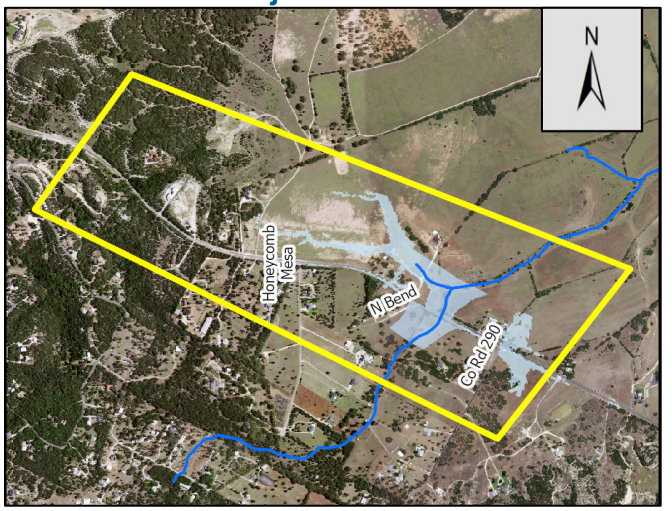
	Score
Property Flooding	0
Roadway Flooding Risk	35
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	20
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	3
Total	**82**

Project Costs

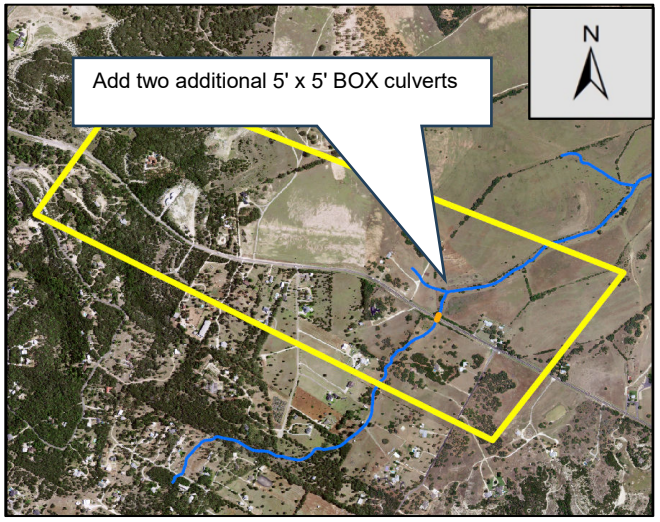
Engineering & Survey:	$ 72,000
Construction:	$ 479,986
Other:	
Total:	**$ 551,986**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	12 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: NFB-5 (Rank #8)
Project Name: Conveyance Improvements Near Waterfall Ave
Drainage Basin: NFB_090

Problem Description

Apparent flooding of large earthen channel through development, culvert crossings at Landing Ln and Sunny Ridge Dr. Poorly defined flowline of creek upstream of development must turn and find relatively small channel section at Landing Ln culvert crossing. Vegetation downstream of Sunny Ridge Dr may prevent efficient conveyance. May be related to Area of Interest 34.

Proposed Improvements

- Earthwork improvements upstream of Landing Ln
- Vegetation removal downstream of Sunny Ridge Dr
- Flowline armoring (rock riprap) at western property line and existing culverts

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	20
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**79**

Project Costs

Engineering & Survey:	$ 50,000
Construction:	$ 209,950
Other:	
Total:	**$ 259,950**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	2-3 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: NFB-1 (Rank #9)
Project Name: E San Gabriel Pkwy Culvert Improvements
Drainage Basin: NFB_110

Problem Description

A tributary of North Fork Brushy Creek crosses the E San Gabriel Parkway through 3 - 5' x 3' box culverts. The existing crossing is undersized and does not adequately convey the 25 year storm even. This leads to backwater inundating several residential structures upstream and flooding W Broade Street and Akumal Street.

Proposed Improvements

- Upgrade the E San Gabriel Parkway culvert system to 6 - 5' x 3' box culverts.
- Upstream and downstream modifications on the channel.

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	20
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	3
External Partner Coord	5
External Funding Opp	0
Total	**80**

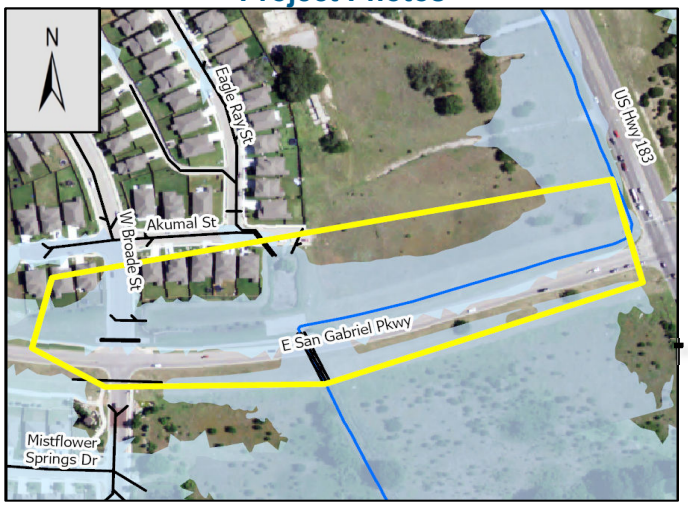
Project Costs

Engineering & Survey:	$ 135,000
Construction:	$ 870,000
Other:	
Total:	**$ 1,005,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	6-8 Months

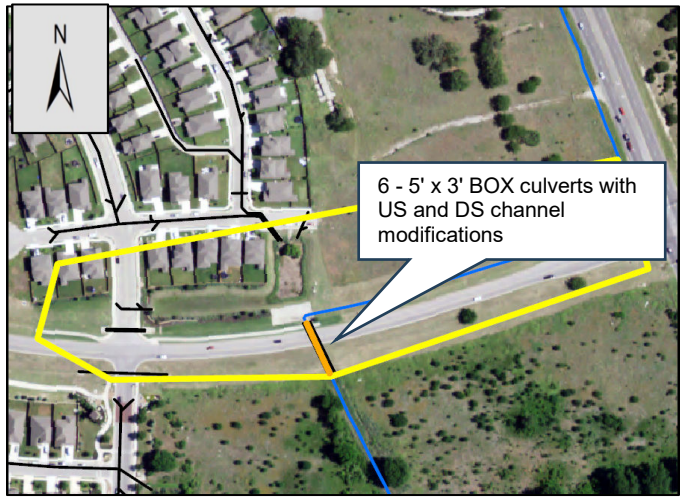
Assumptions

May be accomplished through currently planned CIP expansion of San Gabriel Pkwy.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BLC-7 (Rank #10)
Project Name: E Crystal Falls Parkway at North Branch Block House Creek
Drainage Basin: BHC_160

Problem Description

A tributary of Blockhouse Creek crosses SH 183, a railroad, and W Crystal Falls Pkwy through culvert systems and flows a commercial area via storm drain system and open ditch. The culverts at SH 183 are undersized and overtop in the 25-yr event. Overtopping flow inundates the commercial structures and causes significant flooding.

Proposed Improvements

- SH 183 - Upgrade 2 - 54" circular culvert to 2 - 5' x 5' box culverts.
- Upsize 1,140 linear feet of storm sewer

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	25
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	0
External Funding Opp	1
Total	**78**

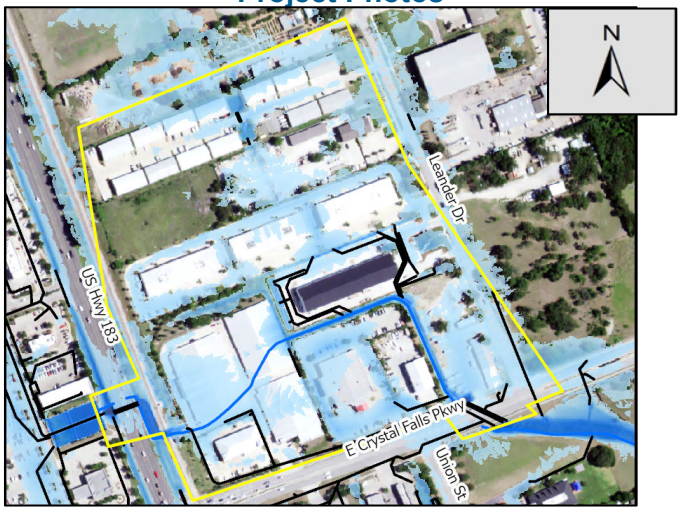
Project Costs

Engineering & Survey:	$ 165,000
Construction:	$ 1,099,670
Other:	
Total:	**$ 1,264,670**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	9-12 Months

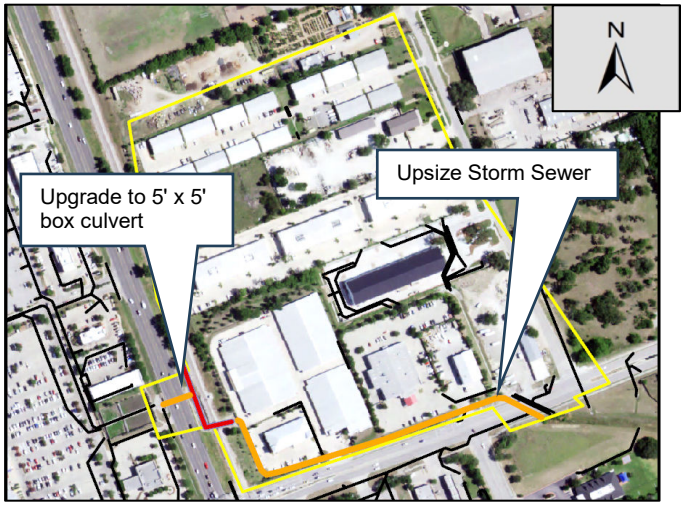
Assumptions

Some options for private box culverts through warehouse/industrial site, potentially complex coordination with TxDOT and railroad

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BC-2 (Rank #11)
Project Name: Brushy Creek Tributary at Pecan Creek
Drainage Basin: UBC_210

Problem Description

A tributary of Brushy Creek flows through a residential neighborhood and adjacent to four ponds. It crosses Echo Park Dr via 5 - 9' x 5' box culverts and Pecan Creek Dr. via 7 - 8' x 4' box culverts. The channel and culvert crossings are undersized and cause overtopping of Echo Park Drive and Pecan Creek Dr along with residential flooding.

Proposed Improvements

- Excavation within the park downstream of Pecan Creek Dr to increase floodplain storage.
- Clearing of brush in the creek: 1ac downstream of Pecan Creek Dr and 2ac near Journey Park and Julian Ln.
- Replace existing pedestrian creek crossing near Moody Park, earthen berm at perimeter of playground (south bank)

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**74**

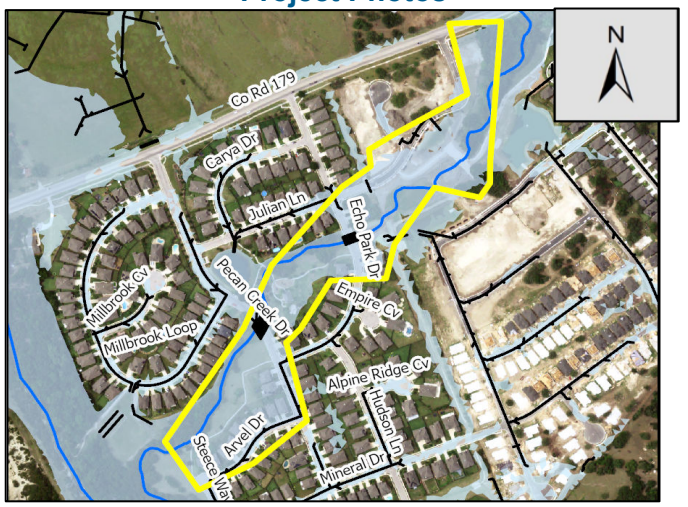
Project Costs

Engineering & Survey:	$ 58,000
Construction:	$ 389,025
Other:	
Total:	**$ 447,025**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	4-6 Months

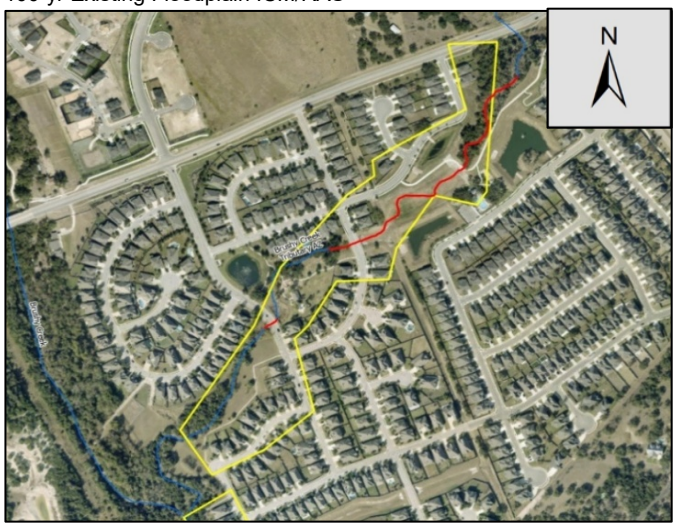
Assumptions

Zone AE backwater at Pecan Creek culvert is approx. 836', as-built d/s flowline is 836.51'. Listed 100yr tailwater for culvert crossing is 841.50. At Echo Creek, culvert flowline is 843.68, listed 100yr tailwater is 851.08 (Look at as-builts for Lost Woods)

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

Project ID: MC-1 (Rank #12)
Project Name: Horizon Park Bridge Improvements
Drainage Basin: MAS_070

Problem Description

Mason Creek crosses the Horizon Park Blvd bridge and flows north towards the UBCWCID dam. The roadway is overtopped in the 25-yr event and does not meet City criteria posing a safety risk.

Proposed Improvements

◦ Raise roadway profile and bridge low chord elevation by approximately 6' to reduce overtopping of the roadway and increase the level of service.

CIP Ranking Criteria

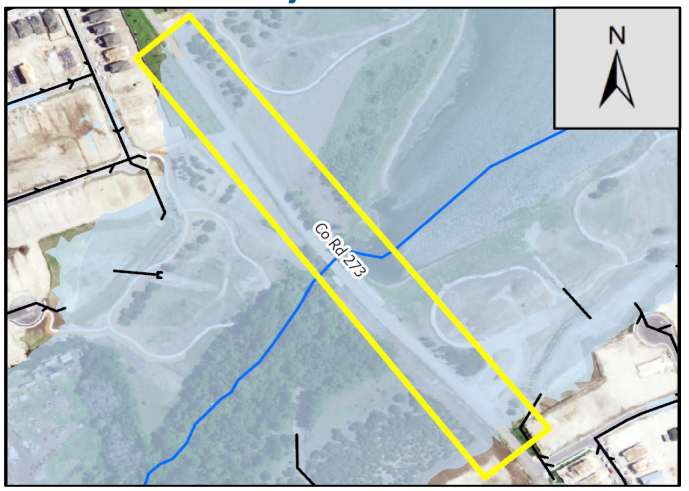
	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	10
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	1
Total	**72**

Project Costs

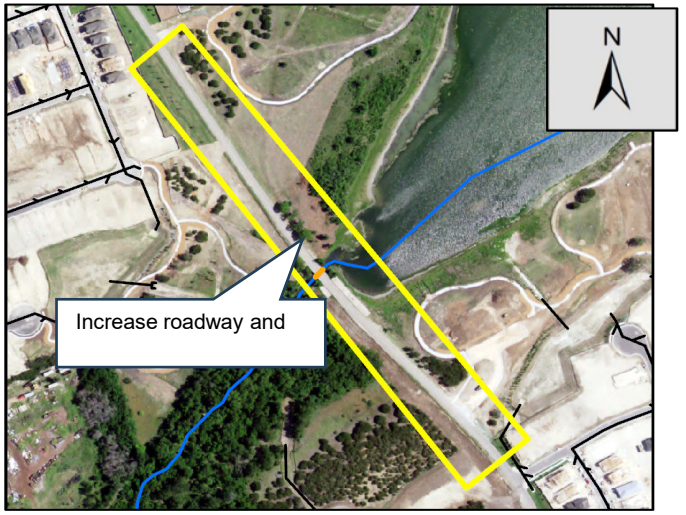
Engineering & Survey:	$ 80,000
Construction:	$ 530,062
Other:	
Total:	**$ 610,062**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6-8 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BLC-10 (Rank #13)
Project Name: US 183 Culvert Crossing at Houghton Creek
Drainage Basin: BHC_110

Problem Description

A tributary of Blockhouse Creek crosses S Hwy 183 through 6 - 4' x 4' box culverts. The box culverts are undersized for the 25-yr event which causes significant roadway overtopping and inundation of two adjacent commercial properties.

Proposed Improvements

- Add 6 additional culvert barrels to the existing Hwy 183 culverts for a total of 12 - 4' x 4' box culverts
- Channel improvements at the upstream and downstream ends of the culverts.

CIP Ranking Criteria

	Score
Property Flooding	15
Roadway Flooding Risk	25
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**71**

Project Costs

Engineering & Survey:	$ 189,000
Construction:	$ 1,257,640
Other:	
Total:	**$ 1,446,640**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	9-12 Months

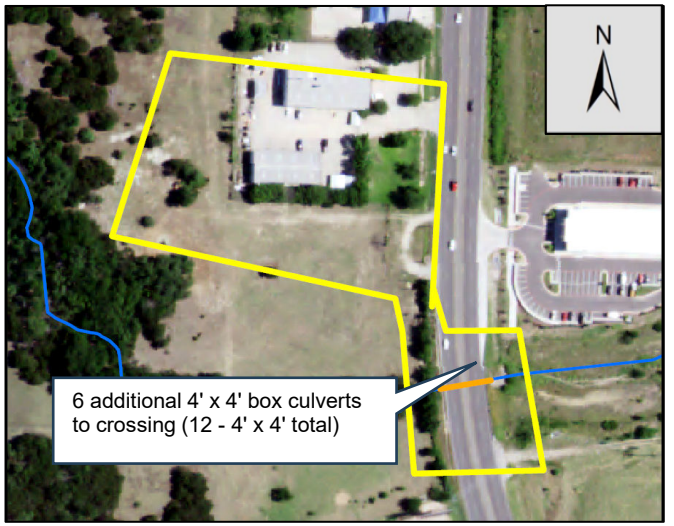
Assumptions

Inline/offline pond for floodplain storage.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

Project ID: SFSG-T28.01-1 (Rank #14)
Project Name: Bonnet Culvert and Channel Improvements
Drainage Basin: SSG_3730

Problem Description

The existing drainage for the subdivision primarily consists of roadside ditches along with roadway and driveway culverts and is undersized. Localized modeling shows that the primary drainage channels are undersized and there's potential risk for residential structures.

Proposed Improvements

- Improve capacity of downstream channels at boundary of Bonnet and Larkspur
- Replace culvert crossing at Trigger Trail (7'x3' RCB) with 2-5'x4' RBC
- Improve upstream and downstream channels at Trigger Trail to increase capacity

CIP Ranking Criteria

	Score
Property Flooding	14
Roadway Flooding Risk	0
Citizen Input/Historical	25
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**70**

Project Costs

Engineering & Survey:	$ 99,000
Construction:	$ 660,400
Other:	
Total:	**$ 759,400**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	6 Months

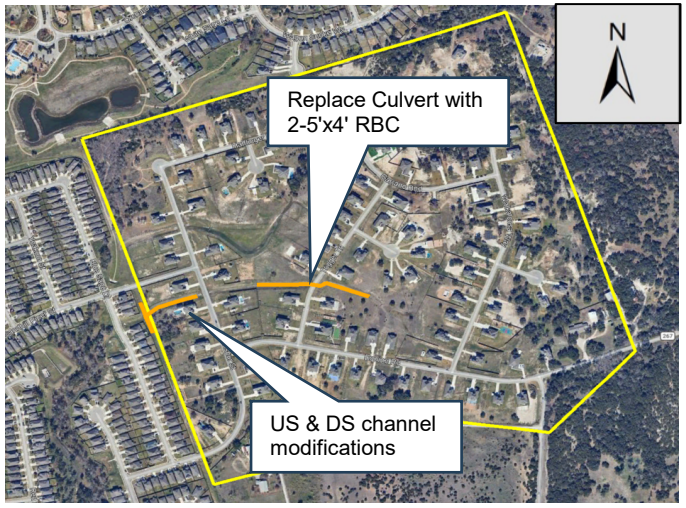
Assumptions

Proposed improvements do not substantially reduce overtopping at complaint sites - grading of channels & ponds, downstream low water crossings aid in conveyance

Project Photos



100-yr Inundation from ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT SUMMARY

Project ID: BLC-3A (Rank #15)
Project Name: Ridgewood South Pond & Channel Improvements
Drainage Basin: BHC_190

Problem Description

Blockhouse Creek south of E Crystal Falls Pkwy flows through a residential neighborhood via a manmade channel and crosses Vintage Drive twice through two culvert systems. Additionally, there are two detention ponds on the north side of the creek. Both Vintage Drive culvert systems and the manmade channel are undersized which causes severe roadway inundation and potential flooding of residential structures.

Proposed Improvements

Phase 1/Rank 15:

- Improve channels, ponds, & flowlines along 1570 linear feet of Blockhouse Creek

Phase 2/Rank 16:

- *Upgrade upstream and downstream Vintage Dr culvert system to 4 - 8' x 4' box culverts*
- *Replace and upsize 870 linear feet of storm sewer along Rutherford Dr, ranging from 36" to 48" RCP.*

CIP Ranking Criteria

	Score
Property Flooding	40
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	0
Total	**70**

Project Costs

Engineering & Survey:	$ 73,000
Construction:	$ 483,925
Other:	
Total:	**$ 556,925**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	8-12 Months

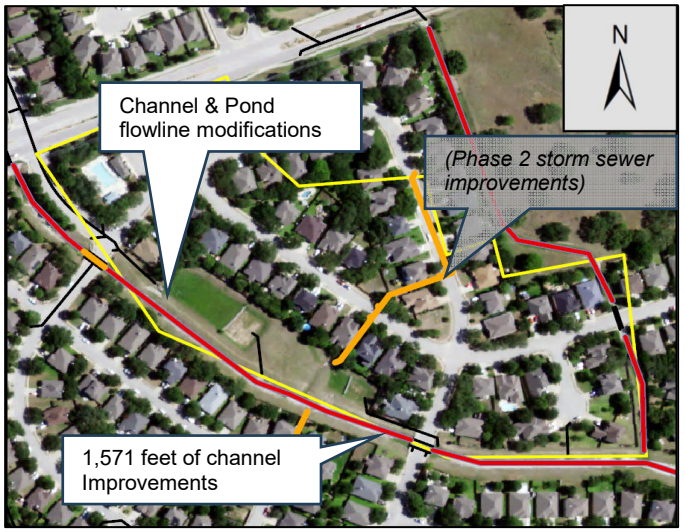
Assumptions

- Extensive work within ROW and creek/conveyance channels

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BC-3B (Rank #16)
Project Name: Ridgewood South Storm Drain & Culvert Improvements
Drainage Basin: BHC_190

Problem Description

Blockhouse Creek south of E Crystal Falls Pkwy flows through a residential neighborhood via a manmade channel and crosses Vintage Drive twice through two culvert systems. Additionally, there are two detention ponds on the north side of the creek. Both Vintage Drive culvert systems and the manmade channel are undersized which causes severe roadway inundation and potential flooding of residential

Proposed Improvements

(Phase 1/Rank 15: Improve channels, ponds, & flowlines along 1570 linear feet of Blockhouse Creek)
Phase 2/Rank 16:

- Upgrade upstream and downstream Vintage Dr culvert system to 4 - 8' x 4' box culverts
- Replace and upsize 870 linear feet of storm sewer. The sizes ranges from 36" to 48" RCP.

CIP Ranking Criteria

	Score
Property Flooding	40
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	0
Total	**70**

Project Costs

Engineering & Survey:	$ 113,000
Construction:	$ 754,130
Other:	
Total:	**$ 867,130**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12 Months

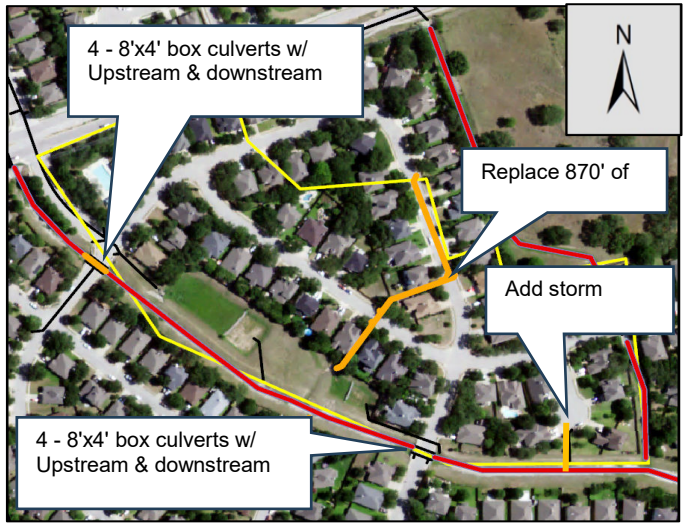
Assumptions

(Phase 2 of 2; See AOI #15) Box Culvert Replacement upstream of Vintage Dr, add and replace storm drain within Vintage Dr and Rutherford Dr, add storm drain and inlets near Oakville Cir

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BC-1A (Rank #17)
Project Name: Storm Drain Improvements Along Steece Way
Drainage Basin: UBC_220

Problem Description

Brushy creek abuts the rear of multiple residences along Steece Way. Additionally, drainage channels and pond within Hudson-Steece-Mineral loop may have under-sized culvert crossings. Brushy Creek is in its natural vegetated condition along this reach and may be backing water into the development due to high dense vetegation.

Proposed Improvements

- Replace existing (4-36" RCP?) culvert crossing at Steece Way with 4-5'x3' box culverts
- Vegetation overgrowth clearing in Brushy Creek to promote conveyance efficiency
- 1,100 linear feet of Earthen berm along rear property line of Steece Way residences

CIP Ranking Criteria

	Score
Property Flooding	30
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	5
Total	**75**

Project Costs

Engineering & Survey:	$ 85,000
Construction:	$ 300,000
Other:	
Total:	**$ 385,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6-8 Months

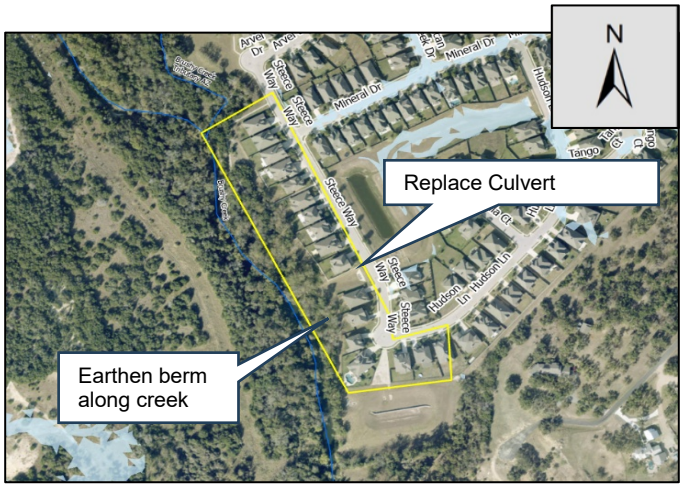
Assumptions

May require a FEMA conditional letter of map revision/leter of map revision for floodplain fringe berm and clearing

Project Photos



Existing Project Location



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-9 (Rank #18)
Project Name: The Bluffs Conveyance Improvements
Drainage Basin: MAS_020

Problem Description

Storm drain inefficiency along N Lakeline Blvd, Uhland Dr, and Greening Way are attributed to Mason Creek tributary 9 north of Crystal Falls Pkwy.

Proposed Improvements

- Clear vegetation near Uhland Drive creek culvert crossing and install rock or concrete riprap to prevent re-vegetation
- Improve concrete channel between Greening Way and Uhland Dr

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	10
Level of Project Impact	3
External Partner Coord	5
External Funding Opp	0
Total	**70**

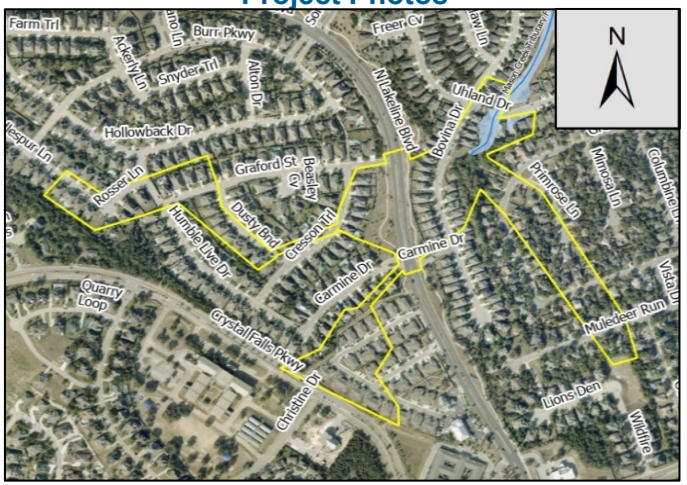
Project Costs

Engineering & Survey:	$ 80,000
Construction:	$ 400,000
Other:	
Total:	**$ 480,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	12 Months

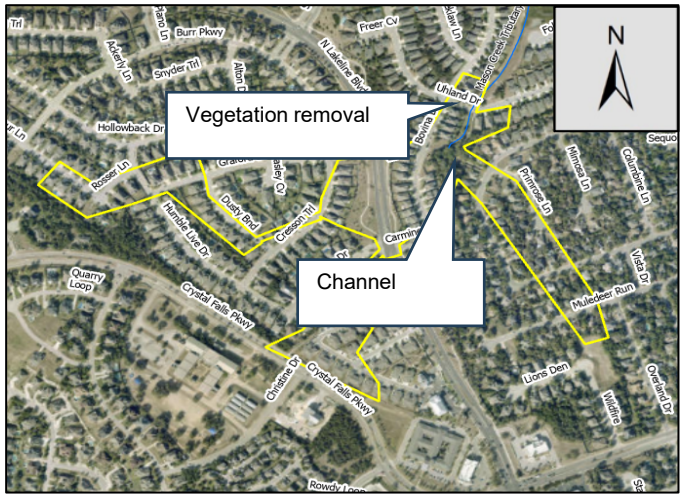
Assumptions

Concrete channel improvements may require widening channel and possible easement acquisition (0.5 acres). May require multi-phase construction for traffic control.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BC-4 (Rank #19)
Project Name: CR-175 Low Water Crossing
Drainage Basin: UBC_090

Problem Description

A tributary to Brushy Creek crosses CR175 near Leander Rd via a low water crossing comprised of 2-18" CMPs. Natural vegetation upstream and downstream may impede flow of runoff, but culvert crossing appears significantly undersized and overtops frequently.

Proposed Improvements

- Vegetation clearing including tree removal
- Replace ex. 2-18" CMP with 2-4'x2' box culverts, pavement repair & guardrail

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	30
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**69**

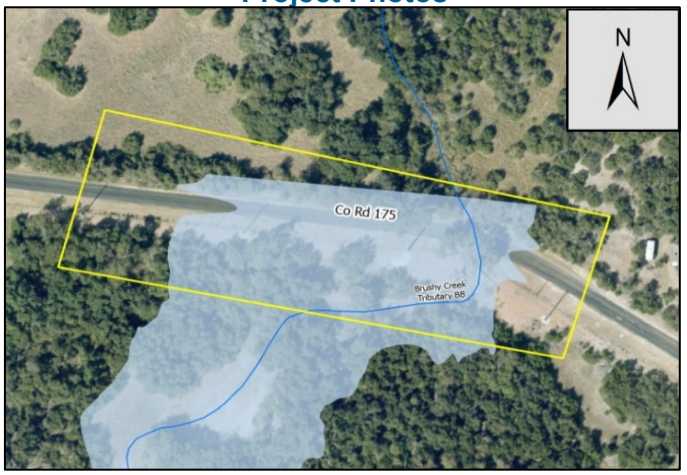
Project Costs

Engineering & Survey:	$ 75,000
Construction:	$ 600,000
Other:	
Total:	**$ 675,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6-8 Months

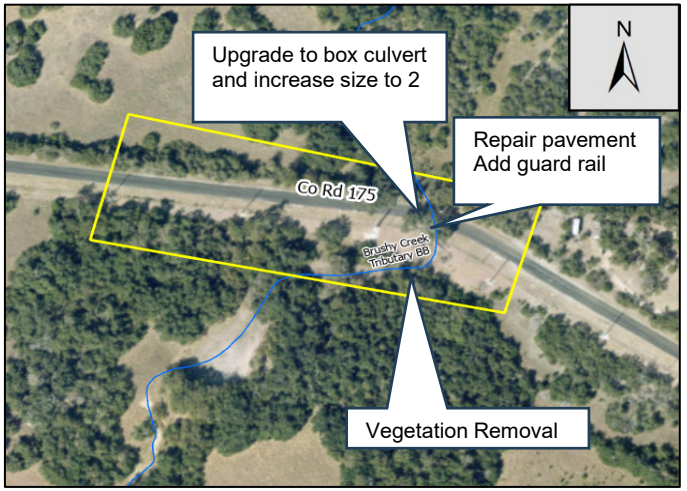
Assumptions

May require easements and/or coordination with overhead electric transmission owner, large "heritage" tree may require removal with impact fee or mitigation cost, possibility of WilCo partnership on county road

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLH-1 (Rank #20)
Project Name: FM 1431 Bridge Improvements
Drainage Basin: Bloody Hollow

Problem Description

Bloody Hollow creek crosses FM 1431 via a bridge-class culvert (unknown composition) near the southwest limits of City, Travis County Unincorporated Areas south of crossing. Significant elevation difference between creek flowline and roadway. Creek is Zone A floodplain, but studied upstream and downstream.

Proposed Improvements

- Replace existing culverts with single 60-foot span bridge

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	30
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	20
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	5
Total	**68**

Project Costs

Engineering & Survey:	$ 180,000
Construction:	$ 1,200,000
Other:	
Total:	**$ 1,380,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	12-18 Months

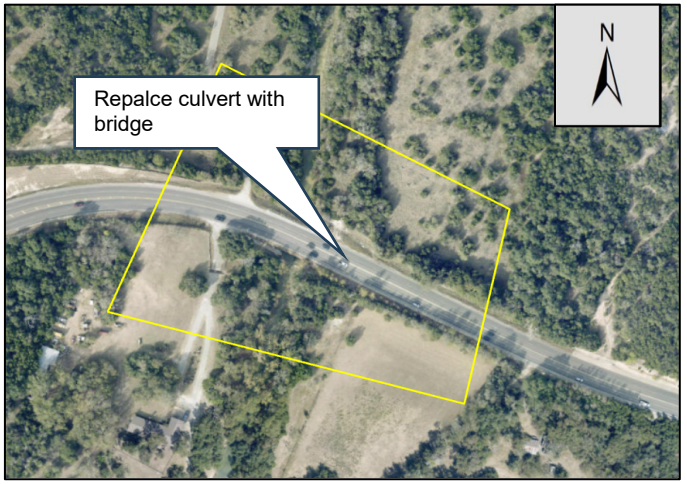
Assumptions

Extended project duration due to traffic phasing, FEMA conditional letter of map revision/letter of map revision likely required, possibility of TxDOT partnership on FM 1431

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: NFB-3 (Rank #21)
Project Name: Benbrook Ranch Storm Drain Improvements
Drainage Basin: NFB_100

Problem Description

Flooding across Barclay Dr, Henderson Dr, Burgess Dr, Whitley Dr, and Middle Brook Dr

Proposed Improvements

- Upsize inlets and approximately 2000 linear feet of underground storm drain

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	15
Level of Project Impact	3
External Partner Coord	5
External Funding Opp	0
Total	**67**

Project Costs

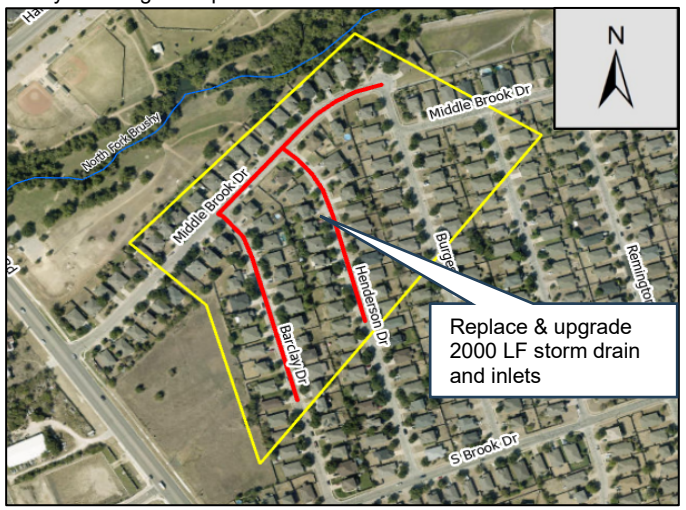
Engineering & Survey:	$ 110,000
Construction:	$ 700,000
Other:	
Total:	**$ 810,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	8 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BCH-1 (Rank #22)
Project Name: Granite Hill Cove Storm Improvements
Drainage Basin: Bee Cave Hollow

Problem Description

Inadequate drainage through cul-de-sac on Granite Hill Cove

Proposed Improvements

- Add 1,000 linear feet of storm drain and inlets along Granite Hill Dr and Granite Hill Cove

CIP Ranking Criteria

	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	15
Level of Project Impact	3
External Partner Coord	3
External Funding Opp	0
Total	**66**

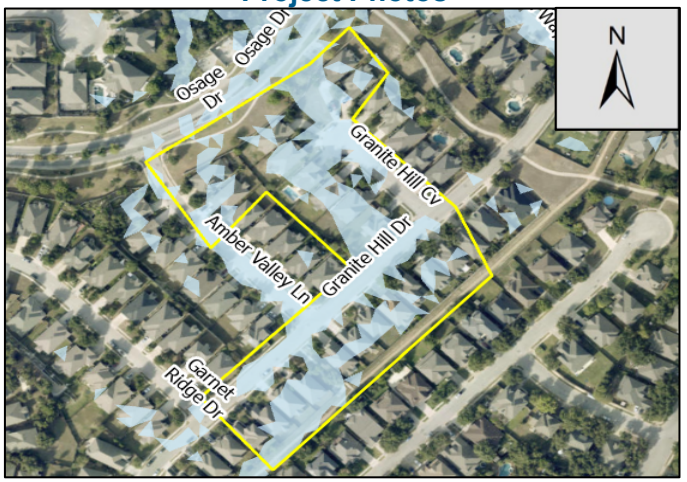
Project Costs

Engineering & Survey:	$ 95,000
Construction:	$ 300,000
Other:	
Total:	**$ 395,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	8-12 Months

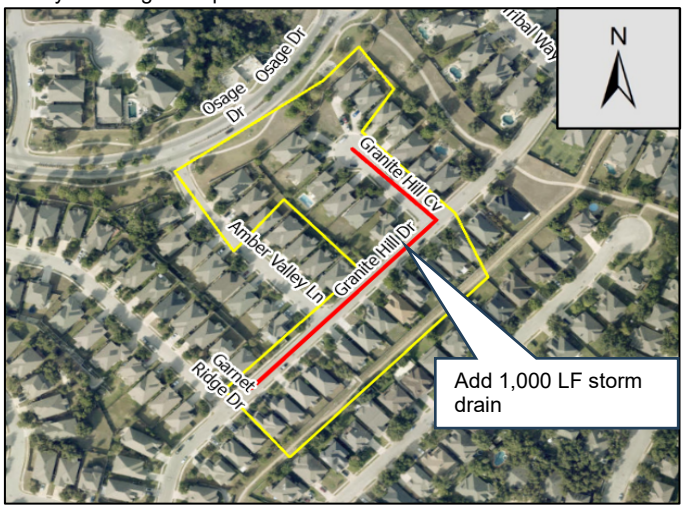
Assumptions

Some easement acquisition may be required, lengthy construction due to traffic control plan complexity

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-4 (Rank #23)
Project Name: Storm & Channel Improvements near Horseshoe Dr
Drainage Basin: MAS_050

Problem Description

An unnamed tributary to Mason Creek appears to cause flooding through multiple residential areas including the Horseshoe Apartments. The tributary and Mason Creek are naturally vegetated and may be hindering conveyance of flows. An existing CMP culvert crossing at Horseshoe Dr may be undersized. Additionally, South West Drive appears to overtop near the Leander Middle School athletics field.

Proposed Improvements

◦ Replace existing 3-30" CMP culvert crossing at Northern Trail with 3-5'x3' box culverts, roadway repair, vegetation removal and channel improvements downstream
◦ Replace culvert crossing at South West Dr with 2-5'x3' box culverts, reconfigure ditch downstream of South West Dr

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	8
O&M Requirements	13
Level of Project Impact	10
External Partner Coord	3
External Funding Opp	3
Total	**65**

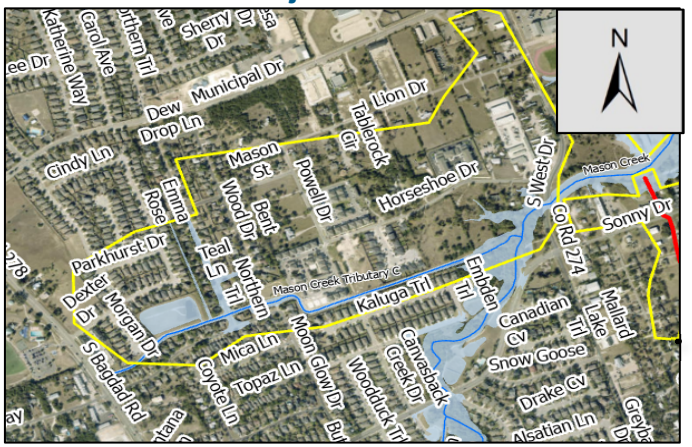
Project Costs

Engineering & Survey:	$ 100,000
Construction:	$ 1,400,000
Other:	
Total:	**$ 1,500,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	8-12 Months

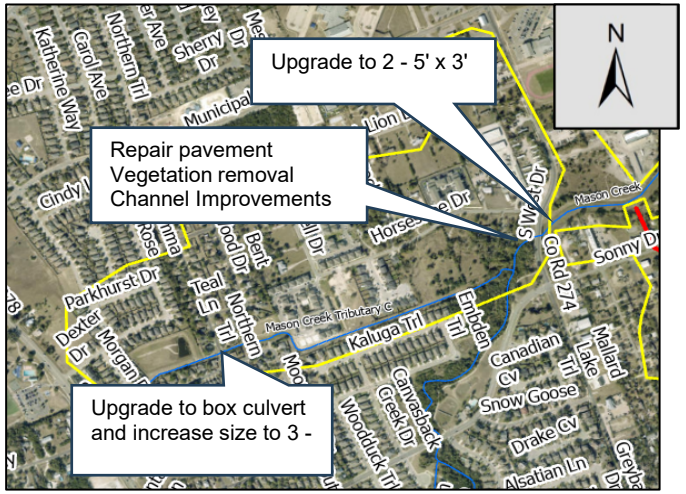
Assumptions

May require coordination with property owners and overhead utility owners for access easements and fence removal/replacement, coordination with school district at South West Dr. May need to be split into 2 separate projects

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-6 (Rank #24)
Project Name: Storm & Culvert Improvements Near Los Vista Dr
Drainage Basin: MAS_030

Problem Description

A tributary to Mason Creek causes flooding upstream (east) of S Bagdad Rd between Los Vista Drive and Bonita Verde Dr. All storm drainage is surface runoff with no underground stormwater network. The tributary is overgrown and poorly defined east of S Bagdad Rd.

Proposed Improvements

◦ Acquire minimum a 50' wide easement on parcels east of S Bagdad between Los Vista and Bonita Verde Dr
◦ Clear vegetation within creek area and excavate channel to approximately 10' bottom width to improve capacity and provide additional floodplain storage outside of residential footprints

CIP Ranking Criteria

	Score
Property Flooding	10
Roadway Flooding Risk	20
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	0
Total	**66**

Project Costs

Engineering & Survey:	$ 85,000
Construction:	$ 525,000
Other:	
Total:	**$ 610,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	8-12 Months

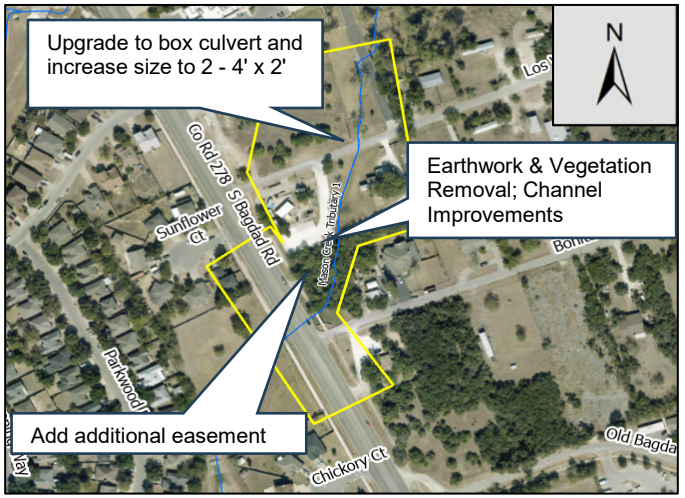
Assumptions

Improvements may require property acquisition or up to 1 acre easement, reflected in construction cost.

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFSG-T27-2 (Rank #25)
Project Name: Mollie McBride Ln Conveyance Improvements
Drainage Basin: SSG_3790

Problem Description

Homes along Mollie McBride Ln appear to be impacted from flooding along adjacent tributary, vegetation is overgrown up to Bryson Ridge Trl

Proposed Improvements

- Clear tributary flowpath of overgrown vegetation, construct berm to protect from inundation

CIP Ranking Criteria

	Score
Property Flooding	20
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**64**

Project Costs

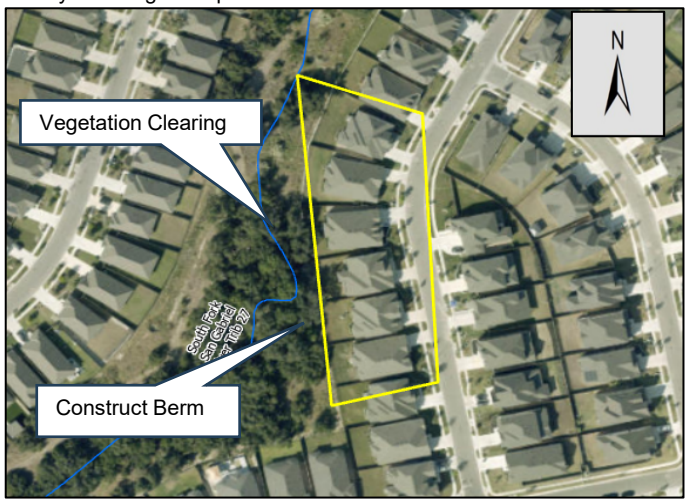
Engineering & Survey:	$ 65,000
Construction:	$ 300,000
Other:	
Total:	**$ 365,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6-8 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-5 (Rank #26)
Project Name: Vista Ridge Earthwork & Storm Drain Improvements
Drainage Basin: MAS_060

Problem Description

Roadway overtopping in neighborhood caused backwater from detention pond at Robin Bledsoe Park

Proposed Improvements

◦ Replace 800 linear feet of storm drain and inlets in Cerezo Dr, Loma Cedro Blvd, Rancho Verde Dr, and Gaviota Lane, Ddtention pond capacity improvements in Robin Bledsoe Park

CIP Ranking Criteria

	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	20
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**62**

Project Costs

Engineering & Survey:	$ 100,000
Construction:	$ 750,000
Other:	
Total:	**$ 850,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	8-12 Months

Assumptions

◦ Upsize internal storm drain through Vintage Dr and Rutherford Dr
◦ Add storm drain at cul-de-sac and grade to capture/convey north channel offsite through cul-de-sac

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-8 (Rank #27)
Project Name: Glass Dr Storm & Detention Improvements
Drainage Basin: BHC_150

Problem Description

Runoff backs up from Lowes/Goodwill/Petco commercial center into neighborhood to the west

Proposed Improvements

- Detention pond capacity improvements
- 500 LF storm drain replacement along South West Drive and High Chaparral Dr, related to conflict rank 10 site (183 & Crystal Fallks Pkwy)

CIP Ranking Criteria

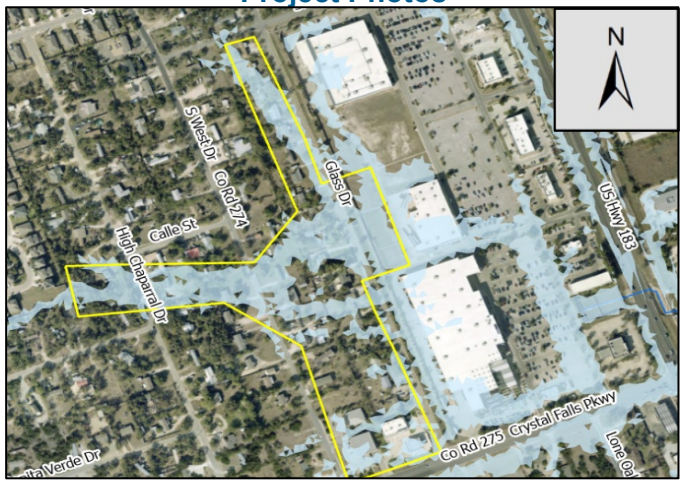
	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	16
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**62**

Project Costs

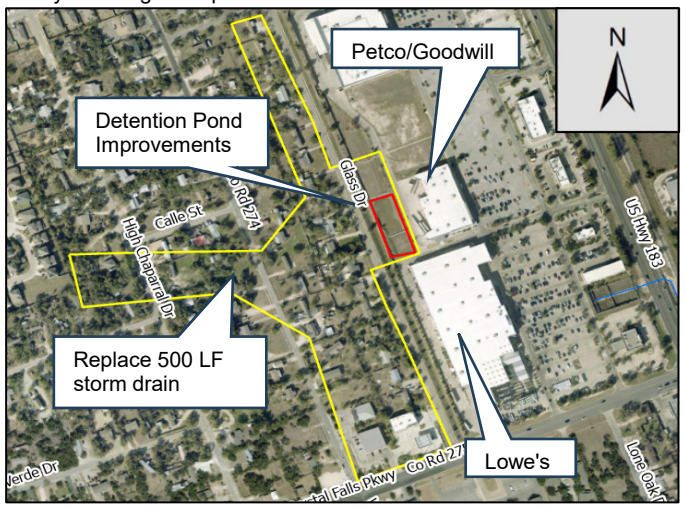
Engineering & Survey:	$ 75,000
Construction:	$ 450,000
Other:	
Total:	**$ 525,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6-8 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFB-4 (Rank #28)
Project Name: Ran Rd and Briarwood Dr Storm Improvements
Drainage Basin: SFB_020

Problem Description

Ponding along Ran Rd and Briarwood Dr, flat slope of storm drain to detention pond near Deercreek and Candlelight

Proposed Improvements

◦ Replace & upsize approximately 1000 linear feet of storm drain on the upstream end of the system

CIP Ranking Criteria

	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**61**

Project Costs

Engineering & Survey:	$ 80,000
Construction:	$ 450,000
Other:	
Total:	**$ 530,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	12-18 Months

Assumptions

May require easements and/or coordination with overhead electric transmission owner, large "heritage" tree may require removal with impact fee or mitigation cost, possibility of WilCo partnership on county road

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BC-1 (Rank #29)
Project Name: E Crystal Falls Pkwy Culvert Improvements
Drainage Basin: BHC_210

Problem Description

Existing large box culvert crossing between Wiley Middle School property and area south of E Crystal Falls Pkwy appears to be overtopping

Proposed Improvements

◦ Install additional runs of 2-8'x4' box culverts for crossing conveyance

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	20
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	3
External Funding Opp	3
Total	**61**

Project Costs

Engineering & Survey:	$ 90,000
Construction:	$ 650,000
Other:	
Total:	**$ 740,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	8-12 Months

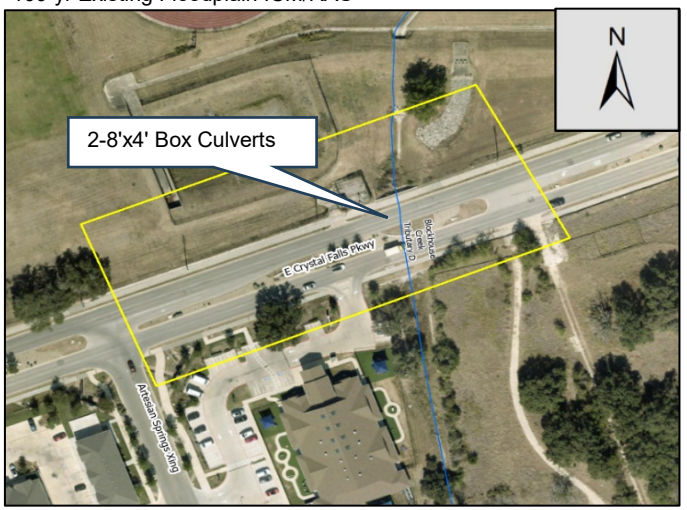
Assumptions

May consider trenchless installation to avoid damage/patch repairs to Crystal Falls Pkwy

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-8 (Rank #30)
Project Name: Earthwork & Storm Drain Improvements near Stinnett Ln
Drainage Basin: MAS_010

Problem Description

Flooding along Stinnett Dr, Arbor Acres Loop, Bogata Blvd, along N Lakeline Blvd

Proposed Improvements

- Replace approximately 1800 linear feet of storm drain in Arbor Acres Loop, Bogata Ln, Stinnett Drive
- Channel improvements along Falcon Oaks properties
- Earthwork/detention pond at N Lakeline Blvd and Stinnett

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**60**

Project Costs

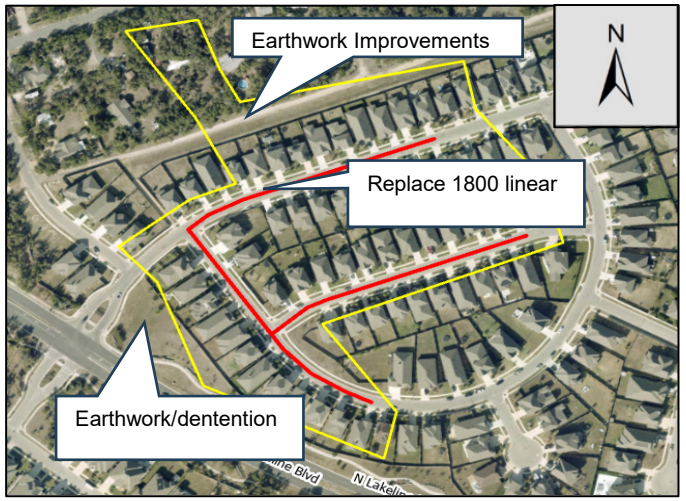
Engineering & Survey:	$ 150,000
Construction:	$ 900,000
Other:	
Total:	**$ 1,050,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	12-18 Months

Assumptions

Project Photos



100-yr Inundation from ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-5 (Rank #31)
Project Name: Laurel Glen Blvd Storm Drain Improvements
Drainage Basin: BHC_190

Problem Description

Tributary 5 to Blockhouse Creek near Oak Ridge Park includes neighborhood drainage from an older development with likely undersized underground storm drain infrastructure. Resident complaints cite Oak Ridge Park detention improvements and local flooding during heavy storm events

Proposed Improvements

- Reconstruct detention outfall and overflow structure in Oak Ridge Park
- Install 1,500 linear feet of underground storm drain replacements throughout Moss Creek Dr, Birch Brook Dr, Spring Hollow Dr, and River Oak Dr

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**59**

Project Costs

Engineering & Survey:	$ 120,000
Construction:	$ 650,000
Other:	
Total:	**$ 770,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12-18 Months

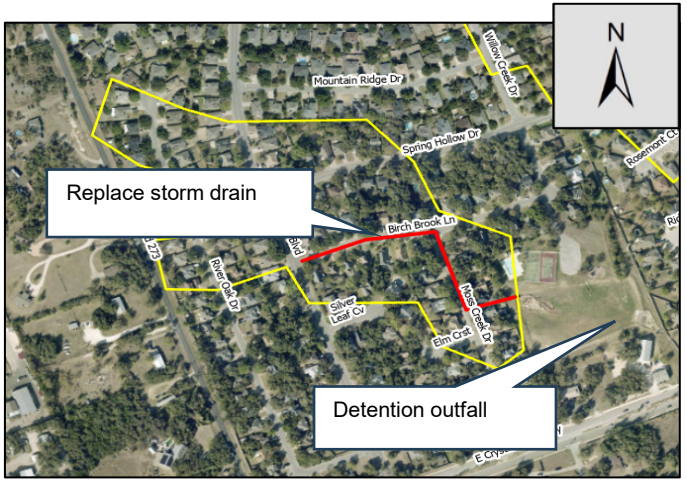
Assumptions

Review pond upgrades previously constructed at Oak Ridge Park will be required, extended duration due to complex TCP

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-2 (Rank #32)
Project Name: Crystal Falls Apartments Detention Improvements
Drainage Basin: BHC_190A

Problem Description

Ponds on the apartment site and off-site to the southeast of the are backing up through parking and northern portions of complex

Proposed Improvements

◦ Pond regrading off-site, additional storm drain on-site

CIP Ranking Criteria

	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	10
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	0
Total	**59**

Project Costs

Engineering & Survey:	$ 65,000
Construction:	$ 300,000
Other:	
Total:	**$ 365,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	6-8 Months

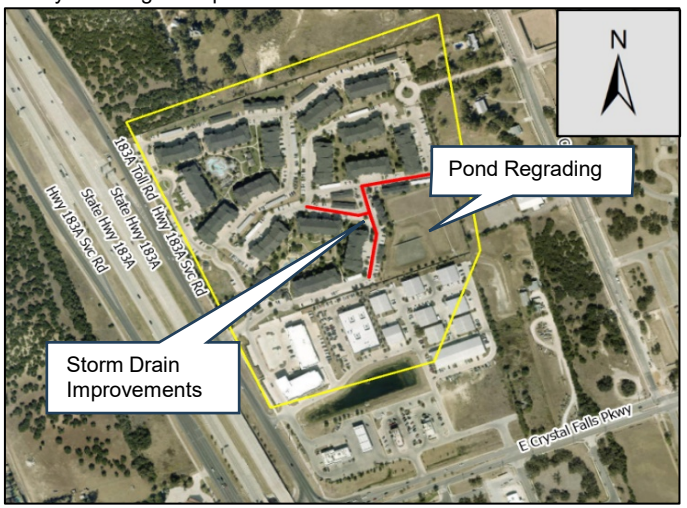
Assumptions

Improvements may require property acquisition or easements, reflected in construction cost.

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFSG-1 (Rank #33)
Project Name: Mongolian Dr Culvert & Storm Drain Improvements
Drainage Basin: SSG_3960

Problem Description

Flooding along Mongolian Dr and Hinterwald St from large detention pond and tributary flow through neighborhood, close proximity to South Fork San Gabriel River

Proposed Improvements

◦ Clearing & storage grading for tributary area through neighborhood open spaces, culvert replacement, approximately 700 linear feet of storm drain improvements along Mongolian Dr

CIP Ranking Criteria

	Score
Property Flooding	20
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	20
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**59**

Project Costs

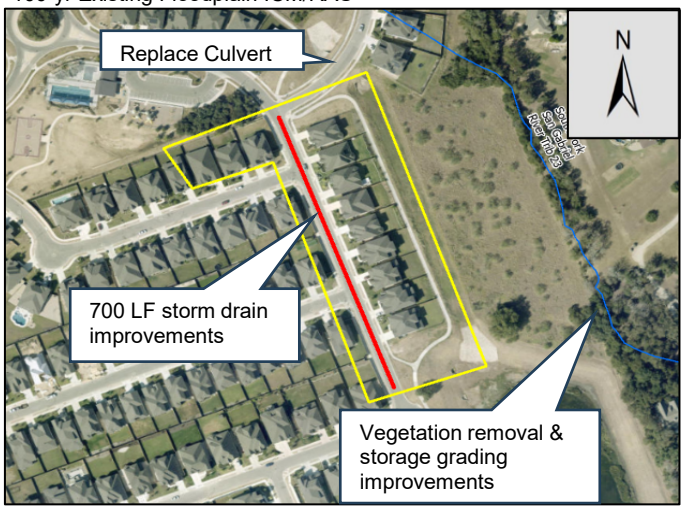
Engineering & Survey:	$ 95,000
Construction:	$ 600,000
Other:	
Total:	**$ 695,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	12 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: NFB-4 (Rank #34)
Project Name: Maple Creek Dr Low Water Crossing
Drainage Basin: NFB_090

Problem Description

Low water crossing at Maple Creek Dr in Devine Lake Park overtops frequently

Proposed Improvements

- Replace existing culvert crossing with multiple large 10'x5' box culverts

CIP Ranking Criteria

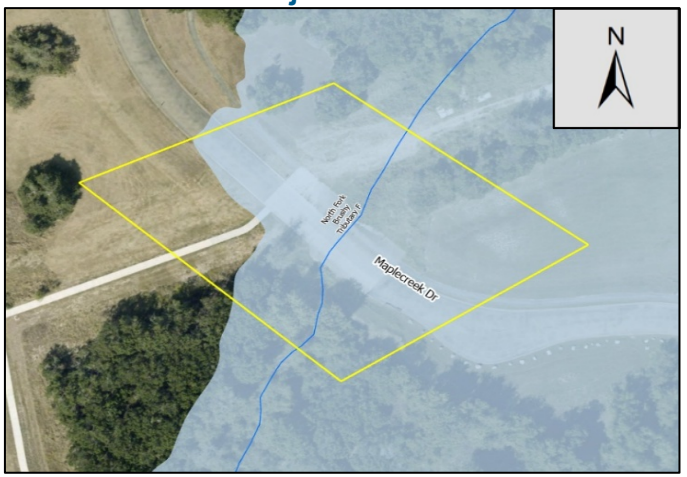
	Score
Property Flooding	0
Roadway Flooding Risk	20
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	3
Total	**59**

Project Costs

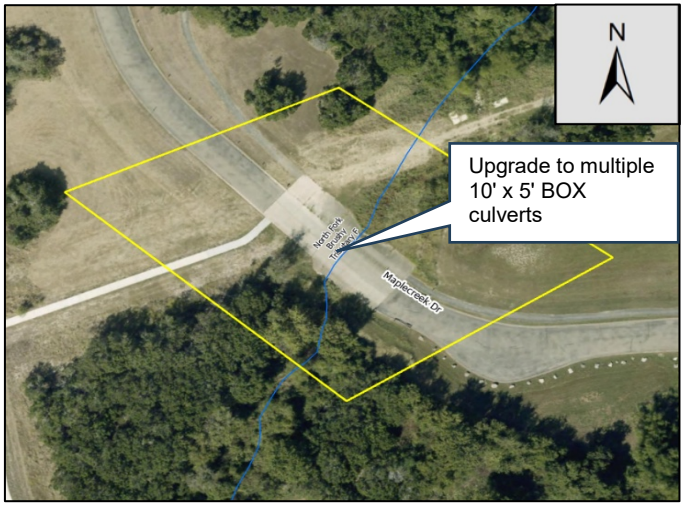
Engineering & Survey:	$ 85,000
Construction:	$ 680,000
Other:	
Total:	**$ 765,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	6-8 Months

Assumptions

Project Photos



100-yr Inundation from ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-2B (Rank #35)
Project Name: Business 183 at Mason Creek
Drainage Basin: MAS_060

Problem Description

Backwater from Mason Creek at US HWY 183 and railroad inundates approximately 10 acres between creek and Leander MS

Proposed Improvements

◦ Clear vegetation upstream and downstream of the US HWY 183 bridge, elevate US HWY 183 bridge by approximately 2'

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	20
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	10
External Partner Coord	1
External Funding Opp	0
Total	**58**

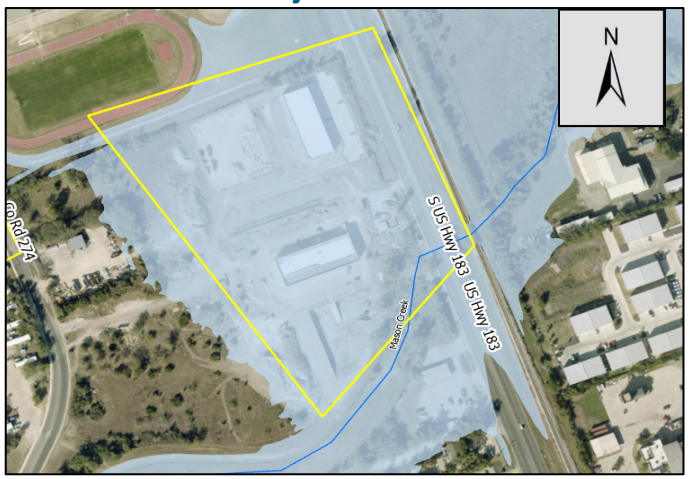
Project Costs

Engineering & Survey:	$ 120,000
Construction:	$ 1,000,000
Other:	
Total:	**$ 1,120,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	18-24 Months

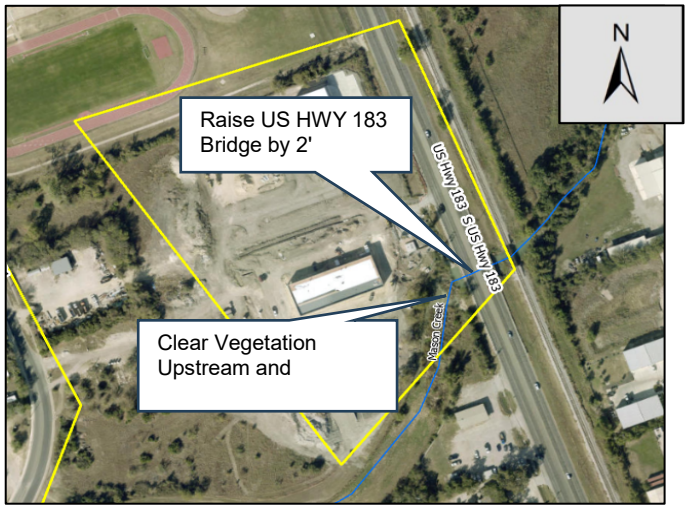
Assumptions

No replacement of railroad crossings proposed, may require property and/or easement acquisition

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BC-3 (Rank #36)
Project Name: Sarita Valley Conveyance Improvements
Drainage Basin: UBC_100

Problem Description

Ponding in rear cul-de-sacs along Brushy Creek - Lyme Ridge Cove, Rabbits Tail Drive, Wedgescale Pass

Proposed Improvements

◦ Add overflow drainage swales directly to Brushy Creek at cul-de-sac curb inlets for Lyme Ridge Cove, Rabbits Tail Drive, and Wedgescale Pass

CIP Ranking Criteria

	Score
Property Flooding	20
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	24
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	2
Total	**57**

Project Costs

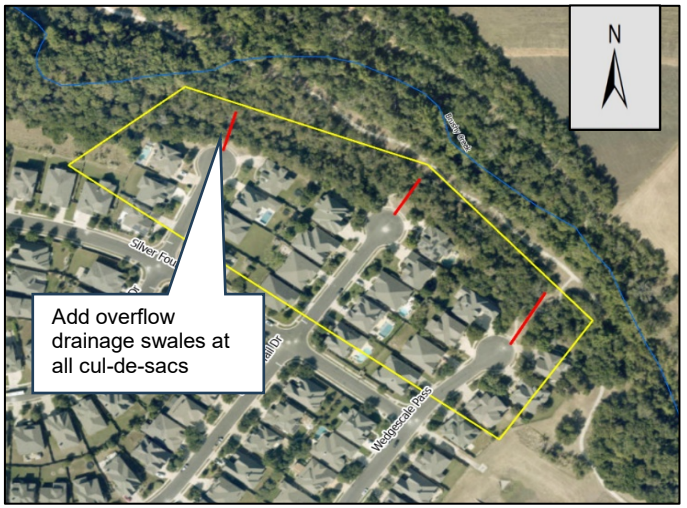
Engineering & Survey:	$ 60,000
Construction:	$ 350,000
Other:	
Total:	**$ 410,000**
Conceptual Cost Range:	$250k - $500k
Estimated Construction Duration:	8 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFSG-T27-1 (Rank #37)
Project Name: Two Low Water Crossings along CR270
Drainage Basin: SSG_3780

Problem Description

Two tributaries overtop CR 270 near North Elementary, backwater of San Gabriel River, severely undersized CMP culverts

Proposed Improvements

◦ Replace two low water crossings with 3-5'X2' box culverts

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**56**

Project Costs

Engineering & Survey:	$ 110,000
Construction:	$ 900,000
Other:	
Total:	**$ 1,010,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	12-18 Months

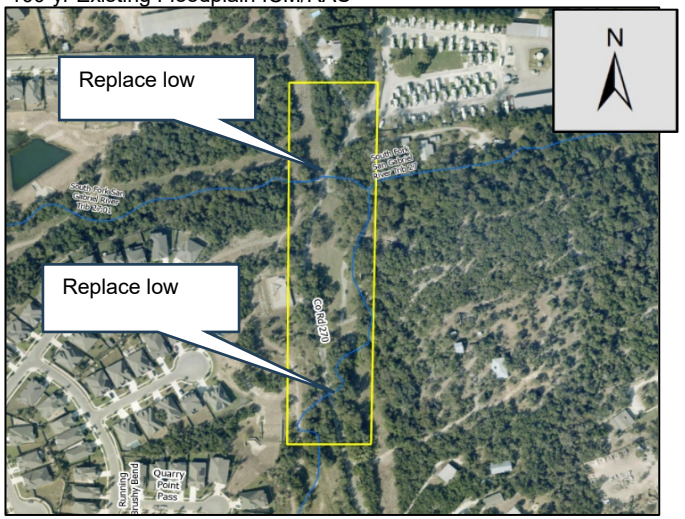
Assumptions

Coordination with Williamson County (CR270) will be required.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-4 (Rank #38)
Project Name: Willow Creek Dr Storm Drain Improvements
Drainage Basin: BHC_190

Problem Description

Tributary 4 to Blockhouse Creek includes neighborhood drainage through Ridgewood Dr, Meadow View Dr, and Willow Creek Drive. Underground storm drain infrastructure may be undersized. Drainage appears to follow utility/drainage easement along rear of lots along Willow Creek Dr

Proposed Improvements

◦ Replace 2000 linear feet underground storm drain through Ridgewood Dr, Willow Creek Dr, and Meadow View Drive
◦ Surface or channelized runoff may need to be captured by underground storm drain system to be conveyed through
◦ Ridgewood North Park and ultimately Crystal Falls Parkway

CIP Ranking Criteria

	Score
Property Flooding	28
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	0
Total	**55**

Project Costs

Engineering & Survey:	$ 150,000
Construction:	$ 800,000
Other:	
Total:	**$ 950,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12-18 Months

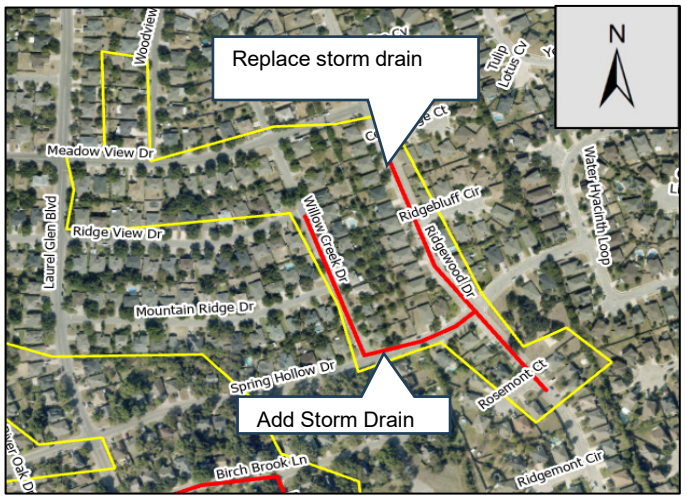
Assumptions

May be related to Area of Interest 24, may require coordination with overhead electric owner for easement access & construction

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFB-3 (Rank #39)
Project Name: S Fork Brushy at S Bagdad Bridge Improvements
Drainage Basin: SFB_030

Problem Description

South Fork Brushy Overtops S Bagdad Rd near industrial and residential developments

Proposed Improvements

◦ Raise S Bagdad Rd approximately 2', replace S Bagdad Rd bridge, conveyance improvements east of roadway for floodplain storage, clear vegetation

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	25
Citizen Input/Historical	0
Cost Effectiveness	8
O&M Requirements	14
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	3
Total	**54**

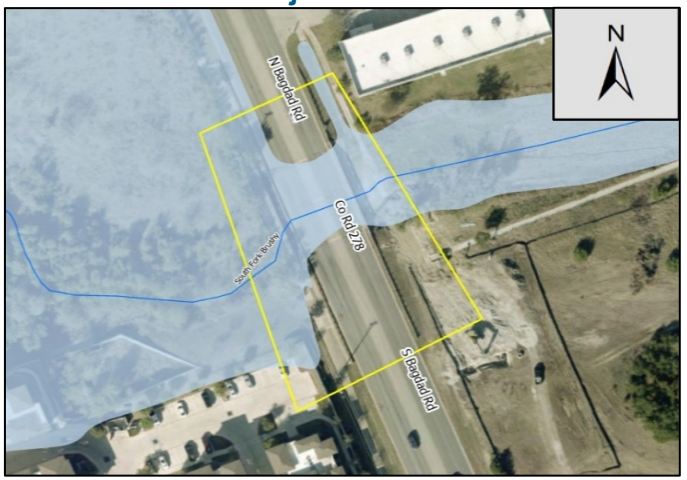
Project Costs

Engineering & Survey:	$ 160,000
Construction:	$ 1,500,000
Other:	
Total:	**$ 1,660,000**
Conceptual Cost Range:	$1.5M - $2M
Estimated Construction Duration:	18-24 Months

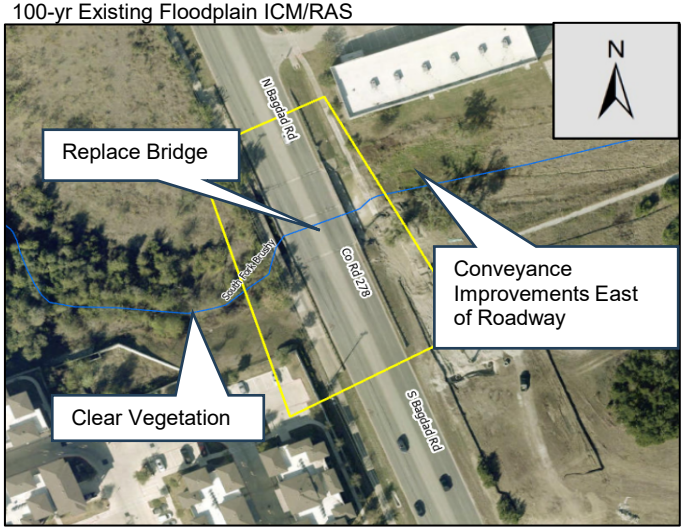
Assumptions

Phasing recommended due to lengthy traffic control, coordination with Williamson county (CR 279) will be required.

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFB-2 (Rank #40)
Project Name: Storm Drain Routing Improvements at Hero Way & Bagdad Rd
Drainage Basin: SFB_030

Problem Description

Underground storm drain at intersection may be undersized. Apparent Hero Way UG drainage discharges to South Fork Brushy Tributary 2 approximately 3,200 feet to the east.

Proposed Improvements

◦ Diversion south along N Bagdad Road to Brushy Creek for all runoff west of N Bagdad Rd to alleviate flooding at intersection and along channels & area drains on north side of W Hero Way ROW
◦ Earthwork, driveway and pavement replacement, approximately 1,000 linear feet of underground storm drain, 500 linear feet of new drainage channel along west side of N Bagdad Rd

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	30
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	0
Total	**53**

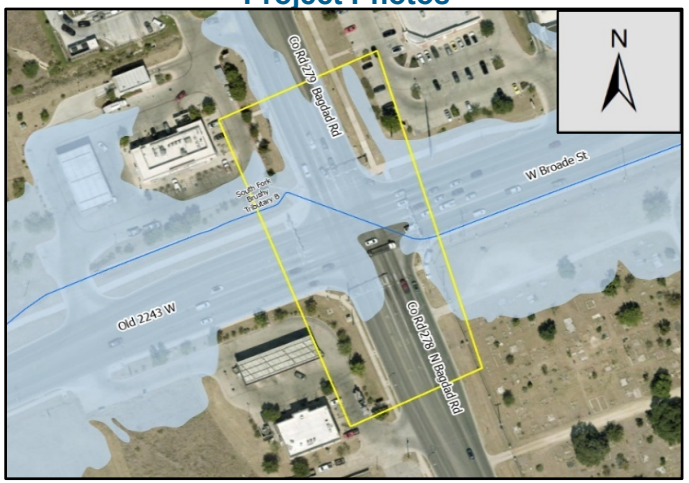
Project Costs

Engineering & Survey:	$ 125,000
Construction:	$ 900,000
Other:	
Total:	**$ 1,025,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	18-24 Months

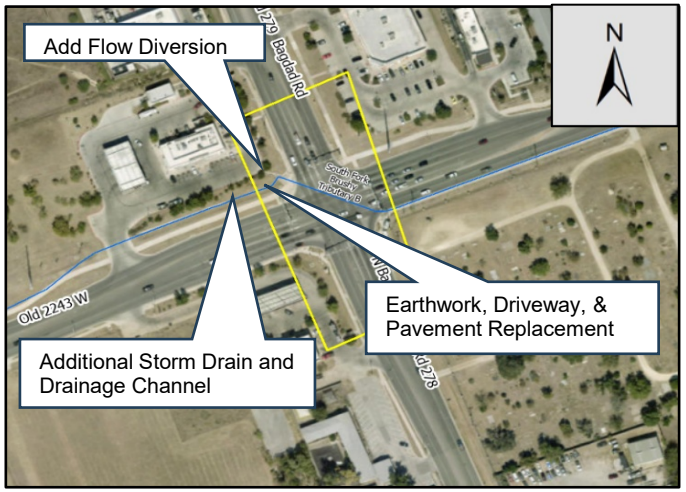
Assumptions

Some easement acquisition along N Bagdad Rd (approximately 0.5 acres) may be required, lengthy construction due to traffic control plan complexity

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: SFSG-T34-1(Rank #41)
Project Name: Mockingbird Hill Low Water Crossing
Drainage Basin: SSG_3340

Problem Description

Existing low water crossing at Mockingbird Hill overtops frequently

Proposed Improvements

- Replace existing low water crossing with 3-8'x4' box culverts

CIP Ranking Criteria

	Score
Property Flooding	0
Roadway Flooding Risk	20
Citizen Input/Historical	0
Cost Effectiveness	**20**
O&M Requirements	11
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	0
Total	**52**

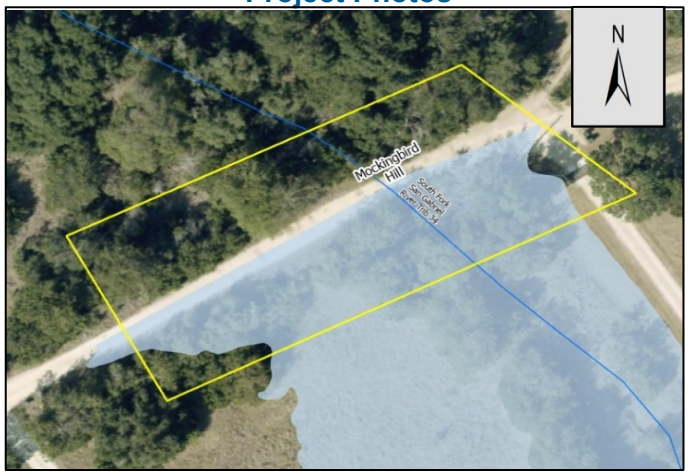
Project Costs

Engineering & Survey:	$ 80,000
Construction:	$ 650,000
Other:	
Total:	**$ 730,000**
Conceptual Cost Range:	$500k - $750k
Estimated Construction Duration:	6-8 Months

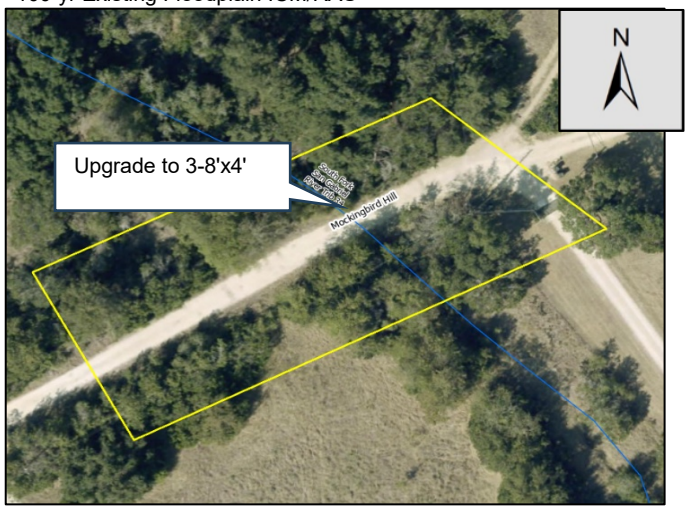
Assumptions

May require coordination with City of Liberty Hill, individual property owners

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-6 (Rank #42)
Project Name: Horizon Park Blvd Culvert Improvements
Drainage Basin: BHC_170

Problem Description

Existing low water crossing overtops Horizon Park Blvd frequently

Proposed Improvements

◦ Add 2-10'x3' box culverts to improve conveyance across Horizon Park Blvd, elevate roadway by 2 feet

CIP Ranking Criteria

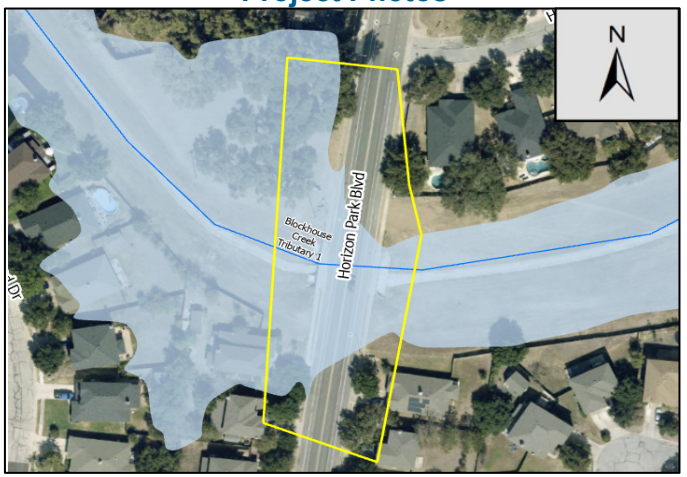
	Score
Property Flooding	0
Roadway Flooding Risk	15
Citizen Input/Historical	0
Cost Effectiveness	16
O&M Requirements	15
Level of Project Impact	0
External Partner Coord	5
External Funding Opp	0
Total	**51**

Project Costs

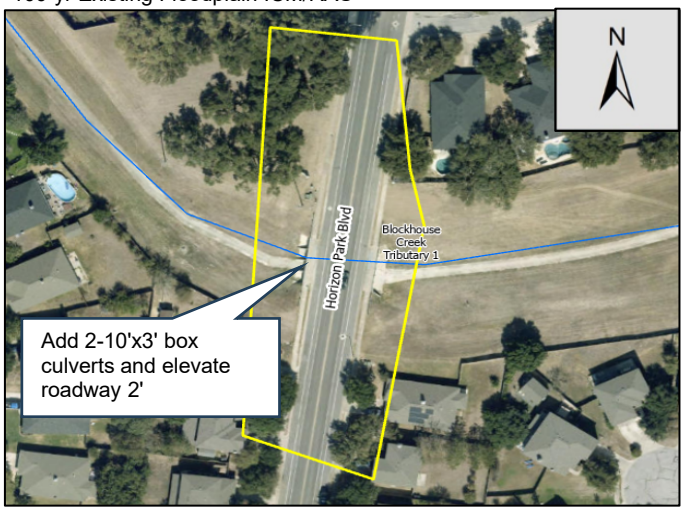
Engineering & Survey:	$ 80,000
Construction:	$ 850,000
Other:	
Total:	**$ 930,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: MC-2 (Rank #43)
Project Name: Storm & Channel Improvements near Sonny Dr
Drainage Basin: MAS_060

Problem Description

Backwater from Mason creek is inundating the adjacent residences to the south and Sonny Dr

Proposed Improvements

◦ Replace ditches and culverts with approximately 1000 linear feet of underground storm drain and outfall to Mason Creek

CIP Ranking Criteria

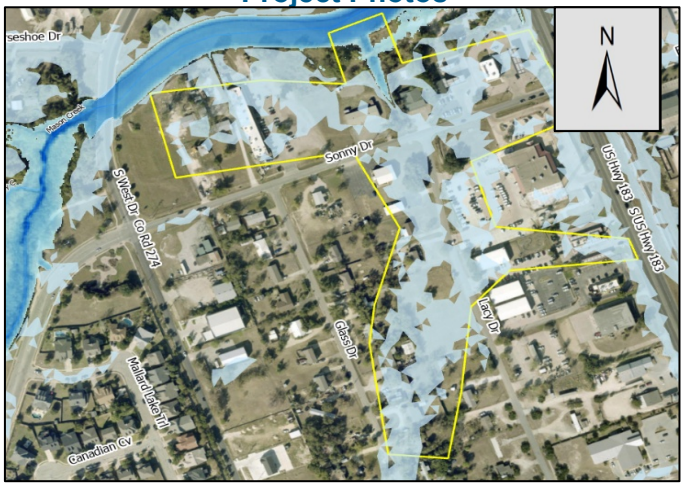
	Score
Property Flooding	21
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	10
Level of Project Impact	3
External Partner Coord	1
External Funding Opp	3
Total	**50**

Project Costs

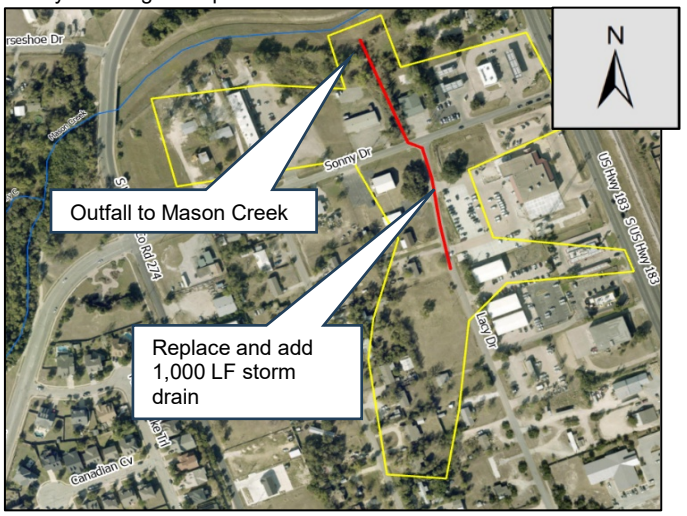
Engineering & Survey:	$ 150,000
Construction:	$ 1,200,000
Other:	
Total:	**$ 1,350,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	12-18 Months

Assumptions

Project Photos



100-yr Existing Floodplain ICM



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLH-2 (Rank #44)
Project Name: High Lonesome Channel & Culvert Improvements
Drainage Basin: Brown Hollow

Problem Description

Brown Hollow/Blockhouse Creek Trib 2 flooding encroaches on properties along High Lonesome. Creek vegetation is overgrown. High lonesome has multiple sub-tributary culvert crossings.

Proposed Improvements

◦ Conveyance improvements along main channel, replace up to 3 culvert crossings along High Lonesome

CIP Ranking Criteria

	Score
Property Flooding	15
Roadway Flooding Risk	0
Citizen Input/Historical	5
Cost Effectiveness	16
O&M Requirements	9
Level of Project Impact	0
External Partner Coord	1
External Funding Opp	3
Total	**49**

Project Costs

Engineering & Survey:	$ 85,000
Construction:	$ 750,000
Other:	
Total:	**$ 835,000**
Conceptual Cost Range:	$750k - $1M
Estimated Construction Duration:	12 Months

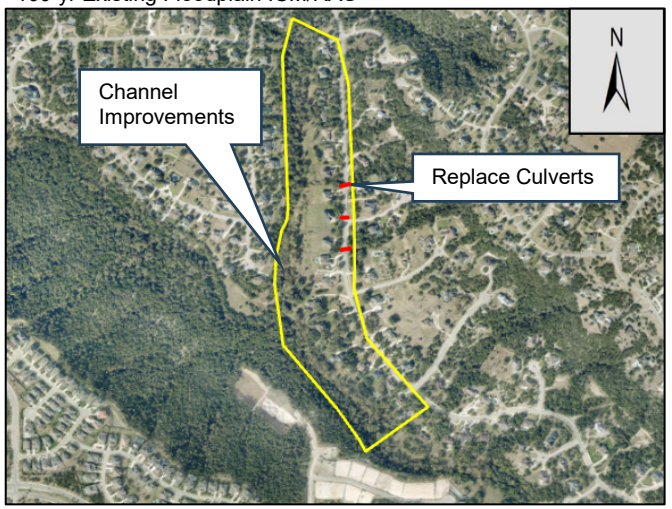
Assumptions

Construction access may require easements & club member/HOA coordination

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

CITY OF LEANDER
DRAINAGE MASTER PLAN
PROJECT:
PROJECT SUMMARY

Project ID: BLC-9 (Rank #45)
Project Name: Washington Square Dr Storm Improvements
Drainage Basin: BHC_130

Problem Description

Flooding along Cannery Cove and Washington Square Drive from Knight Fields west of RR tracks, drainage easement overgrown

Proposed Improvements

◦ Earthwork/detention improvements, Culvert improvements, channel improvements

CIP Ranking Criteria

	Score
Property Flooding	20
Roadway Flooding Risk	0
Citizen Input/Historical	0
Cost Effectiveness	12
O&M Requirements	10
Level of Project Impact	0
External Partner Coord	0
External Funding Opp	3
Total	**45**

Project Costs

Engineering & Survey:	$ 180,000
Construction:	$ 850,000
Other:	
Total:	**$ 1,030,000**
Conceptual Cost Range:	$1M - $1.5M
Estimated Construction Duration:	12-18 Months

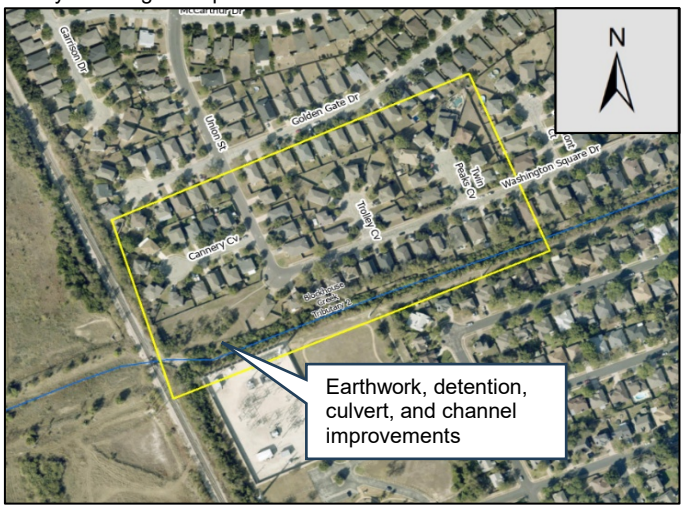
Assumptions

RR Coordination required, longer construction duration and higher cost reflected

Project Photos



100-yr Existing Floodplain ICM/RAS



Proposed improvements

Appendix E: Opinions of Probable Construction Cost (OPCCs)

- Top 15 Priority AOIs OPCCs

DRAFT

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	OAK CREEK PHASE 5 - MISTFLOWER SPRINGS DR
RANK	1
CIP PROJ. LABEL	NFB-2

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	432-7003	RIPRAP (CONC)(6 IN)	350	CY	$ 600	$ 210,000
2	110-7002	EXCAV (CHANNEL)	2500	CY	$ 25	$ 62,500
3	462-70XX	CONC BOX CULV (8 FT X 3 FT)	100	LF	$ 850	$ 85,000
4	132-7001	EMBANKMENT (FNL)(OC)(TY A)	600	CY	$ 25	$ 15,000
5		CONC PIPE CL III 30"	90	LF	$ 150	$ 13,500
6	466-71XX	WINGWALL (FW - 0) (HW=5 FT)	2	EA	$ 30,000	$ 60,000
7		PSET 4:1 30"	1	EA	$ 5,000	$ 5,000
8		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
9	500-7001	MOBILIZATION (10%)	1	LS	$ 47,000	$ 47,000
					SUBTOTAL:	$ 513,000

DESCRIPTION: CHANNEL AND CULVERT MODIFICATIONS TO REDUCE OVERTOPPING AND CONVEY FLOW TO NORTH FORK BRUSHY CREEK

30% CONTINGENCY:	$ 153,900
15% PS&E:	$ 100,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 766,900**

ESTIMATED CONSTRUCTION DURATION: 4-6 MONTHS

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	W BROADE ST AND BUS 183 AT HERO WAY
RANK	2
CIP PROJ. LABEL	SFB-1

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		CLEAR & GRUB	4	AC	$ 7,000	$ 28,000
2	432-7003	RIPRAP (CONC)(6 IN)	100	CY	$ 600	$ 60,000
3	110-7002	EXCAV (CHANNEL)	5000	CY	$ 25	$ 125,000
4	132-7001	EMBANKMENT (FNL)(OC)(TY A)	1600	CY	$ 25	$ 40,000
5		CONC BOX CULV (# FT X # FT)	600	LF	$ 700	$ 420,000
6	466-71XX	WINGWALL (FW - 0) (HW=5 FT)	2	EA	$ 50,000	$ 100,000
7		EROSION CONTROL & REVEG	1	LS	$ 30,000	$ 30,000
8	500-7001	MOBILIZATION (10%)	1	LS	$ 80,000	$ 80,000
					SUBTOTAL:	$ 883,000

DESCRIPTION: REPLACE CULVERT CROSSING AT W BROADE ST, CLEAR & REGRADE CHANNEL BETWEEN BROADE & BUS 183, CONSTRUCT BERM ALONG SOUTHWEST CREEK BOUNDARY

30% CONTINGENCY:	$ 264,900
15% PS&E:	$ 172,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,319,900**

ESTIMATED CONSTRUCTION DURATION: 12-18 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	COUNTY CORK LN AND EMERALD ISLE DR
RANK	3
CIP PROJ. LABEL	BLC-11

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	432-7003	RIPRAP (CONC)(6 IN)	80	CY	$ 600	$ 48,000
2	110-7002	EXCAV (CHANNEL)	350	CY	$ 25	$ 8,750
3	132-7001	EMBANKMENT (FNL)(OC)(TY A)	100	CY	$ 25	$ 2,500
4		CONC PIPE CL III 36"	650	LF	$ 220	$ 143,000
5		CONC BOX CULV (4 FT X 3 FT)	300	LF	$ 450	$ 135,000
6	466-71XX	WINGWALL (FW - 0) (HW=5 FT)	4	EA	$ 30,000	$ 120,000
7		HEADWALL CH-FW-0 36"	5	EA	$ 12,000	$ 60,000
8		ROADWAY REPAIR	1500	SY	$ 45	$ 67,500
9		EROSION CONTROL & REVEG	1	LS	$ 35,000	$ 35,000
10	500-7001	MOBILIZATION (10%)	1	LS	$ 62,000	$ 62,000

SUBTOTAL:	$ 681,750
30% CONTINGENCY:	$ 204,525
15% PS&E:	$ 133,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,019,275**

DESCRIPTION: 950LF STORM SEWER (PIPE & BOX) ALONG COUNTY GLEN ST & WICKLOW DR, TWO LWC UPGRADES AT EMERALD ISLE DR

ESTIMATED CONSTRUCTION DURATION: 9-12 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	MASON RANCH PH1 SECTION1 AT BAGDAD RD
RANK	4
CIP PROJ. LABEL	MC-7

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	432-7003	RIPRAP (CONC)(6 IN)	400	CY	$ 600	$ 240,000
2		REMOVE PIPE	2400	LF	$ 20	$ 48,000
3	110-7002	EXCAV (CHANNEL)	2500	CY	$ 25	$ 62,500
4	132-7001	EMBANKMENT (FNL)(OC)(TY A)	2000	CY	$ 25	$ 50,000
5		CONC PIPE CL III 24"	1136	LF	$ 120	$ 136,320
6		CONC PIPE CL III 36"	567	LF	$ 160	$ 90,720
7		CONC PIPE CL III 48"	454	LF	$ 200	$ 90,800
8		CONC PIPE CL III 60"	113	LF	$ 240	$ 27,120
9		CONC BOX CULV (3 FT X 3 FT)	120	LF	$ 380	$ 45,600
10		CONC BOX CULV (8 FT X 4 FT)	50	LF	$ 800	$ 40,000
11	466-71XX	WINGWALL (FW - 0) (HW=5 FT)	4	EA	$ 30,000	$ 120,000
12		HEADWALL CH-FW-0 (VARIOUS SIZES)	4	EA	$ 4,500	$ 18,000
13		ROADWAY REPAIR	2600	SY	$ 40	$ 104,000
14		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
15	500-7001	MOBILIZATION (10%)	1	LS	$ 109,000	$ 109,000

SUBTOTAL: $ 1,202,060

DESCRIPTION: *PROPOSE WORK IN 3 PHASES:* 1. CERTIFY LEVEE (ENGINEERING ONLY), 2. CLEARING, CHANNEL AND CULVERT IMPROVEMENTS WITH DOWNSTREAM EMBANKMENT & STABILIZATION, 3. STORM DRAIN & INLET REPLACEMENT IN NEIGHBORHOOD

30% CONTINGENCY:	$ 360,618
15% PS&E PLUS 5% LEVEE CERT.:	$ 313,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,875,678**

ESTIMATED CONSTRUCTION DURATION: 18-24 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	MASON CREEK AT FM 2243		
RANK	5		
CIP PROJ. LABEL	BC-6		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	630	SY	$ 50	$ 31,500
2		REMOVE CULVERTS	350	LF	$ 100	$ 35,000
3	420-7012	CL C CONC (ABUT)	30	CY	$ 1,500	$ 45,000
4	425-7005	PRESTR CONC GIRDER (TX54)	420	LF	$ 250	$ 105,000
5	422-7001	REINF CONC SLAB	450	SY	$ 200	$ 90,000
6		APPROACH SLAB	101	CY	$ 810	$ 81,810
7	454-7004	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	108	LF	$ 250	$ 27,000
8	540-7001	MTL W-BEAM GD FEN (TIM POST)	500	LF	$ 50	$ 25,000
9	432-7003	RIPRAP (CONC)(6 IN)	42	CY	$ 600	$ 25,200
10		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
11		MOBILIZATION (10%)	1	LS	$ 48,000	$ 48,000

	SUBTOTAL:	$ 528,510
	30% CONTINGENCY:	$ 158,553
	15% PS&E:	$ 103,000
	PROPERTY ACQUISITION:	$ -
	TOTAL:	**$ 790,063**

DESCRIPTION: REPLACE CULVERTS WITH SINGLE SPAN BRIDGE, RAISE ROADWAY ELEV. APPROX. 4'

ESTIMATED CONSTRUCTION DURATION: 12-18 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	SOUTH FORK SAN GABRIEL TRIB AT CR 270
RANK	6
CIP PROJ. LABEL	SFSG-T25-1

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	250	SY	$ 50	$ 12,500
2		REMOVE CULVERTS	50	LF	$ 100	$ 5,000
3	432-7003	RIPRAP (CONC)(6 IN)	20	CY	$ 600	$ 12,000
4	110-7002	EXCAV (CHANNEL)	1900	CY	$ 25	$ 47,500
5	132-7001	EMBANKMENT (FNL)(OC)(TY A)	475	CY	$ 25	$ 11,875
6		CONC PIPE CL III 36"	100	LF	$ 160	$ 16,000
7		PSET 4:1 36"	8	EA	$ 3,500	$ 28,000
8	247-7179	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS)	28	CY	$ 65	$ 1,820
9		ASPHALT PAVEMENT	250	SY	$ 150	$ 37,500
10		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
11		MOBILIZATION (10%)	1	LS	$ 19,000	$ 19,000

	SUBTOTAL:	$ 206,195
30% CONTINGENCY:		$ 61,859
20% PS&E:		$ 54,000
PROPERTY ACQUISITION:		$ -
TOTAL:		**$ 322,054**

DESCRIPTION: REPLACE LOW WATER CROSSING WITH 4 - 36" RCP AND PSETS, DITCH CLEARING & RIPRAP ARMORING, CHANNEL GRADING & RIPRAP THROUGH CENTEX AND GAS PAD SITES

ESTIMATED CONSTRUCTION DURATION: 6 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	HERO WAY W NEAR NORTH FORK BRUSHY CREEK
RANK	7
CIP PROJ. LABEL	NFB-6

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	250	SY	$ 50	$ 12,500
2		REMOVE CULVERTS	90	LF	$ 100	$ 9,000
3	432-7003	RIPRAP (CONC)(6 IN)	30	CY	$ 600	$ 18,000
4	110-7002	EXCAV (CHANNEL)	200	CY	$ 25	$ 5,000
5	132-7001	EMBANKMENT (FNL)(OC)(TY A)	1000	CY	$ 25	$ 25,000
6		CONC BOX CULV (5 FT X 5 FT)	180	LF	$ 730	$ 131,400
7		WINGWALL (FW - 0) (HW=7 FT)	2	EA	$ 30,000	$ 60,000
8	540-7001	MTL W-BEAM GD FEN (TIM POST)	300	LF	$ 50	$ 15,000
9	247-7179	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS)	28	CY	$ 65	$ 1,820
10		ASPHALT PAVEMENT	250	SY	$ 150	$ 37,500
11		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
12		MOBILIZATION (10%)	1	LS	$ 34,000	$ 34,000
					SUBTOTAL:	$ 369,220

DESCRIPTION: REPLACE LWC WITH BOX CULVERTS, CHANNEL GRADING U/S & D/S

30% CONTINGENCY:	$ 110,766
15% PS&E:	$ 72,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 551,986**

ESTIMATED CONSTRUCTION DURATION: 12 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	NEAR WATERFALL AVE & SUNNY RIDGE DR		
RANK	8		
CIP PROJ. LABEL	NFB-5		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	110-7002	EXCAV (CHANNEL)	560	CY	$ 25	$ 14,000
2	132-7001	EMBANKMENT (FNL)(OC)(TY A)	60	CY	$ 25	$ 1,500
3	432-7003	RIPRAP (CONC)(6 IN)	185	CY	$ 600	$ 111,000
4		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
5		MOBILIZATION (10%)	1	LS	$ 15,000	$ 15,000
6						$ -

SUBTOTAL: $ 161,500

DESCRIPTION: EARTHWORK UPSTREAM OF LANDING LN, VEG. REMOVAL DOWNSTREAM OF SUNNY RIDGE, ARMOR FLOWLINE AT DOWNSTREAM BOUNDARY & CULVERT CROSSINGS

30% CONTINGENCY: $ 48,450

15% PS&E: $ 50,000

PROPERTY ACQUISITION: $ -

TOTAL: $ 259,950

ESTIMATED CONSTRUCTION DURATION: 2-3 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	SAN GABRIEL PKWY WEST OF BUS 183		
RANK	9		
CIP PROJ. LABEL	NFB-1		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	196	SY	$ 50	$ 9,801
2		REMOVE CULVERTS	360	LF	$ 100	$ 36,000
3	462-7007	CONC BOX CULV (5 FT X 3 FT)	720	LF	$ 620	$ 446,400
4	466-7147	WINGWALL (FW - 0) (HW=5 FT)	2	EA	$ 30,000	$ 60,000
5	432-7003	RIPRAP (CONC)(6 IN)	16	CY	$ 600	$ 9,600
6	247-7179	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS)	22	CY	$ 65	$ 1,430
7		ASPHALT PAVEMENT	200	SY	$ 150	$ 30,000
8		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
9		MOBILIZATION (10%)	1	LS	$ 61,000	$ 61,000

DESCRIPTION: REPLACE EX. CULVERT CROSSING WITH BOX CULVERTS, CHANNEL MODIFICATIONS U/S AND D/S

SUBTOTAL:	$ 669,231
30% CONTINGENCY:	$ 200,769
15% PS&E:	$ 135,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,005,000**

ESTIMATED CONSTRUCTION DURATION: 6-8 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	BUS 183 AT E CRYSTAL FALLS PKWY		
RANK	10		
CIP PROJ. LABEL	BLC-7		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	432-7003	RIPRAP (CONC)(6 IN)	200	CY	$ 600	$ 120,000
2	110-7002	EXCAV (CHANNEL)	2500	CY	$ 25	$ 62,500
3	132-7001	EMBANKMENT (FNL)(OC)(TY A)	1000	CY	$ 25	$ 25,000
4		CONC PIPE CL III 36"	415	LF	$ 160	$ 66,400
5		CONC BOX CULV (# FT X # FT)	1100	LF	$ 400	$ 440,000
6	466-71XX	WINGWALL (FW - 0) (HW=5 FT)	2	EA	$ 20,000	$ 40,000
7		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
8	500-7001	MOBILIZATION (10%)	1	LS	$ 77,000	$ 77,000
					SUBTOTAL:	$ 845,900

DESCRIPTION: EXCAVATE OVERFLOW BASIN EAST OF RR, UPGRADE EX. BOX CULVERT CROSSING OF BUS 183, REROUTE STORM BOX ALONG ROW

30% CONTINGENCY:	$ 253,770
15% PS&E:	$ 165,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,264,670**

ESTIMATED CONSTRUCTION DURATION: 9-12 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	BRUSHY CREEK TRIB AT PECAN CREEK COMM
RANK	11
CIP PROJ. LABEL	BC-2

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE PEDESTRIAN CREEK CROSSING	1	LS	$ 15,000	$ 15,000
2	110-7002	EXCAV (CHANNEL)	4000	CY	$ 25	$ 100,000
3	132-7001	EMBANKMENT (FNL)(OC)(TY A)	650	CY	$ 25	$ 16,250
4		PEDESTRIAN BRIDGE	1	LS	$ 100,000	$ 100,000
5		CREEK VEGETATION CLEARING	3	AC	$ 7,000	$ 21,000
6		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
7		MOBILIZATION (10%)	1	LS	$ 27,000	$ 27,000
					SUBTOTAL:	$ 299,250

DESCRIPTION: POND MAINTENANCE, VEGETATION REMOVAL, CHANNEL & FLOODPLAIN STORAGE EXCAVATION, PEDESTRIAN BRIDGE CROSSING REPLACEMENT, EARTHEN BERM

30% CONTINGENCY:	$ 89,775
15% PS&E:	$ 58,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 447,025**

ESTIMATED CONSTRUCTION DURATION: 4 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	MASON CK RESERVOIR AT HORIZON PARK BLVD
RANK	12
CIP PROJ. LABEL	MC-1

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE BRIDGE STRUCTURE	260	SY	$ 300	$ 78,000
2		REMOVE RIPRAP	600	SY	$ 40	$ 24,000
3	420-7012	CL C CONC (ABUT)	15	CY	$ 1,500	$ 22,500
4	425-7005	PRESTR CONC GIRDER (TX54)	225	LF	$ 250	$ 56,250
5	422-7001	REINF CONC SLAB	250	SY	$ 200	$ 50,000
6		APPROACH SLAB	79	CY	$ 810	$ 63,990
7	454-7004	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	60	LF	$ 250	$ 15,000
8	540-7001	MTL W-BEAM GD FEN (TIM POST)	400	LF	$ 50	$ 20,000
9	432-7003	RIPRAP (CONC)(6 IN)	35	CY	$ 600	$ 21,000
10		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
11		MOBILIZATION (10%)	1	LS	$ 37,000	$ 37,000

SUBTOTAL:	$ 407,740
30% CONTINGENCY:	$ 122,322
15% PS&E:	$ 80,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 610,062**

DESCRIPTION: RAISE ROADWAY PROFILE BY 6', REPLACE CROSSING WITH SINGLE SPAN BRIDGE

ESTIMATED CONSTRUCTION DURATION: 6-8 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	BLOCKHOUSE CREEK NEAR RUSH AUTOMOTIVE		
RANK	13		
CIP PROJ. LABEL	BLC-10		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	550	SY	$ 50	$ 27,500
2		REMOVE CULVERTS	480	LF	$ 100	$ 48,000
3	432-7003	RIPRAP (CONC)(6 IN)	40	CY	$ 600	$ 24,000
4	110-7002	EXCAV (CHANNEL)	1000	CY	$ 25	$ 25,000
5	132-7001	EMBANKMENT (FNL)(OC)(TY A)	250	CY	$ 25	$ 6,250
6		CONC BOX CULV (4 FT X 4 FT)	960	LF	$ 570	$ 547,200
7	466-71XX	WINGWALL (FW - 0) (HW=6 FT)	2	EA	$ 50,000	$ 100,000
8	247-7179	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS)	61	CY	$ 65	$ 3,965
9		ASPHALT PAVEMENT	550	SY	$ 150	$ 82,500
10		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
11	500-7001	MOBILIZATION (10%)	1	LS	$ 88,000	$ 88,000
					SUBTOTAL:	$ 967,415

DESCRIPTION: FLOODPLAIN STORAGE & CHANNEL EXCAVATION, CULVERT REPLACEMENT AT BUS 183

30% CONTINGENCY:	$ 290,225
15% PS&E:	$ 189,000
PROPERTY ACQUISITION:	$ -
TOTAL:	**$ 1,446,640**

ESTIMATED CONSTRUCTION DURATION: 9-12 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN	**CONCEPTUAL COST ESTIMATE**	
OWNER	CITY OF LEANDER		
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN		
LOCATION	SOUTH FORK SAN GABRIEL TRIB AT BONNET		
RANK	14		
CIP PROJ. LABEL	SFSG-T28.01-1		

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1		REMOVE ROADWAY	160	SY	$ 50	$ 8,000
2		REMOVE CULVERTS	55	LF	$ 100	$ 5,500
3	432-7003	RIPRAP (CONC)(6 IN)	20	CY	$ 600	$ 12,000
4	110-7002	EXCAV (CHANNEL)	8917	CY	$ 25	$ 222,925
5	132-7001	EMBANKMENT (FNL)(OC)(TY A)	1783	CY	$ 25	$ 44,575
6		CONC BOX CULV (5 FT X 4 FT)	110	LF	$ 670	$ 73,700
7		WINGWALL (FW - 0) (HW=6 FT)	2	EA	$ 25,000	$ 50,000
8	247-7179	FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS)	20	CY	$ 65	$ 1,300
9		ASPHALT PAVEMENT	160	SY	$ 150	$ 24,000
10		EROSION CONTROL & REVEG	1	LS	$ 20,000	$ 20,000
11		MOBILIZATION (10%)	1	LS	$ 46,000	$ 46,000
					SUBTOTAL:	$ 508,000

DESCRIPTION: EROSION PREVENTION MEASURES, CHANNEL EXCAVATION, REPLACE EXISTING CULVERT CROSSING AT TRIGGER LN

30% CONTINGENCY:	$	152,400
15% PS&E:	$	99,000
PROPERTY ACQUISITION:	$	-
TOTAL:	**$**	**759,400**

ESTIMATED CONSTRUCTION DURATION: 6 MO

PROJECT NAME	LEANDER STORMWATER MASTER PLAN
OWNER	CITY OF LEANDER
EDGE PROJ. NO.	COL_001_STORMWATER_MASTER_PLAN
LOCATION	BLOCKHOUSE CREEK THRU RIDGEWOOD
RANK	15
CIP PROJ. LABEL	BLC-3A

CONCEPTUAL COST ESTIMATE

ITEM NO	SPEC NO	DESCRIPTION	QTY	UNIT	$/UNIT	COST
1	432-7003	RIPRAP (CONC)(6 IN)	20	CY	$ 600	$ 12,000
2	110-7002	EXCAV (CHANNEL)	9750	CY	$ 25	$ 243,750
3	132-7001	EMBANKMENT (FNL)(OC)(TY A)	2700	CY	$ 25	$ 67,500
4		EROSION CONTROL & REVEG	1	LS	$ 15,000	$ 15,000
5		MOBILIZATION (10%)	1	EA	$ 34,000	$ 34,000

SUBTOTAL:	$	372,250
30% CONTINGENCY:	$	111,675
15% PS&E:	$	73,000
PROPERTY ACQUISITION:	$	-
TOTAL:	**$**	**556,925**

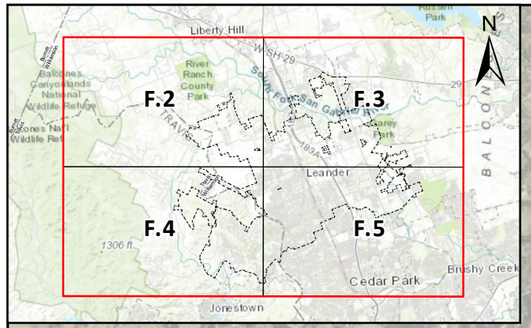
DESCRIPTION: (PHASE 1 OF 2, SEE AOI #16) CHANNEL & POND GRADING IMPROVEMENTS THRU RIDGEWOOD

ESTIMATED CONSTRUCTION DURATION: 8-12 MO

Appendix F: City-wide Inundation Maps (2D Modeling Results)

- 2-year Inundation Maps
- 10-year Inundation Maps
- 25-year Inundation Maps
- 100-year Inundation Maps

DRAFT



KEY MAP

LIBERTY HILL

CEDAR PARK

0 1,300 5,200 Feet

N

Legend

- City_Limits
- County
- Quadrants
- ETJ

2-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

County

SEE EXHIBIT F.2 SHEET 2 OF 5

SEE EXHIBIT F.3 SHEET 3 OF 5

SEE EXHIBIT F.4 SHEET 4 OF 5

SEE EXHIBIT F.5 SHEET 5 OF 5

Travis

Williamson

US 183A

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

Hero Way

N Fork Brushy Creek

S Fork San Gabriel River

S Fork Brushy Creek

Mason Creek

Bagdad Rd

Crystal Falls Pkwy

Block House Creek

Brushy Creek

Big Sandy Creek

Brown Hollow

N Lakeline Blvd

Bee Cave Hollow

Bloody Hollow

DATA SOURCE: AUTODESK INFOWORKS ICM 2D MODELING, 2025

DATE:

APPENDIX F.1

FLOOD INUNDATION MAP - 2YR

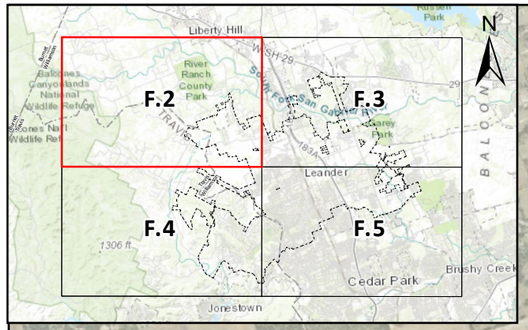
SHEET 1 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

2-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

S Fork San Gabriel River

Williamson

Travis

Bagdad Rd

Big Sandy Creek

N Fork Brushy Creek

MATCHLINE - SEE APPENDIX F.3

MATCHLINE - SEE APPENDIX F.4

DATE: APRIL 2026

APPENDIX F.2

FLOOD INUNDATION MAPS - 2YR

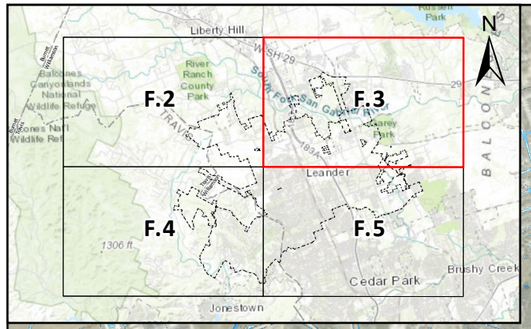
SHEET 2 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

2-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

MATCHLINE - SEE APPENDIX F.2

S Fork San Gabriel River

US 183A

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

N Fork Brushy Creek

Hero Way

MATCHLINE - SEE APPENDIX F.5

DATE: APRIL 2026

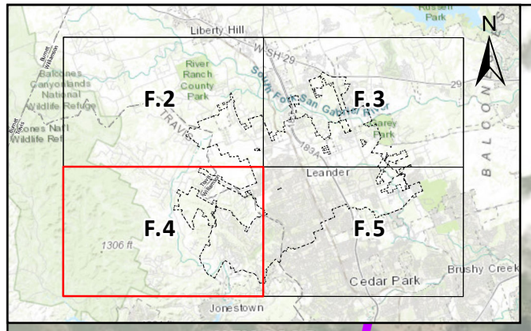
APPENDIX F.3
FLOOD INUNDATION MAP - 2YR
SHEET 3 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

MATCHLINE - SEE APPENDIX F.2



KEY MAP

Big Sandy Creek

Williamson

Travis

Brown Hollow

Bloody Hollow

MATCHLINE - SEE APPENDIX F.5

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

2-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

DATE: APRIL 2026

APPENDIX F.4

FLOOD INUNDATION MAP - 2YR

SHEET 4 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

MATCHLINE - SEE APPENDIX F.3

MATCHLINE - SEE APPENDIX F.4

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

2-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

Mason Creek

Bagdad Rd

US 183A

Crystal Falls Pkwy

Ronald Reagan Blvd

Block House Creek

Bee Cave Hollow

N Lakeline Blvd

Travis

Williamson

US 183

Brushy Creek

KEY MAP

F.2 F.3 F.4 F.5

Liberty Hill

Leander

Cedar Park

Jonestown

DATE: APRIL 2026

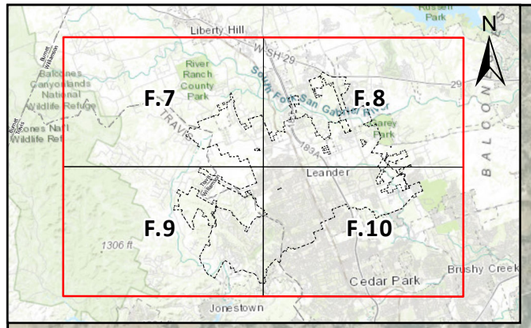
APPENDIX F.5
FLOOD INUNDATION MAP - 2YR
SHEET 5 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

LIBERTY HILL

CEDAR PARK

0 1,300 5,200 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

0.501 - 0.75
0.751 - 1.25
1.251 - 2
2.001 - 5
5.001 - 33.517

10-yr Inundation Depth, ft

Value

0.251 - 0.5

SEE EXHIBIT F.7 SHEET 2 OF 5

SEE EXHIBIT F.8 SHEET 3 OF 5

SEE EXHIBIT F.9 SHEET 4 OF 5

SEE EXHIBIT F.10 SHEET 5 OF 5

Travis
Williamson
US 183A
US 183
San Gabriel Pkwy
Ronald Reagan Blvd
Hero Way
Bagdad Rd
N Lakeline Blvd
Crystal Falls Pkwy

S Fork San Gabriel River
N Fork Brushy Creek
S Fork Brushy Creek
Mason Creek
Block House Creek
Brushy Creek
Big Sandy Creek
Brown Hollow
Bee Cave Hollow
Bloody Hollow

DATA SOURCE: AUTODESK INFOWORKS ICM 2D MODELING, 2025

DATE: APRIL 2026

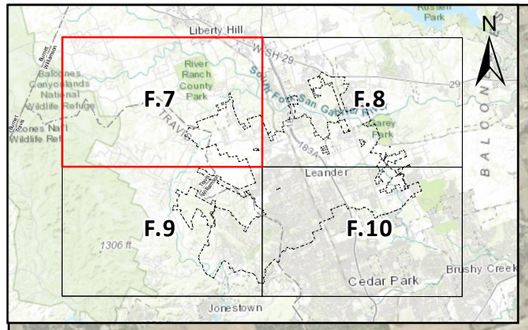
APPENDIX F.6
FLOOD INUNDATION MAP - 10YR
SHEET 1 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

10-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

S Fork San Gabriel River

Williamson

Travis

Big Sandy Creek

N Fork Brushy Creek

Bagdad Rd

MATCHLINE - SEE APPENDIX F.8

MATCHLINE - SEE APPENDIX F.9

DATE: APRIL 2026

APPENDIX F.7

FLOOD INUNDATION MAPS - 10YR

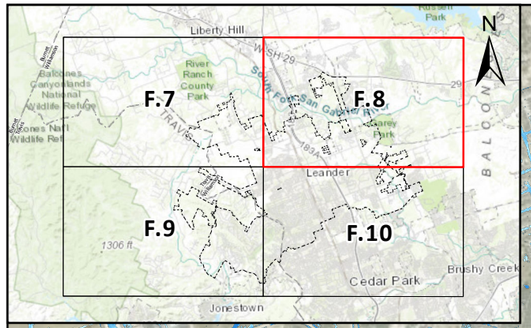
SHEET 2 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

10-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

MATCHLINE - SEE APPENDIX F.7

S Fork San Gabriel River

US 183A

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

Hero Way

N Fork Brushy Creek

MATCHLINE - SEE APPENDIX F.10

DATE: APRIL 2026

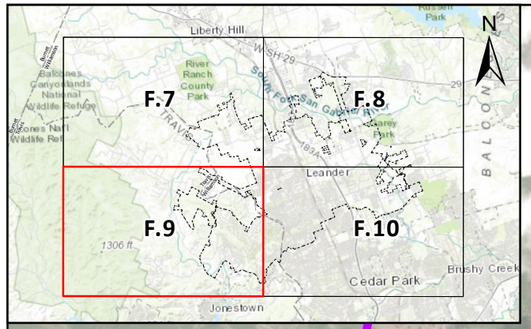
APPENDIX F.6
FLOOD INUNDATION MAP - 10YR
SHEET 3 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

MATCHLINE - SEE APPENDIX F.7



KEY MAP

Big Sandy Creek

Williamson

Travis

Brown Hollow

Bloody Hollow

MATCHLINE - SEE APPENDIX F.10

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

10-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

DATE: APRIL 2026

APPENDIX F.9

FLOOD INUNDATION MAP - 10YR

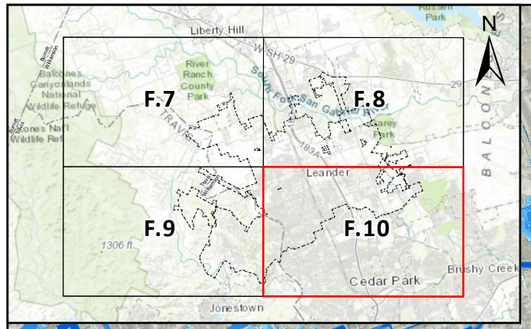
SHEET 4 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

MATCHLINE - SEE APPENDIX F.8

MATCHLINE - SEE APPENDIX F.9

Mason Creek

Block House Creek

Brushy Creek

Bee Cave Hollow

Bagdad Rd

N Lakeline Blvd

US 183A

US 183

Crystal Falls Pkwy

Ronald Reagan Blvd

Travis

Williamson

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

10-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

DATE: APRIL 2026

APPENDIX F.10

FLOOD INUNDATION MAP - 10YR

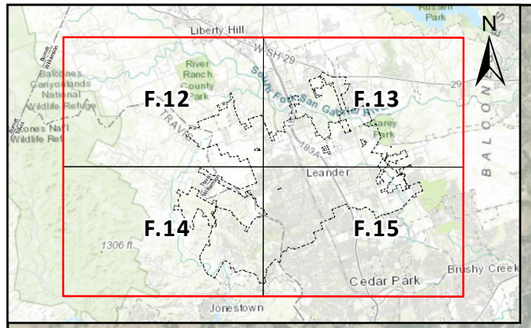
SHEET 5 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

LIBERTY HILL

0 1,300 5,200 Feet

N

Legend

- City_Limits
- County
- Quadrants
- ETJ

25-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5

SEE EXHIBIT F.12 SHEET 2 OF 5
SEE EXHIBIT F.14 SHEET 4 OF 5
SEE EXHIBIT F.13 SHEET 3 OF 5
SEE EXHIBIT F.15 SHEET 5 OF 5

S Fork San Gabriel River
US 183A
US 183
San Gabriel Pkwy
Ronald Reagan Blvd
Hero Way
N Fork Brushy Creek
S Fork Brushy Creek
Mason Creek
Bagdad Rd
Crystal Falls Pkwy
Block House Creek
Brushy Creek
Travis
Williamson
Big Sandy Creek
Brown Hollow
N Lakeline Blvd
Bee Cave Hollow
Bloody Hollow
CEDAR PARK

DATA SOURCE: AUTODESK INFOWORKS ICM 2D MODELING, 2025

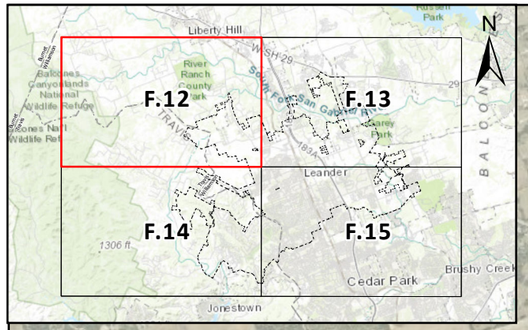
DATE: APRIL 2026

APPENDIX F.11
FLOOD INUNDATION MAP - 25YR
SHEET 1 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

25-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

S Fork San Gabriel River

Williamson

Travis

Bagdad Rd

N Fork Brushy Creek

Big Sandy Creek

MATCHLINE - SEE APPENDIX F.13

MATCHLINE - SEE APPENDIX F.14

DATE: APRIL 2026

APPENDIX F.12
FLOOD INUNDATION MAP - 25YR
SHEET 2 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

0 650 2,600
Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

25-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

MATCHLINE - SEE APPENDIX F.12

S Fork San Gabriel River

US 183A

US 183

San Gabriel Pkwy

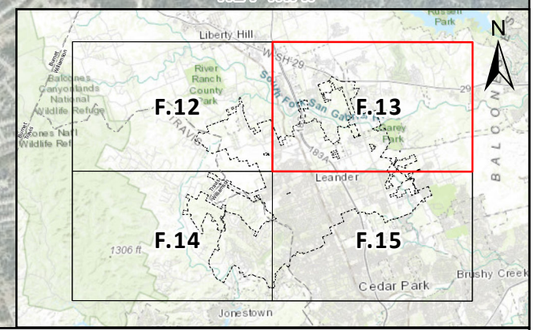
Ronald Reagan Blvd

Hero Way

N Fork Brushy Creek

MATCHLINE - SEE APPENDIX F.15

KEY MAP



DATE: APRIL 2026

APPENDIX F.13
FLOOD INUNDATION MAP - 25YR
SHEET 3 OF 5

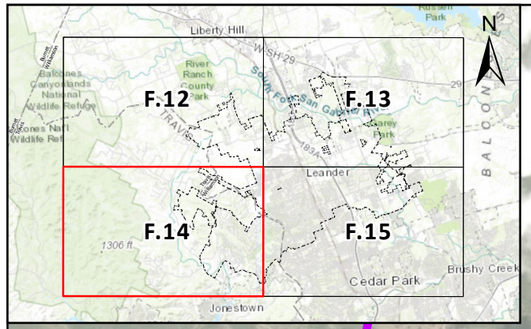
City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

MATCHLINE - SEE APPENDIX F.12



KEY MAP

Big Sandy Creek

Williamson

Travis

Brown Hollow

Bloody Hollow

MATCHLINE - SEE APPENDIX F.15

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

25-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

DATE: APRIL 2026

APPENDIX F.14

FLOOD INUNDATION MAP - 25YR

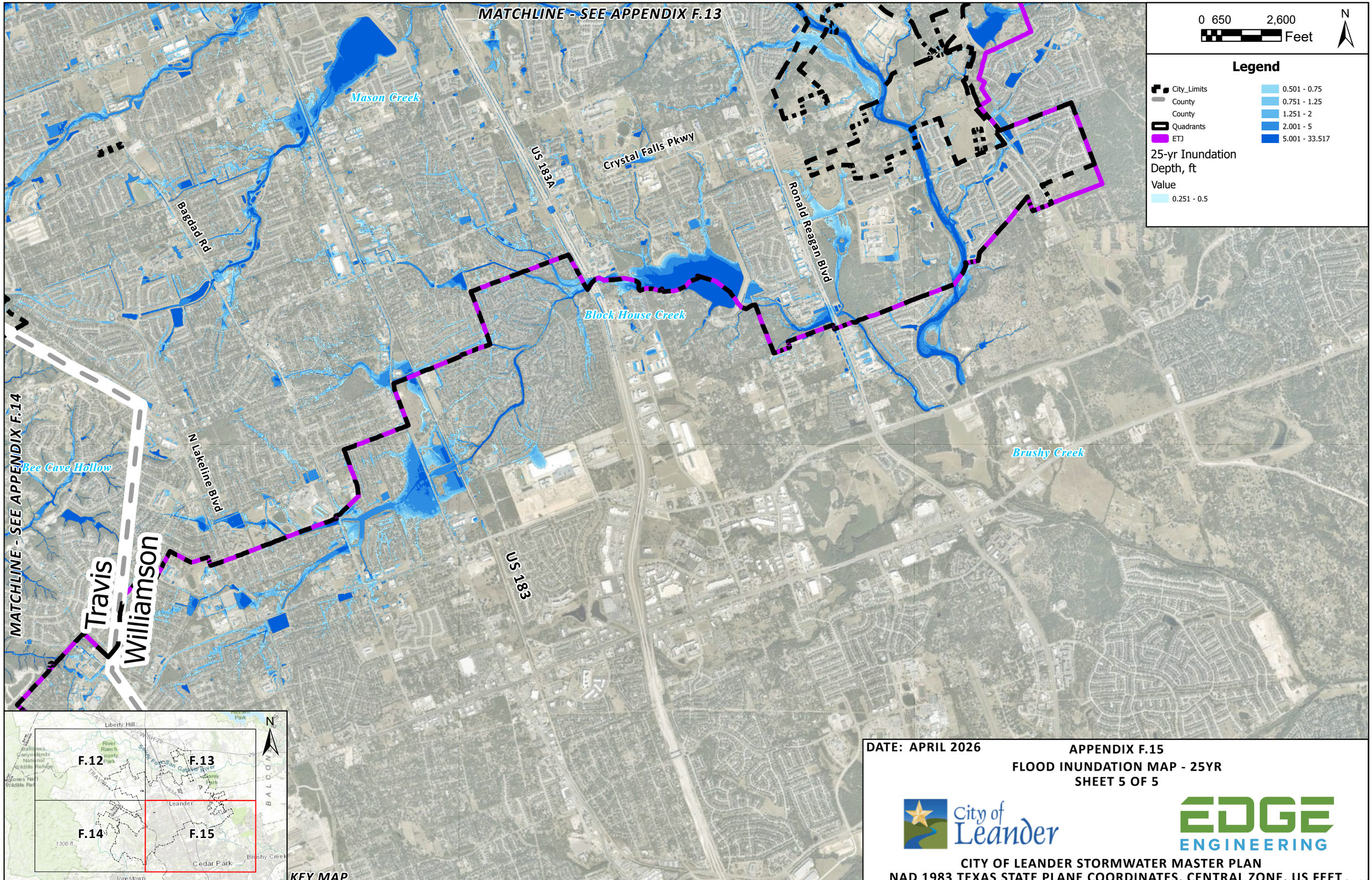
SHEET 4 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



DATE: APRIL 2026

APPENDIX F.15

FLOOD INUNDATION MAP - 25YR

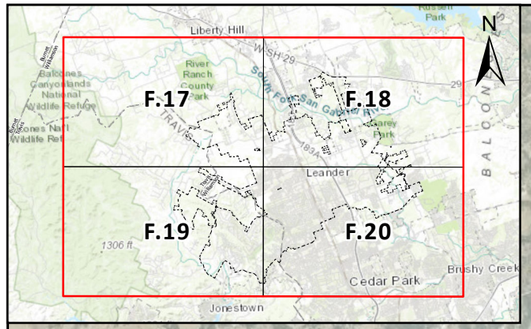
SHEET 5 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

LIBERTY HILL

0 1,300 5,200 Feet

N

Legend

- County
- Quadrants
- ETJ
- City_Limits

100-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5

S Fork San Gabriel River

US 183A

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

Hero Way

N Fork Brushy Creek

S Fork Brushy Creek

Mason Creek

Bagdad Rd

Crystal Falls Pkwy

Block House Creek

Brushy Creek

N Lakeline Blvd

Bee Cave Hollow

Travis

Williamson

Big Sandy Creek

Brown Hollow

Bloody Hollow

CEDAR PARK

SEE EXHIBIT F.17 SHEET 2 OF 5
SEE EXHIBIT F.19 SHEET 4 OF 5
SEE EXHIBIT F.18 SHEET 3 OF 5
SEE EXHIBIT F.20 SHEET 5 OF 5

DATA SOURCE: AUTODESK INFOWORKS ICM 2D MODELING, 2025

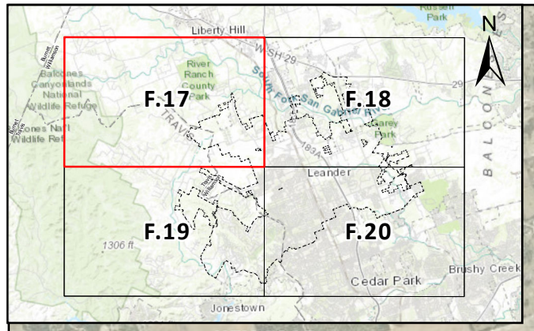
DATE: APRIL 2026

APPENDIX F.16
FLOOD INUNDATION MAP - 100YR
SHEET 1 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

100-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

S Fork San Gabriel River

Williamson

Travis

Bagdad Rd

Big Sandy Creek

N Fork Brushy Creek

DATE: APRIL 2026

APPENDIX F.17

FLOOD INUNDATION MAP - 100YR

SHEET 2 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

100-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

S Fork San Gabriel River

N Fork Brushy Creek

US 183A

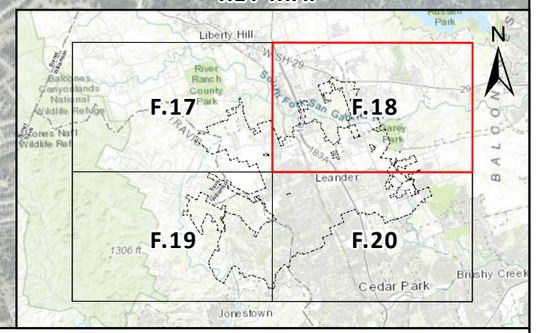
US 183

San Gabriel Pkwy

Hero Way

Ronald Reagan Blvd

KEY MAP



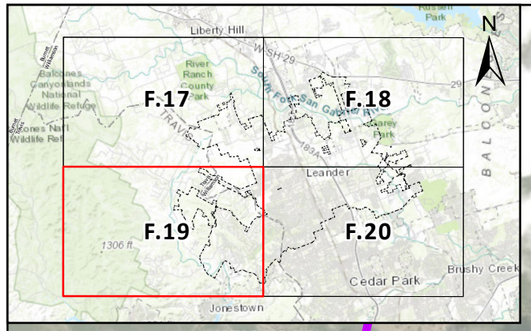
DATE: APRIL 2026

APPENDIX F.18
FLOOD INUNDATION MAP - 100YR
SHEET 3 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN
NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

Big Sandy Creek

Williamson

Travis

Brown Hollow

Bloody Hollow

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

100-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

DATE: APRIL 2026 **APPENDIX F.19**

FLOOD INUNDATION MAP - 100YR

SHEET 4 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

0 650 2,600 Feet

N

Legend

- City_Limits
- County
- County
- Quadrants
- ETJ

100-yr Inundation Depth, ft

Value

- 0.251 - 0.5
- 0.501 - 0.75
- 0.751 - 1.25
- 1.251 - 2
- 2.001 - 5
- 5.001 - 33.517

Mason Creek

Bagdad Rd

US 183A

Crystal Falls Pkwy

Ronald Reagan Blvd

Block House Creek

Bee Cave Hollow

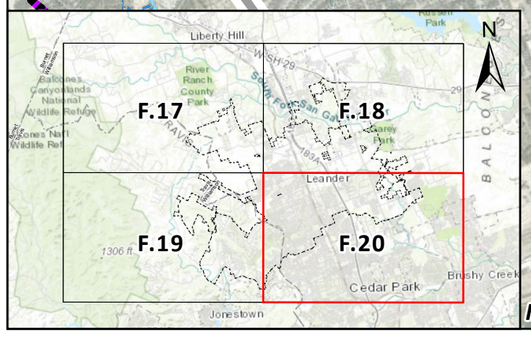
N Lakeline Blvd

Travis

Williamson

US 183

Brushy Creek



KEY MAP

DATE: APRIL 2026

APPENDIX F.20

FLOOD INUNDATION MAP - 100YR

SHEET 5 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Appendix G: External Funding Opportunities

- Flood Information Clearinghouse – Funding Matrix by Project Type
  Source: https://texasfloodclearinghouse.org/

- 2024-2025 Intended Use Plan - FIF Criteria Scoring and Weight
  Source:http://www.twdb.texas.gov/financial/programs/fif/doc/SFY2024-2025-FIF-IUP.pdf

DRAFT

Working 2024 State Flood Plan Flood Management Evaluation (FME), Flood Mitigation Project (FMP) and Flood Management Strategy (FMS) Ranking Criteria and Weight

Texas Water Code Sec. 16.061, "(b) The state flood plan must include: … (2) a statewide, ranked list of ongoing and proposed flood control and mitigation projects and strategies necessary to protect against the loss of life and property from flooding…"
TWDB rules state that the state flood plan shall incorporate "a statewide, ranked list of recommended FMEs, FMSs, and FMPs that have associated one-time capital costs derived from the Board-approved RFPs (31 TAC § 362.4 (c)(5)).
All flood risk and risk reduction information are for 1% annual chance storm.
*Select reported data were normalized on the curve (ArcSinh), scoring 0-10.

		Criteria Name	Criteria Type	Criteria Grouping	FME Ranking Criteria	FME Ranking Weight	FME Grouping Weight	FMP Ranking Criteria	FMP Ranking Percent Weight	FMP Grouping Weight	FMS Ranking Criteria	FMS Ranking Percent Weight	FMS Grouping Weight	Max Score
REPORTED DATA FROM FME, FMP and FMS FEATURE CLASSES	1	Estimated number of structures at 100yr flood risk*	Flood Risk	Life, Safety and Structures	Yes	**15.0%**	75.0%	No	0.0%	0.0%	Yes	**10.0%**	40.0%	10
	2	Estimated Population at 100-year flood risk*	Flood Risk		Yes	**15.0%**		No	0.0%		Yes	**10.0%**		10
	3	Critical facilities at 100-year flood risk (#)*	Flood Risk		Yes	**25.0%**		No	0.0%		Yes	**10.0%**		10
	4	Number of low water crossings at flood risk (#)*	Flood Risk		Yes	**20.0%**		No	0.0%		Yes	**10.0%**		10
	5	Estimated number of road closures (#)*	Flood Risk	Mobility	Yes	**5.0%**	15.0%	No	0.0%	0.0%	Yes	**5.0%**	15.0%	10
	6	Estimated length of roads at 100-year flood risk (Miles)*	Flood Risk		Yes	**10.0%**		No	0.0%		Yes	**10.0%**		10
	7	Estimated farm & ranch land at 100-year flood risk (acres)*	Flood Risk	Agriculture	Yes	**10.0%**	10.0%	No	0.0%	0.0%	Yes	**5.0%**	5.0%	10
	8	Number of structures removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction	Life, Safety and Structures				Yes	**5.0%**	45.0%	Yes	**10.0%**	25.0%	10
	9	Percent of structures removed from 100yr (1% annual chance) Floodplain (**Calculated** by TWDB from reported data)	Flood Risk Reduction					Yes	**10.0%**					10
	10	Residential structures removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction					Yes	**2.5%**		Yes	**5.0%**		10
	11	Estimated Population removed from 100yr (1% annual chance) Floodplain*	Flood Risk Reduction					Yes	**10.0%**		Yes	**10.0%**		10
	12	Critical facilities removed from 100yr (1% annual chance) Floodplain (#)*	Flood Risk Reduction					Yes	**10.0%**		No	0.0%		10
	13	Number of low water crossings removed from 100yr (1% annual chance) Floodplain (#)*	Flood Risk Reduction					Yes	**7.5%**		No	0.0%		10
	14	Estimated length of roads removed from 100yr floodplain (Miles)*	Flood Risk Reduction	Mobility				Yes	**5.0%**	5.0%	No	0.0%	0.0%	10
	15	Estimated farm & ranch land removed from 100yr floodplain (acres)*	Flood Risk Reduction	Agriculture				Yes	**5.0%**	5.0%	No	0.0%	0.0%	10
	16	Percent Nature-based Solution (by cost)	Other					Yes	**5.0%**		Yes	**7.5%**		10
	17	Benefit-Cost Ratio	Other					Yes	**2.5%**					10
	18	Water Supply Benefit (Y/N)	Other					Yes	**5.0%**		Yes	**5.0%**		10
	19	FMP Project Type (10 points) Low water crossing (4 points) Preparedness	Other					Yes	**2.5%**		No			
	20	FMS Project Type (10 points) Flood Measurement and Warning (8 points) Regulatory and Guidance (6 points) Education and Outreach (4 points) Property Acquisition and Structural Elevation (4 points) Infrastructure Projects (2 points) Other	Other					No	0.0%		Yes	**2.5%**		10
		Subtotal			**100.0%**			**70.0%**			**100.0%**			
FMP PROJECT DETAILS SCORING (COMPUTED BY RFPGs)	21	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)	Flood Risk					Yes	**5.0%**					10
	22	Score 2: Severity - Community Need (% Population)	Flood Risk					Yes	**5.0%**					10
	23	Score 6: Life and Safety	Flood Risk Reduction					Yes	**5.0%**					10
	24	Score 8: Social Vulnerability	Other					Yes	**5.0%**					10
	25	Score 10: Multiple Benefits	Other Benefits					Yes	**2.5%**					10
	26	Score 13: Environmental Benefit	Other Benefits					Yes	**2.5%**					10
	27	Score 15: Mobility	Other Benefits					Yes	**5.0%**					10
		Subtotal			**0.0%**			**30.0%**			**0.0%**			
		Total (Must add up to 100%)			**100.0%**			**100.0%**			**100.0%**			

Please refer to RFP Exhibit C (pages 114 - 135) for definition of Project Details Scoring:

Exhibit C: Technical Guidelines for Regional Flood Planning

1 Severity Ranking - Pre-Project Average Depth of Flooding (100-year): Ranking of severity based on the baseline/pre-project average 100-year flood depth.
2 Severity Ranking - Community Need (% Population): Ranking of severity based on a community's need by percentage of project community affected by population.
6 Life and Safety Ranking (Injury/Loss of life): Ranking project based on life/injury risk percentage using estimates of area hazard rating, area vulnerability rating, and historical loss of life injury data for project.
8 Social Vulnerability Ranking: A ranking based on the Center for Disease Control SVI data for Texas, by calculating an average project SVI by census tract and classifying the vulnerability level.
10 Multiple Benefit Ranking: Ranking a project based on the reporting of significant, measurable, expected benefits to: recreation, transportation, social and quality of life, local economic impacts, meeting sustainability goals, and/or project resilience goals.
13 Environmental Benefit Ranking: Ranking of expected level of environmental benefits to be delivered by project to water quality, cultural heritage, habitat, air quality, natural resources, agricultural resources, and soils/erosion and sedimentation.
15 Mobility Ranking: Ranking project improvement and protection of mobility during flood events, with particular emphasis on emergency service access and major access routes.

Texas Flood Information Clearinghouse

General Eligibility by Project Type

	Administered by TDEM		*Administered by TWDB*				*Administered by GLO*		*Administered by TCEQ*
Eligible Activities	**Hazard Mitigation Grant Program**	**Pre-Disaster Mitigation**	**Flood Mitigation Assistance**	**Flood Infrastructure Fund**	**Clean Water State Revolving Fund**	**Texas Water Development Fund**	**Community Development Block Grants-Mitigation**	**Development Block Grants - Disaster Recovery**	**High Hazard Potential Dams Grant Program**
5 Percent Initiative Projects*	√								
Advance assistance	√								
Aquifer and storage recovery**	√	√	√		√				
Conservation easements/land acquisition					√	√	*√*	*√*	
Dam repair, removal, or rehabilitation of a high hazard dam				√	√****	√	*√ (not beyond original footprint)*	*√ (not beyond original footprint)*	
Drainage and local-scale stormwater infrastructure	√	√		√	√	√	*√*	*√*	
Dry floodproofing of historic residential structures	√	√	√				*√*	*√*	
Dry floodproofing of non-residential structures	√	√	√				*√*	*√*	
Early warning systems	√			√		√	*√*	*√*	
Educational and outreach campaigns	√			√			*√*	*√*	
Emergency action plans	√			√			*√*		
Flood diversion and storage**	√	√	√	√	√****	√	*√*	*√*	
Floodplain and stream restoration**	√	√	√	√	√****		*√*	*√*	
Gages, flood or stream	√			√			*√*		
Generators	√	√					*√*	*√*	
Green infrastructure**	√	√	√	√	√	√	*√*	*√*	
Infrastructure retrofit	√	√	√	√	√	√	*√*	*√*	
Levees, flood walls, related infrastructure	√	√		√	√****	√	*√*	*√*	
Local match for federally funded projects				√			*√*	*√*	
Localized flood risk reduction projects	√	√	√	√	√	√	*√*	*√*	
Miscellaneous/Other**	√	√	√	√			*√*	*√*	
Mitigation reconstruction	√	√	√	√	√	√	*√*	*√*	
Nature-based solutions, including natural erosion control	√	√		√	√		*√*	*√*	
Non-localized flood risk reduction projects	√	√		√	√****	√	*√*	*√*	
Non-structural retrofitting of existing buildings and facilities	√	√	√		√***		*√*	*√*	
Permeable pavement	√			√	√	√	*√*	*√*	
Post-disaster code enforcement	√						*√*	*√*	
Property acquisition and structure demolition	√	√	√	√			*√*	*√*	
Property acquisition and structure relocation	√	√	√	√		√	*√*	*√*	
Rehabilitation of existing infrastructure, not including costs associated with current or future operations and maintenance activities				√	√***	√	*√*	*√*	
Reservoirs (new) with flood control function	√	√		√	√****	√	*√*		

Texas Flood Information Clearinghouse

General Eligibility by Project Type

Eligible Activities	Hazard Mitigation Grant Program	Pre-Disaster Mitigation	Flood Mitigation Assistance	Flood Infrastructure Fund	Clean Water State Revolving Fund	Texas Water Development Fund	Community Development Block Grants-Mitigation	Development Block Grants - Disaster Recovery	High Hazard Potential Dams Grant Program
Restoration of riparian corridors				√	√		√	√	
Retention/detention basins	√	√		√	√	√	√	√	
Reverse 911 systems	√			√			√	√	
Road crossing barriers	√			√			√	√	
Safe room construction	√	√					√ (HMGP supplemental)	√ (HMGP supplemental)	
Soil stabilization	√	√	√		√	√	√	√	
Structural retrofitting of existing buildings	√	√	√		√***		√	√	
Structure elevation	√	√	√				√	√	
Watershed planning and mapping	√			√			√	√	
Wildfire mitigation	√	√							
Wind retrofit for one- and two-family residences	√	√					√	√	
Hazard mitigation planning	√	√	√	√			√		
Management costs	√	√	√				√	√	
Dam risk and consequence assessments									√
Feasibility studies, preliminary engineering studies, alternatives analysis, mapping, surveys, and inundation modeling									√
Engineering design and specifications									√
Development of floodplain management plans or operations and maintenance plans									√

*FEMA allows increasing the 5% Initiative amount up to 10% for a Presidential major disaster declaration under HMGP. The additional 5% Initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

**Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.
***Of wastewater infrastructure ("treatment works").
**** If project is considered measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water.

Appendix H: Stormwater Maintenance Report Template

DRAFT

City of Leander

STORMWATER ASSET INSPECTION REPORT

START DATE: _____ INSPECTOR NAME: _____

END DATE: _____ WEATHER CONDITIONS: _____

LOCATION: _____ START TIME: _____

GIS ID: _____ END TIME: _____

ASSET NAME	CONDITION	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS TAKEN
NOTES:			

ASSET NAME	CONDITION	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS TAKEN
NOTES:			

ASSET NAME	CONDITION	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS TAKEN
NOTES:			

ASSET NAME	CONDITION	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS TAKEN
NOTES:			

NEXT INSPECTION: _____
DATE

GIS PROCESSING - LEAVE BLANK

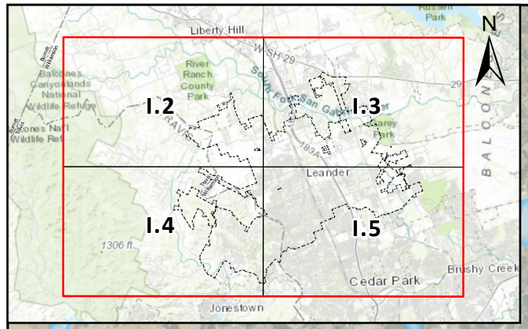
RECEIVED BY: _____
NAME DATE

ENTERED: _____
NAME DATE

ACCEPTED BY: _____
SIGNATURE DATE

Appendix I: Weather Station and Stream Gage Locations

DRAFT



KEY MAP

SG US

LIBERTY HILL

Williamson
Travis

S Fork San Gabriel River

N Fork Brushy Creek

S Fork Brushy Creek

Mason Creek

Big Sandy Creek

Brown Hollow

Bloody Hollow

Bee Cave Hollow

Block House Creek

Brushy Creek

CEDAR PARK

US 183

San Gabriel Pkwy

Ronald Reagan Blvd

Hero Way

Bagdad Rd

Crystal Falls Pkwy

N Lakeline Blvd

DAM 1

DAM 2

DAM 3

DAM 5

BSC US

BSC DS

SEE EXHIBIT I.2 SHEET 2 OF 5
SEE EXHIBIT I.4 SHEET 4 OF 5
SEE EXHIBIT I.3 SHEET 3 OF 5
SEE EXHIBIT I.5 SHEET 5 OF 5

0 3,500 7,000 Feet

N

Legend

- Weather Stations
- Rain Gauges
- Flow Gauges
- Proposed Location
- STREAM FLOW
- WEATHER
- ETJ
- FEMA Floodplain
- City Limits
- County

DATE: APRIL 2026

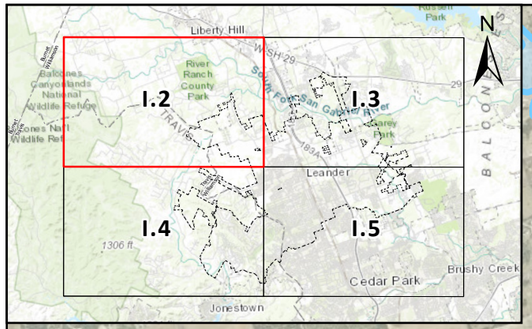
APPENDIX I.1
WEATHER GAUGE STATION MAP
SHEET 1 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

EXISTING AND PROPOSED RAIN, WEATHER, & GAGE STATION SUMMARY

Item No.	Name	Gage ID	Operator/Org	TYPE
1	BSC US	BSC US	USGS	Rain Gage
2	Big Sandy Creek near Jonestown	3953	LCRA	Rain Gage
3	UBC Dam 1 nr Leander, TX	303508097525399	USGS	Rain Gage
4	UBC Dam 2 nr Leander, TX	303443097502700	USGS	Rain Gage
5	UBC Dam 3 nr Leander, TX	303318097482000	USGS	Rain Gage
6	UBC Dam 5 nr Leander, TX	303439097465000	USGS	Rain Gage
7	S Fk San Gabriel Rv at SH 1869 nr Liberty Hill, TX	8104866	USGS	Stream Flow Gage
8	S Fk San Gabriel Rv at Georgetown, TX	8104900	USGS	Stream Flow Gage
9	Brushy Ck at Cedar Park, TX	8105872	USGS	Stream Flow Gage
10	Leander 5 W	3951	LCRA	Weather Station
11	S Fk San Gabriel Rv at Hwy 183 nr Leander, TX	8104870	USGS	Weather Station
12	S Fk Brushy Ck at Hwy 183, Leander, TX	8105850	USGS	Weather Station
13	Brushy Ck bl Leander, TX	8105855	USGS	Weather Station
14	UBC Dam 3 nr Leander, TX	303318097482000	USGS	Weather Station
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19	UBCWCID DAM 1 NEAR LEANDER 2W	BCLT2	HADS	Weather Station
20	UBCWCID DAM 5 NEAR LEANDER 4E	BLDT2	HADS	Weather Station
21	UBCWCID DAM 2 NEAR LEANDER 1E	WLAT2	HADS	Weather Station
22	UBCWCID DAM 3 NEAR LEANDER 3ESE	WLNT2	HADS	Weather Station
23	LEANDER 7.2 WNW	US1TXTV0007	GHCN	Weather Station
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26	LEANDER 4.4 WSW	US1TXTV0197	GHCN	Weather Station
27	LEANDER 1.4 SSW	US1TXTV0312	GHCN	Weather Station
28	LEANDER 2.3 SSW	US1TXTV0324	GHCN	Weather Station
29	LEANDER 6.4 WNW	US1TXTV0346	GHCN	Weather Station
30	LEANDER 4.5 WNW	US1TXTV0357	GHCN	Weather Station
31	LEANDER 1.6 SW	US1TXTV0459	GHCN	Weather Station
32	LEANDER 1.6 NW	US1TXWM0013	GHCN	Weather Station
33	LEANDER 1.0 SSE	US1TXWM0036	GHCN	Weather Station
34	GEORGETOWN 8.0 W	US1TXWM0078	GHCN	Weather Station
35	LEANDER 3.4 NNE	US1TXWM0142	GHCN	Weather Station
36	GEORGETOWN 10.2 W	US1TXWM0235	GHCN	Weather Station
37	LEANDER 3.2 W	US1TXWM0240	GHCN	Weather Station
38	LEANDER 1.7 NNW	US1TXWM0285	GHCN	Weather Station
39	LEANDER 0.5 SW (MASON HILLS SU	US1TXWM0287	GHCN	Weather Station
40	LEANDER 2.3 N	US1TXWM0347	GHCN	Weather Station
41	Leander 7.2 WNW	TX-TV-7	CoCoRaSH	Weather Station
42	Leander 1.9 WSW	TX-TV-27	CoCoRaSH	Weather Station
43	Leander 6.6 WNW	TX-TV-84	CoCoRaSH	Weather Station
44	Leander 6.8 WNW	TX-TV-108	CoCoRaSH	Weather Station
45	Leander 4.4 WSW	TX-TV-197	CoCoRaSH	Weather Station
46	Leander 3.3 SW	TX-TV-301	CoCoRaSH	Weather Station
47	Leander 1.4 SSW	TX-TV-312	CoCoRaSH	Weather Station
48	Leander 5.9 WNW	TX-TV-314	CoCoRaSH	Weather Station
49	Leander 2.3 SSW	TX-TV-324	CoCoRaSH	Weather Station
50	Leander 6.4 WNW	TX-TV-346	CoCoRaSH	Weather Station
51	Leander 4.5 WNW	TX-TV-357	CoCoRaSH	Weather Station
52	Leander 5.6 W	TX-TV-409	CoCoRaSH	Weather Station
53	Leander 1.6 NW	TX-WM-13	CoCoRaSH	Weather Station
54	Leander 1.0 SSE	TX-WM-36	CoCoRaSH	Weather Station
55	Georgetown 8.0 W	TX-WM-78	CoCoRaSH	Weather Station
56	Leander 0.8 SE	TX-WM-86	CoCoRaSH	Weather Station
57	Leander 3.4 NNE	TX-WM-142	CoCoRaSH	Weather Station
58	Leander 2.0 S	TX-WM-145	CoCoRaSH	Weather Station
59	Leander 1.4 ESE	TX-WM-186	CoCoRaSH	Weather Station
60	Leander 0.6 S	TX-WM-188	CoCoRaSH	Weather Station
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62	Georgetown 10.2 W	TX-WM-235	CoCoRaSH	Weather Station
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64	Leander 3.2 W	TX-WM-240	CoCoRaSH	Weather Station
65	Leander 1.9 NNW	TX-WM-242	CoCoRaSH	Weather Station
66	Leander 1.5 S	TX-WM-246	CoCoRaSH	Weather Station
67	Leander 1.7 NNW	TX-WM-285	CoCoRaSH	Weather Station
68	Leander 0.5 SW (Mason Hills Subdivision)	TX-WM-287	CoCoRaSH	Weather Station
69	Leander 2.0 E	TX-WM-290	CoCoRaSH	Weather Station
70	Leander 3.5 E	TX-WM-314	CoCoRaSH	Weather Station
71	Georgetown 8.0 W	TX-WM-326	CoCoRaSH	Weather Station
72	Leander 2.3 N	TX-WM-347	CoCoRaSH	Weather Station
73	Leander 1.7 NW	TX-WM-348	CoCoRaSH	Weather Station
74	Leander 2.4 NNW	TX-WM-356	CoCoRaSH	Weather Station
	PROPOSED CITY OF LEANDER WEATHER & GAGE STATIONS			
75	**Leander Fire Station 2**	COL-RG-FS02	City of Leander	Weather Station
76	**Leander Fire Station 5**	COL-WX-FS05	City of Leander	Weather Station
77	**Proposed Leander Fire Station 6 (TBD)**	COL-WX-FS06	City of Leander	Weather Station
78	**N Bagdad Rd north of CR 280**	COL-WX-NBGD	City of Leander	Weather Station
79	**W Hero Way at CR 290**	COL-WX-HROW	City of Leander	Weather Station
80	**S Fork San Gabriel River at Ronald Reagan Blvd**	COL-SF-SSGR	City of Leander	Stream Flow Gage
81	**N Fork Brushy Creek at US 183**	COL-SF-NFBE	City of Leander	Stream Flow Gage
82	**Brushy Creek at Ronald Reagan Blvd**	COL-SF-BCRR	City of Leander	Stream Flow Gage
83	**S Fork Brushy Creek at US 183**	COL-SF-SFBE	City of Leander	Stream Flow Gage
84	**S Fork Brushy Creek at S Bagdad Rd**	COL-SF-SFBW	City of Leander	Stream Flow Gage
85	**Mason Creek at S Bagdad Rd**	COL-SF-MASW	City of Leander	Stream Flow Gage
86	**Mason Creek at US 183**	COL-SF-MASE	City of Leander	Stream Flow Gage
87	**Houghton Creek at US 183**	COL-SF-HTNE	City of Leander	Stream Flow Gage
88	**Block House Ck Trib 3 at E Crystal Falls Pkwy**	COL-SF-BH3E	City of Leander	Stream Flow Gage
89	**Block House Creek at Ronald Reagan Blvd**	COL-SF-BHRR	City of Leander	Stream Flow Gage

DATE: APRIL 2026

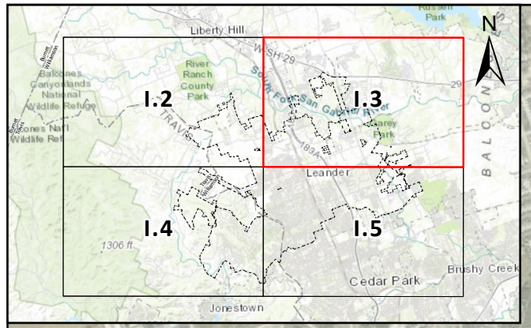
APPENDIX I.2
WEATHER GAUGE STATIONS MAP
SHEET 2 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



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74	Leander 2.4 NNW	TX-WM-356	CoCoRaSH	Weather Station
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76	**Leander Fire Station 5**	COL-WX-FS05	City of Leander	Weather Station
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85	**Mason Creek at S Bagdad Rd**	COL-SF-MASW	City of Leander	Stream Flow Gage
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88	**Block House Ck Trib 3 at E Crystal Falls Pkwy**	COL-SF-BH3E	City of Leander	Stream Flow Gage
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DATE: APRIL 2026

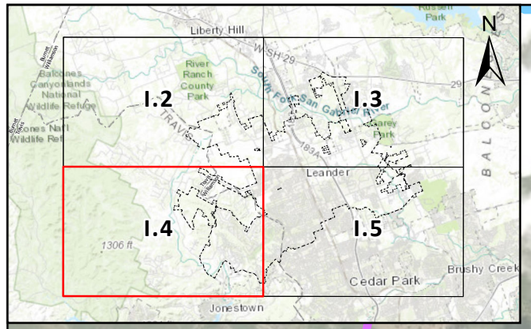
APPENDIX I.3
WEATHER GAUGE STATIONS MAP
SHEET 3 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



KEY MAP

MATCHLINE - SEE APPENDIX I.2

MATCHLINE - SEE APPENDIX I.5

BSC US

42

21

79

43

Williamson

Travis

Big Sandy Creek

28

55

15

33

17

36

37

76

EXISTING AND PROPOSED RAIN, WEATHER, & GAGE STATION SUMMARY

Item No.	Name	Gage ID	Operator/Org	TYPE
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27	LEANDER 1.4 SSW	US1TXTV0312	GHCN	Weather Station
28	LEANDER 2.3 SSW	US1TXTV0324	GHCN	Weather Station
29	LEANDER 6.4 WNW	US1TXTV0346	GHCN	Weather Station
30	LEANDER 4.5 WNW	US1TXTV0357	GHCN	Weather Station
31	LEANDER 1.6 SW	US1TXTV0459	GHCN	Weather Station
32	LEANDER 1.6 NW	US1TXWM0013	GHCN	Weather Station
33	LEANDER 1.0 SSE	US1TXWM0036	GHCN	Weather Station
34	GEORGETOWN 8.0 W	US1TXWM0078	GHCN	Weather Station
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0 1,750 3,500 Feet

N

Legend

- Weather Stations
- Rain Gauges
- Flow Gauges
- Proposed Location
- STREAM FLOW
- WEATHER
- ETJ
- FEMA Floodplain
- City Limits
- County

DATE: APRIL 2026

APPENDIX I.4

WEATHER GAUGE STATIONS MAP

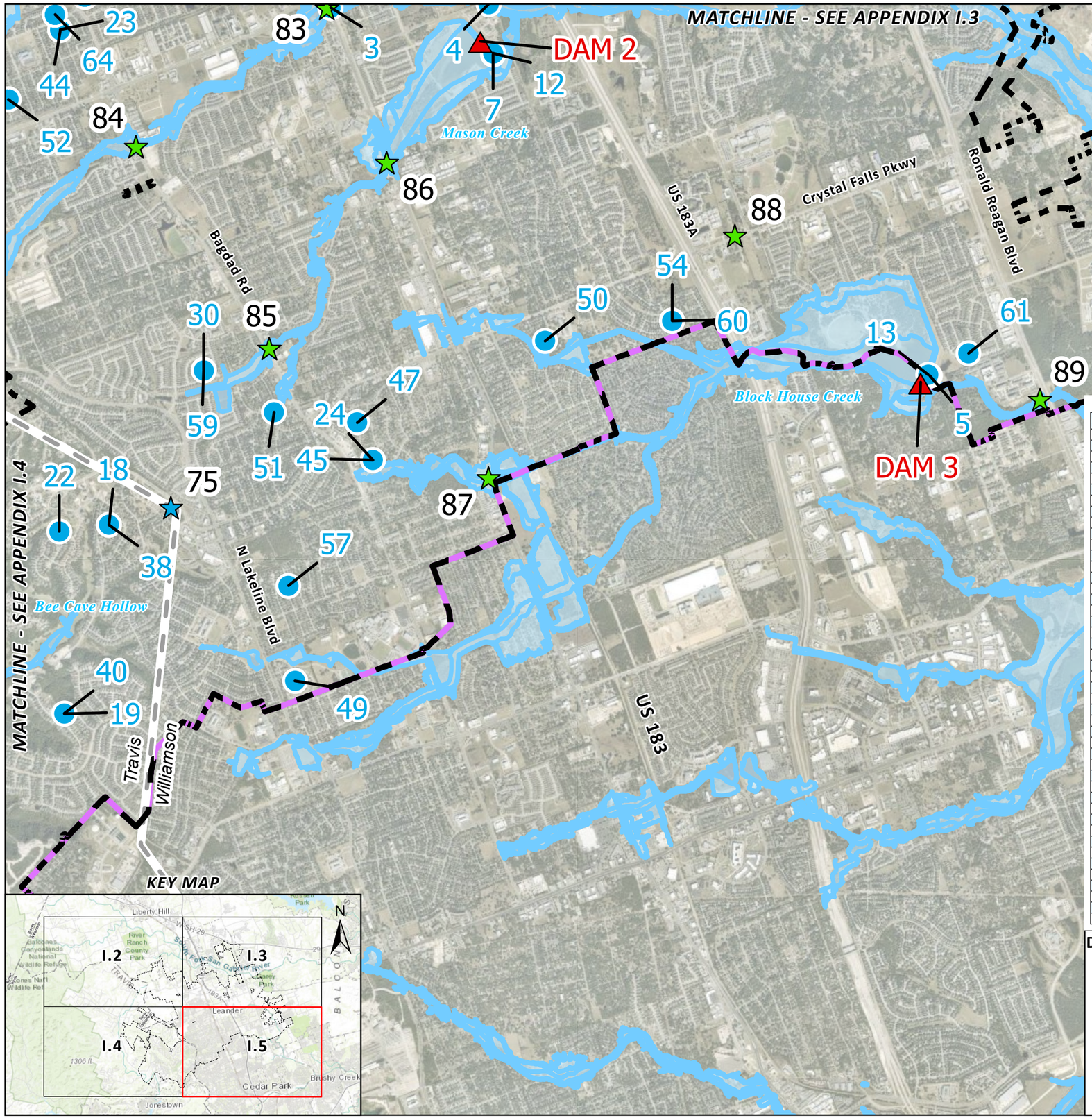
SHEET 4 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET



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DATE: APRIL 2026

APPENDIX I.5

WEATHER GAUGE STATIONS MAP
SHEET 5 OF 5

City of Leander

EDGE ENGINEERING

CITY OF LEANDER STORMWATER MASTER PLAN

NAD 1983 TEXAS STATE PLANE COORDINATES, CENTRAL ZONE, US FEET

Appendix J: Digital Data

- GIS Stormwater Asset Inventory
- Inundation Mapping Rasters
- AOI Shapefiles
- Public Survey Responses

DRAFT

CITY OF LEANDER, TEXAS
CITY COUNCIL RULES OF PROCEDURE

Pursuant to Section 3.05 of the City Charter, which states that the Council may determine the rules of its proceedings, the City Council hereby adopts the following Rules of Procedure.

A. GENERAL GUIDELINES

1) Focus on governing (policy making), not administration.
2) Treat everyone with respect. No personal attacks on City Staff or each other.
3) Address the present issue and let each item stand on its own.
4) Be brief and concise. Focus comments for item under consideration.
5) Support the validity and integrity of the process even when you disagree with the outcome.
6) Listen before judging or taking action. Do not pre-judge the motives of your fellow Councilmembers.
7) Wait for recognition from the Mayor before speaking.
8) Agree to disagree. No need to over-talk an issue.
9) Council directs as a body. Be clear on directions, follow plans, and support City policies.
10) No surprises. Share all information equally with each other and the City Manager.

B. AGENDAS

1) Preparation of the Agenda. The City Manager shall cause the City Secretary to prepare the agenda for the Mayor's review and approval.

2) Consent Agenda. The following matters may be placed on the Consent Agenda: minutes; contracts or expenditures requiring Council approval that are within the budget; contracts city staff was authorized to negotiate and bring back for approval; second reading of ordinances; plat approvals where variances are not accepted; acceptance of subdivision infrastructure; and other similar routine, administrative matters that do not require deliberation. Items on the Consent Agenda may be approved with a single motion and vote; provided that any Councilmember may request that an item be pulled from the Consent Agenda for discussion and action during the regular agenda.

3) Councilmember Requested Agenda Items. Section 3.07 of the City Charter provides that any Councilmember may require any item be placed on an agenda for which timely notice may be given.

   a. A Councilmember that wishes to place an item on an agenda must submit the agenda item and the background material described in subsection (b) below to the City

Manager's Office by 5:00 p.m. on the Wednesday before the regular meeting. A Councilmember may submit no more than two (2) agenda items per meeting. The Mayor may consult with a Councilmember about placement of an agenda item on a later meeting. All items submitted by the deadline will appear on the agenda for the meeting unless the Councilmember agrees to delay the agenda item to a later meeting. Items that are submitted after the deadline or that do not include the required background material will not appear on the agenda. The Mayor may waive the deadline for agenda items that are time sensitive.

b. The Councilmember shall provide the City Manager with materials providing background information on the agenda item that consists of, at a minimum, a written explanation about the purpose of the agenda item and any additional relevant information or documents. The City Secretary will assist with preparing the Executive Summary based on the Councilmember's written explanation for the Councilmember's review and approval.

c. The Councilmember requested agenda items will be identified as "Council Directive" in the Executive Summary.

d. Except for Proclamations, Councilmember requested items will be placed at the end of the agenda.

4) Councilmember Closing Statements. When this item appears on the agenda, Councilmembers may make statements about the following items only:

a. Expressions of thanks, congratulations, or condolence;

b. Information regarding holiday schedules;

c. An honorary or salutary recognition of a public official, public employee, or other citizen, except that a discussion regarding a change in the status of a person's public office or public employment is not an honorary or salutary recognition for purposes of this subdivision;

d. A reminder about an upcoming event organized or sponsored by the governing body;

e. Information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the political subdivision; and

f. Announcements involving an imminent threat to the public health and safety of people in the political subdivision that has arisen after the posting of the agenda.

5) Proclamations. As one of the two Councilmember agenda items allotted per meeting, a Councilmember may request a proclamation be placed on the agenda in accordance with Section (B)(3). To appear on the agenda, a proclamation must have a nexus to City business, a City event, a City program, or one of the City's community partnerships. The Mayor is authorized to issue ceremonial proclamations.

C. CONDUCTING THE MEETING

1) Presiding Officer. The Mayor or, in their absence, the Mayor Pro Tem shall preside over and conduct all City Council meetings. In the absence of both the Mayor and the Mayor Pro Tem, the City Council shall, by majority vote of those present, determine which member shall preside over and conduct the meeting.

2) General Conduct. Councilmembers shall show respect and courtesy to, and refrain from making disparaging comments about, fellow Councilmembers, the public, and City staff in the conduct of a City Council meeting, outside of Council meetings, in social settings, and on social media.

3) Consideration of Agenda Items.

   a. Councilmembers shall confine their discussions concerning a motion or a question to the merits of a motion made and seconded or to a question already presented to them.

   b. When an item is raised for discussion, the Presiding Officer will ask for input from each member of the Council. Each Councilmember will be given an opportunity to speak before a Councilmember who has spoken may speak again. Councilmembers shall raise their hands to indicate a desire to speak. The presiding officer will recognize a member whose hand is raised. The same procedure will be followed for discussion on an item after a motion has been made and seconded.

   c. Debate shall normally be closed after every Councilmember wishing to speak has been given every opportunity to speak and no Councilmember has any additional comments to make. When the debate appears to have closed, the Mayor or Presiding Officer shall call for a vote.

   d. Any Councilmember may call for the question on any issue, and upon seconding by another Councilmember, the issue shall immediately be put to vote. Passage of the motion to address the previous question shall terminate debate on the motion, amendment, or amended motion, and the matter shall move on immediately.

4) Executive Session. Matters discussed in executive session will be kept confidential and City Councilmembers shall not discuss matters discussed in executive session outside of the executive session.

5) Adjournment. After 11:00 p.m., if more than two items remain on the agenda (excluding Councilmember closing remarks), the Council may vote on the question of adjourning the meeting and postponing the remaining items. If three-fourths of Councilmembers present and voting at the meeting (but no less than four) vote to postpone the items and adjourn the meeting, then the remaining items will be posted on the next regular City Council agenda, or an earlier agenda if approved by the City Council or Mayor. Such agenda items shall be the first items listed under the Regular Agenda.

6) Participation by Videoconference. One (1) or more Councilmember(s) may participate in City Council meetings remotely by means of videoconference, and shall be counted as present, if all of the following conditions apply:

a. Attendance by the Councilmember at the physical meeting location is unreasonably difficult or impossible.

b. The Councilmember has notified the City Secretary of his/her request to participate remotely by means of videoconference no later than one week prior to the scheduled meeting date.

c. The meeting notice specifies a physical meeting location and the intent to have a quorum of City Council present at the physical meeting location.

   i. If the Mayor plans to participate remotely by means of videoconference, the Mayor Pro Tem (or other Councilmember designated pursuant to Section C.1) shall serve as the Presiding Officer.

d. The technology used to facilitate two-way audio and video communication among participating City Council members, which is audible and visible to the public during the meeting, operates in accordance with Texas Open Meetings Act requirements.

   i. If a quorum of City Council is present at the physical meeting location, and the Councilmember participating remotely by means of videoconference is no longer visible and audible to those in attendance at the physical meeting location, the meeting may continue in accordance with the Texas Open Meetings Act.

e. During any executive session or closed meeting, to protect confidentiality and preserve attorney-client privilege, the Councilmember participating remotely by means of videoconference must safely prohibit all audio and video communication from being seen, heard or recorded by unauthorized persons.

7) Meetings by Teleconference. A quorum of City Council may conduct meetings remotely by means of teleconference if all of the following conditions apply:

   a. An emergency or public necessity exists, as defined by Texas Open Meetings Act provisions for telephone meetings.

   b. Physical attendance at one location by a quorum of City Council is unreasonably difficult or impossible.

   c. The technology used to facilitate two-way audio communication among participating City Council members, which is audible to the public during the meeting, operates in accordance with Texas Open Meetings Act requirements.

D. INTERACTION WITH CITY STAFF

1) City Charter Requirement. Section 4.05 of the City Charter provides that: "No member of the council shall give orders directly to any city employee, except when empowered to do so by an emergency proclamation, and all members of the council shall deal with the nonelective officers, employees and administrative offices of the city solely through the city manager."

2) Council Requests for Staff Reports. City Council Members may request staff reports and other staff work through the City Manager. If the request involves a significant use of staff resources (generally defined as approximately four hours or more of staff time), the City Manager shall have the discretion to ask the Council member to bring the request forward as an agenda item and the request must receive a consensus from the City Council.

3) Council Request for Information. The City Council may ask for information from City Staff by making the request to the City Manager or getting authorization from the City Manager to request the information from City Staff. Written materials or written responses to questions or requests for information shall be provided to the entire City Council.

4) OneDrive Usage. OneDrive is the official platform for the secure and convenient exchange of City documents between staff and councilmembers. Authorized staff will establish common folders for general information and individual folders for member-specific documents. All files will be in PDF format. Documents marked "Not For Public" within the "Confidential" folder are restricted and must not be shared with unauthorized individuals.

E. RECONSIDERATION OF MATTERS

1) In order for an action to be reconsidered, a Councilmember may request that an item considered be submitted to the City Manager's Office no later than 5:00 p.m. on the first Wednesday after the City Council Meeting in which a vote was taken on the item. A request to reconsider at item can only be sponsored by a Council Member who voted with the prevailing side. A motion to reconsider any action of the Council can be made not later than the next succeeding official City Council Meeting following its submission to the City Manager's Office. Such motion can only be made by a member who voted with the prevailing side. It can be seconded by any member. No question shall be twice reconsidered, except by unanimous consent of the Council.

2) For matters that have not received four votes of Council either for or against a motion on the matter, any member of Council can request that the matter be placed on the agenda for reconsideration. The request may be made at the meeting at which the motion failed to pass, or the request may be made in writing and submitted to the City Manager and the City Secretary by 5:00 p.m. on the first Wednesday after the City Council Meeting in which the matter failed to receive four votes.

3) Reconsideration of matter under this Section will not be limited to the motion or motions made at the prior meeting.

F. MISCELLANEOUS

1) Email and Cell Phone Usage. Councilmembers to the greatest extent possible will use city-issued cell phones and email accounts to conduct City business.

2) Robert's Rules. Where needed for structure and order, the City Council may use Roberts Rules of Order as a guide for its proceedings, unless they conflict with these rules.

3) Suspension of Rules. Any provision of these rules not governed by the City Charter or

Code may be temporarily suspended by a two-thirds vote of all members of the Council.

4) Amendment to Rules. These rules may be amended, or new rules adopted, by a majority vote of all members of the Council. Council shall review these rules annually.

G. COUNCIL LIAISON ROLES AND RESPONSIBILITIES

The City Council adopted on December 1, 2022, the following guidelines for Council Liaison members on City appointed Boards, Commissions, and Committees (Boards).

- **Definition.** The Council Liaison acts as spokesperson on behalf of the Council when so directed by the Council as a body.

- **Purpose.** The role of the Council Liaison is to facilitate communication from the Council to the Board by providing information about Council actions and related discussions.

- **Appointments.** No Council member is required to serve as Council Liaison to a Board. Council Liaison appointments will be conducted annually in October at the same meeting during which annual Board appointments are made. Councilmembers desiring to serve as Council Liaison to multiple Boards will be considered for appointment to one Board and then may be considered for additional appointments once other Council members have an opportunity to serve.

- **Attendance.** Attendance by Council Liaisons at Board meetings is not required and is not counted for the purposes of establishing and maintaining Board quorum. However, attendance at all or most Board meetings is encouraged. Frequency of attendance may be determined by each Council Liaison.

- **Participation.** Council Liaisons do not have voting or agenda setting privileges on the Board. Although Council Liaisons may participate in Board discussion, they should not advocate positions before the Board, nor should they attempt to influence Board decisions.

These guidelines apply when a Council member is acting as liaison to a City appointed Board. It does not apply when the Council member is appointed to a Board of non-city bodies where the Council member serves as a representative of the City.

Social Media Participation Policy
City Council

The term “social media” refers to forms of electronic communication through which users create online communities to share information, ideas, personal messages and other content. Some examples include, but are not limited to, Internet-based platforms such as Facebook, Twitter, Instagram and YouTube.

Many local governments use social media as a tool to communicate with citizens. Rather than waiting until a regularly scheduled council meeting to receive citizen input, city officials are able to instantly interact with them via social media. Although this technology greatly increases communication outreach and efficiency, some restrictions are required in order to comport with federal and state law.

Commenting on City Accounts

The City of Leander uses social media to send and receive messages about city information, services and related programs with community stakeholders, including employees, vendors, citizens, media and other members of the public.

1. Similar others who engage with the City on social media, as an elected official you should understand the City’s current guidelines for public participation, which are subject to change as new technology and tools emerge.

2. Public comments may be removed from City-administered social media accounts if they contain any one or more of the following:

    a. Vulgar, physically threatening or harassing language.

    b. Content that promotes, fosters, or perpetuates discrimination on the basis of race, religion, gender, marital status, familial status, national origin, age, mental or physical disability, sexual orientation, gender identity, source of income or other protected status under applicable law.

    c. Inappropriate sexual content or similar links.

    d. Private or otherwise confidential information.

    e. Content that promotes illegal activity or encouragement of actions that may compromise public safety.

    f. Content that violates a legal ownership interest of any other party.

    g. Comments not topically related to the original article or post.

    h. Comments in support of or opposition to political candidates, campaigns or ballot measures during an election season.

i. Promoting or advertising a commercial transaction, organization or event that is not sponsored or in direct relationship with the City.

j. Organized political activity.

k. Information that may compromise the safety or security of the public or public systems.

Use of Personal Accounts

As a policy-making body, Council members are given more latitude than City employees to publicly express thoughts and opinions on local issues. However, as an elected official, you should be aware of additional risks related to your general participation on social media.

1. Open Meetings Act – Communications between a quorum of Council members about public business, no matter the forum or time, can constitute a "meeting" to which the Texas Open Meetings Act applies. If the Act applies to a discussion, an agenda must be posted 72 hours in advance, and the public must be allowed to attend.

   Therefore, you should consider the following when using personal social media accounts:

   a. Remove elected titles from profiles used to identify a personal social media account, and clearly state how constituents should communicate regarding public matters.

   b. Include an introductory statement in the profile or about section of your account that defines the purpose and topical scope of your page:

      "This account is intended for personal use only. The views, postings, positions or opinions expressed on this site are my own and do not represent those of the City of Leander. If you are a citizen of Leander and would like to discuss city business, please go to [official page] or contact me at [official email]."

   c. Redirect information to official government sources and avoid making posts related to your official duties or governmental bodies.

   d. Redirect political dialogue requests to an alternative means of communication (i.e. email, phone or other preferred social media account).

   e. Avoid commenting on local issues where other Council members are also participating in discussion.

   f. Avoid making posts and/or comments on behalf of the City and/or the City Council.

   g. Avoid making posts and/or comments in your official capacity as an elected official.

   h. Avoid making posts and/or comments regarding City business.

2. Public Information Act – State law clarifies the definition of "public information" as information that is written, produced, collected, assembled, or maintained in connection with the transaction of official business, which includes email, Internet posting, text message, instant message, and other electronic communication.

   Therefore, you should consider the following:

   a. Hide, rather than delete, clearly inappropriate public comments on your personal or official social media account, if possible. In some cases, these comments may still be subject to verification or public disclosure in the future. When in doubt, don't delete it.

   b. Avoid responding to inappropriate comments or personal attacks on social media. If the commenter persists, redirect them to an alternate method of communication (i.e. email).

   c. Be aware that a personal social media account, depending on its content, may still be subject to the Public Information Act.

3. First Amendment – More constituents are posting comments on elected officials' personal pages to voice concerns on public issues. Once an elected official's social media page is opened for political discussion, it is transformed into a public forum for speech and debate, instantly granting every user a First Amendment right to comment.

   Therefore, you should consider the following:

   a. Limit open-ended political and city business discussions from your personal social media accounts and redirect dialogue requests to an alternate channel.

   b. When in doubt, don't block users. Especially those with whom you have previously engaged. If you must, consult with legal counsel first, and then document your actions and reasons for blocking.

Use of Official Accounts

If you choose to create a social media account to engage with constituents, a best practice is to keep this account distinct and separate from other personal accounts that you maintain.

Elected officials increasingly use social media for reelection purposes as well. However, mixing campaign and constituent communications from the same account could put you at risk for violating laws that prohibit using government resources for political purposes.

Therefore, you should consider the following:

1. Make it official – Your account profile, description and photo should clearly indicate your position as a member of the Leander City Council and your intent to use the account as a way of communicating with constituents.

2. Your account is a public forum – Your engagement with the public on social media as an elected official establishes your platform as a limited public forum, which affords users the right to comment on content you publish. It also means that any speech restrictions or

censorship is subject to strict scrutiny, and First Amendment activities generally may not be prohibited. So, when in doubt, don't delete it.

3. Prohibited content is defined by City policy – For consistency, consider managing prohibited content on your accounts in the same way City-administered accounts are managed.

4. Campaign separately – Council members in office should not use City administered or funded social media accounts for electioneering. It's equivalent to campaigning from the dais during a public meeting, which may violate state law.

5. Involve legal counsel – If you are unsure about publishing certain content, or feel you are justified in the removal of content, involve legal counsel before making a decision.

General Guidelines

1. Be transparent – Your honesty will be quickly noticed in the social media environment. If your private sector work could present a conflict of interest, be the first to point it out. And be clear about why you support, or don't support, certain policies or programs.

2. Be judicious – Make sure your efforts to be transparent do not violate any applicable legal guidelines for external communication. Consult with legal counsel before sharing conversations that are meant to be private or internal to the City or any other public entities. What is published is widely accessible, not easily retractable, and will be around for a long time, so consider the content carefully. Also, be aware that the social media account and anything published on that social media account may be subject to the Public Information Act.

3. Be knowledgeable – Write in first-person and consider linking to your information sources. If you publish to a website outside of the City, consider using a clarifier such as: "These comments and opinions reflect my position as one member of Leander City Council." If you have any questions about complying with brand, trademark, copyright, fair use, confidentiality, or financial disclosure laws, seek an opinion from legal counsel.

4. Be perceptive – In online social networks, the lines between public and private, personal and professional are often blurred. By identifying yourself as an elected official, you are creating perceptions about your expertise and the City. Be sure that all content associated with you is consistent with the City's values and professional standards.

5. Be conversational – Talk to your readers like you would talk to people in professional situations. Avoid overly "composed" language. Bring in your own personality and say what is on your mind. Consider content that is open-ended and invites response. Encourage comments. Broaden the conversation by citing others who are commenting about the same topic and allow your content to be shared.

6. Be excited – The City is making important contributions to the community, state and nation, as well as to public dialogue on a broad range of issues. Our activities are focused on providing services and innovation that benefits citizens and stakeholders. Share what Leander is learning and doing, and open up social media channels to learn from others.

7. Be valuable – There is a lot of written content in the social media environment. The best way to reach an audience is to write about things that they value. Social communication from City leaders should help citizens, partners and families. It should be thought-provoking and build a sense of community. If it helps people improve knowledge or skills, build their businesses, do their jobs, solve problems, or understand the City better, then it adds value.

8. Be responsible – What you write is ultimately your responsibility. Pause. If you are about to publish something that makes you even the slightest bit uncomfortable, don't publish. If you are still unsure, you might want to check with the Public Information Officer or legal counsel. Ultimately, what you publish is yours, but so is the responsibility and potential consequence.

9. Mistakes happen – If you make a mistake, admit it. Be upfront and quick with your correction. If you are posting to a blog, you could choose to modify an earlier post. Make it clear that you have done so.

Records Retention

1. Because of your position as an elected official, activity on your social media accounts may create public records. Any content (messages, posts, photographs, videos, etc.) created or received using a social media account may be considered a record.

   Therefore, you should consider the following:

   a. The City does not archive or manage Council member social media accounts. You are solely responsible for the retention and archival of content published to your individual accounts.

   b. When in doubt, don't delete content without consulting with legal counsel first.

2. Social media content administered by City employees, and intended for public access and comments, will follow a minimum retention period of two years, as established by the Texas State Library and Archives Commission. This includes Council member comments posted on City accounts.

3. When applicable, the City will use a software-assisted social media capture tool to obtain and archive an authentic copy of monitored content. This includes Council member comments posted on City accounts.

Definitions

For the purposes of this policy, unless otherwise stated, the following definitions apply:

1. Comment – a message posted by site visitors, either in response to an existing topic or introducing a new topic. In general, the content of comments is controlled solely by the user, but often can be deleted, accepted or rejected prior to publishing by the site or page administrator.

2. Connections – Any deliberate links between a user and a social media channel or page, whether it is initiated by the individual or by the site moderator. Terms used by various sites to describe a connection include friend, fan, follower or subscriber.

3. Limited forum – a public forum created by the government voluntarily for expressive activity that may be restricted as to subject matter or class of speaker. Forum restrictions must be able to withstand strict judicial scrutiny of its effect on First Amendment rights.

4. Post – In relation to social media accounts or online activity, anything published in an online forum or social media account.

5. Social media – Internet based third-party platforms that facilitate interaction and engagement among individuals in a network or virtual community. Social media offers a participatory environment and includes user-generated content such as videos, photos, videos, blogs, and wikis.

Violation of Policy

This policy is not meant to circumvent or bypass any of the other processes, policies or laws that are applicable to the City Council. Social media activity and conduct by Council members should not only comply with these policy terms, but all other processes, policies and laws that may apply as well.

Policy Updates

The City Council reserves the right to update these terms of use at any time.

ARTICLE 9.05. CODE OF ETHICS

Sec. 9.05.001. Declaration of policy.

(a) It is essential in a democratic system that the public have confidence in the integrity, independence, and impartiality of those who act on their behalf in government. To promote confidence in the government of the city, and thereby enhance the city's ability to function effectively, this article is adopted. Although codes of ethics can provide instruction on what to do in various situations, the situations will always be more varied than the rules can anticipate. Recognizing this, the ethics commission (the "commission") will apply this article to not only enforce regulations, but also to enhance and promote virtue in public servants who are its officers, city officials or employees, paid or unpaid, elected or appointed, as well as members of any standing committee or board.

(b) Furthermore, it is declared to be the policy of the city that proper operation of democratic government requires that public servants be independent, impartial and responsible to the people of the city; that no public servants shall permit any interest, financial or otherwise, direct or indirect, or engagement in any business, transaction or professional activity to conflict with the proper discharge of their duties in the public interest; that public office not be used for illegal or improper personal gain; and that the city council at all times shall be maintained as a nonpartisan body. To implement such a policy, the city council deems it advisable to enact a standard of conduct for all public servants to serve not only as a guide for official conduct, but also as a basis for discipline for those who refuse to abide by its terms. The overriding interest being that public servants of the city shall at all times strive to avoid even the appearance of impropriety.

(c) The city further recognizes that public servants are also members of society and, therefore, cannot and should not be without any personal and economic interest in the decisions and policies of government; that public servants retain their rights as citizens to interests of a personal or economic nature, and their rights to publicly express their views on matters of general public interest. By prohibiting conduct incompatible with the city's best interests and minimizing the risk of any appearance of impropriety, this article will further legitimize the interests of democracy.

(Ordinance 16-006-00, art. 1, adopted 1/7/16)

Sec. 9.05.002. Purpose.

This article has four purposes;

(1) To encourage high ethical standards in official conduct by public servants;

(2) To establish minimum guidelines for ethical standards of conduct for all such public servants by setting forth those acts or actions that are incompatible with the best interests of the city;

(3) To require disclosure by public servants and candidates of private financial or property interests in matters affecting the city; and

(4) To provide minimum standards of ethical conduct for the city's public servants, provide procedures regarding complaints for violations of such standards, and provide a mechanism for disciplining violators of such standards.

(Ordinance 16-006-00, art. 2, adopted 1/7/16)

Sec. 9.05.003. Definitions.

(a) The words "public servant" when used in this article, shall mean the elected officers of the city, all persons appointed by or by vote of the city council, all department heads of the city, all city employees that have any supervisory authority over other employees, and all employees that have discretionary authority to make recommendations to boards or commissions of the city.

(b) The words "calendar day" shall mean any day in a normal seven-day week, including Saturday, Sunday, and holidays, provided however that if the last calendar day in a specified number of calendar days falls on a Saturday, Sunday, or holiday, the next calendar day shall be considered the last such day for purpose of that number of days.

(c) The words "business day" shall mean Monday through Friday of a week, excluding Saturday, Sunday, and holidays.

(d) Words used in the present tense include the future tense. Words used in the plural number include the singular, and words in the singular include the plural. The word "shall" is always mandatory. The word "herein" means in this article. The word "regulations" means the provisions of any applicable ordinance, rule, regulation or policy.

(e) A public servant having a direct financial interest in a contract with the city or being financially interested directly in the sale of land, materials, supplies or services to the city means:

(1) The public servant enters into the contract with the city, purchases land from the city, or sells materials, supplies or services to the city;

(2) A business entity in which the public servant has one of the following ownership interests or a compensation arrangement contracts with the city, purchases land from the city, or sells materials, supplies or services to the city:

(A) When a trust is a party to the transaction, the public servant is a beneficiary or a trustee of the trust;

(B) When a partnership is a party to the transaction, the public servant is a partner of the partnership;

(C) When a corporation is a party to the transaction, the public servant is a director of the corporation or holds stock or shares in the corporation that exceeds one percent of the total capital stock or shares of the corporation;

(D) The public servant receives a commission, royalty, or other compensation, including gifts, grants, or favors that are not insubstantial, from the business entity that is a party to the transaction, as a result of the transaction with the city being entered and/or maintained; or

(E) When an entity other than a natural person has an interest in a trust, partnership or corporation that is a party to a transaction, the public servant has an ownership interest or compensation arrangement described in subsections (e)(2)(B), (C), or (D) with that entity; or

(3) The public servant has an ownership or equitable interest in the land sold to the city.

(4) This section does not include employment agreements approved by the city manager and/or the city council.

(f) A public servant shall be deemed to have an indirect financial interest in a contract with the city, or be indirectly financially interested in the sale of land materials, supplies or services to the city, if the public servant's spouse has a direct financial interest as defined in subsection (e) above.

(Ordinance 16-096-00, sec. 2, adopted 1/5/17; Ordinance 21-016-00, sec. 2, adopted 3/18/21)

Sec. 9.05.004. Present public servants.

(a) *Standards of conduct.*

(1) To avoid the appearance and risk of impropriety and self-enrichment, public servants shall not solicit or accept any gift, personal favor or benefit from any person doing business with, seeking to do business with, or being regulated by the city; and shall not take any action on behalf of any person or business entity from which he or she has received a prohibited gift, or in which he or she has a substantial interest. Except in the sole interest of the public and the performance of the duties of their position, public servants shall not take any action that he or she knows might reasonably tend to influence any other public servant to not properly perform their official duty, nor shall any public servant grant any improper favor, service or thing of value to any person.

(2) As used in this article the word "gift" means a favor, hospitality, economic benefit, product or item having a value of $50.00, or $250.00 or more within a 12-month period. A "gift" does not include campaign contributions reported as required by state law, money, items, or benefits received from a relative if given on account of kinship, or any value received by will, intestate succession, or as a distribution from an inter vivos or testamentary trust established by a spouse or ancestor.

(3) The following factors are considered in evaluating whether a gift is prohibited:

(A) The value of the gift, or gifts, does not exceed $250.00, during any 12 consecutive calendar months;

(B) Any pre-existing relationship between the donor and donee;

(C) Whether the person or entity giving the gift, or on whose behalf the gift is made, has done business with or has been regulated by the city within the immediate proceeding 24 calendar months, or is seeking to do business with the city, or does business with or is regulated by the city during the subsequent 12 months.

(4) Those items or services that do not constitute prohibited gifts include, but are not limited to, the following:

(A) Political contributions made and reported in accordance with all applicable state laws.

(B) Awards publicly presented in recognition of public service.

(C) Entertainment, meals or refreshments furnished in conjunction with public events, appearances, or ceremonies related to official city business, if furnished by the sponsor of such public event, and meals and refreshments having a value of less than $50.00 when furnished or provided to the public servant during the conduct of public business.

(D) Any item received by a public servant and donated to a charitable organization or presented to the city within three business day from the date of receipt; any item(s) other than money the value of which does not exceed $25.00 or $200.00 during any 12 consecutive calendar months;

(E) Meals, lodging, or transportation in connection with services rendered by the public servant at a conference, seminar or similar event that is more than merely perfunctory.

(F) Attendance by a public servant at hospitality functions at local, regional, state or national association meetings and/or conferences.

(G) Pens, pencils, calendars, t-shirts, caps and similar items containing logos, slogans, company names or other marketing material and commonly given out for advertising purposes.

(5) In determining whether or not acceptance if prohibited, the intent of this article is to avoid the appearance of self-enrichment by the public servant versus reasonable expenses necessary to conduct city business.

(b) *Personal financial interest.*

(1) Public servants of the city shall not participate in a vote or decision in which they have a direct substantial financial interest. Ownership in an amount in excess of one percent of an entity or property shall constitute substantial interest. Where members of the city council have a substantial interest in business or in real property which is affected by a proposed city council action and where any conflict of interest may arise they shall file an affidavit of disclosure provided by the city secretary prior to the vote and abstain from voting on such matters.

(2) No officer or employee of the city shall have a financial interest direct or indirect, or by reason of ownership of stock in a corporation, in a contract with the city, or be financially interested directly or indirectly in the sale to the city of land, materials, supplies or services except on behalf of the city as an officer or employee; provided, however, that the provision of this section shall only be applicable when the stock owned by the officer or employee exceeds one percent of the total capital stock of the corporation. Any violation of this shall render the contract voidable.

(c) *Confidential information.* Public servants shall not disclose confidential or proprietary information, or any information they have acquired or obtained in the course of any fiduciary capacity or relationship, that could adversely influence the property, government, or affairs of the city, nor directly or indirectly use his or her position to secure official information about any person or entity for the financial benefit or gain of such public servant or any third party. Public servants shall not release confidential, proprietary or privileged information for any purpose other than the performance of official responsibilities. It shall be a defense to any complaint under this section that the release of information serves a legitimate public purpose, as opposed to the private financial or political interest of the public servant or any third party or group.

(d) *Use of city property.* Public servants shall not use, request or permit the use of city facilities, personnel, equipment, or supplies for any purpose other than to conduct city business unless otherwise provided by law, ordinance or written city policy; or as specifically authorized by the city manager as a convenience to the city, or by terms of employment, e.g. assigned use of a city vehicle.

(e) *Conflict of interest.*

(1) Public servants shall not for pay, profit, compensation, financial gain or benefit represent or appear on behalf of themselves or on behalf of the private interests of others before the city council or other city board, commission, or committee, or represent the private interest of others in any action or proceeding involving the city.

(2) No current members of the city council shall personally appear on their own behalf or on behalf of a third party before the city council or any board, commission or committee but may designate and be represented by a person of their choice in any such personal business matter. This prohibition does not apply where council members appear before the ethics commission on their own behalf.

(3) No current board or commission member shall personally appear on their own behalf or on behalf of a third party before the board or commission upon which they serve or before the city council on matters brought before the board or commission on which they serve, but may designate and be represented by a person of their choice in any such business matter. Board or commission members are prohibited from engaging in private discussions with any applicant or owner regarding issues to be considered by their board or commission or from seeking to influence the outcome of any decision outside of a public meeting. This prohibition does not apply where board or commission members appear before the ethics commission on their own behalf. A member of any appointed committee or board shall remove himself/herself from deliberation regarding his/her interest.

(f) *Additional standards of conduct.*

(1) *Conflicting outside employment.*

(A) The purpose of this provision is to prevent conflicts of interest, conflicts of loyalty, and loss of efficiency at work

(B) This provision does not prevent employees or officials from accepting other employment or following any pursuit which in no way interferes with the full and faithful discharge of their public duties, provided that the employees comply with all applicable city requirements.

(C) A city official or paid city employee shall not solicit, accept or engage in concurrent outside employment or enter into any contract which could impair independence of judgment in, or the faithful performance of, their official duties, or that results in a conflict of interest with their duties as an official or employee of the city.

(D) City employees must inform their supervisor before engaging in off-duty employment. City employees must consider the policy of purpose and must be aware of the policy and general rule as stated above.

(2) *Political activity.* Limitations on the political activities of city officials and employees are imposed by state law, the city charter, and city personnel rules. In addition, the following ethical restrictions apply:

(A) No employee shall solicit or receive contributions to the campaign funds of any candidate for city office or take part in the management, affairs, or political campaign of any city candidate. Current members of the city council who are seeking re-election may engage in any activity on behalf of their own campaign efforts. The following is a list of activities that are, except as specifically provided otherwise, permissible within the sole discretion of the individual employees.

(i) The placement of campaign signs on premises owned by the city employee

(ii) The placement of bumper stickers on personal vehicles, except those vehicles supported in whole or in part by a car allowance provided by the city.

(iii) Off-duty or assigned duty attendance at a political rally or function for a city council candidate, so long as there is no active participation by the city employee; provided that an employee that is off-duty shall not wear any city uniform, item or clothing that identifies the employee as an employee of the city.

(iv) The donation of a political contribution that does not exceed the statutory limit for non-reportable contributions; provided that a candidate for, and the occupant of, an elective city office is prohibited from soliciting contributions from city employees.

This subsection (2) shall be narrowly construed and in no event shall this section be construed or interpreted to prevent any officer, employee, councilmember, mayor or public servant from expressing his or her personal opinion regarding any candidate for office, or any other matter of public interest: provided that city employees shall not, while in uniform or on duty, make public comments or statements concerning any candidate for elective city office. Private statements or comments made by any officer or employee of the city to any other officer or employee of the city concerning any candidate for elective city office are not subject to this section.

(3) *Other interests.*

(A) Non-profit board membership. While membership is encouraged a council member who serves on the board of a public or private non-profit organization shall have a voice but no vote on any funding request or contract with the city by that organization, unless the organization has a

board of directors or trustees appointed in whole or in part by the city council, commission or board members.

(Ordinance 16-006-00, art. 3, adopted 1/7/16; Ordinance 16-096-00, sec. 3, adopted 1/5/17; Ordinance 21-016-00, sec. 3, adopted 3/18/21)

Sec. 9.05.005. Former city officials and employees.

(a) *Continuing confidentiality.*

(1) A former public servant shall not use or disclose confidential government information acquired during service as a public servant, as provided in section 9.05.004(c). This does not prohibit:

(A) Any disclosure that is no longer confidential by law; or

(B) The confidential reporting of illegal or unethical conduct to authorities designated by law; or

(C) As required by court order or appropriate agency.

(b) *Subsequent representation.*

(1) *Representation by a former member of a city body.* For the purpose of this section, "city body" is intended to be the city council or any commission or board created by the city council. A person who was a member of any city body shall not represent for pay, profit, compensation, financial gain or benefit, any person, group or entity, other than himself or herself, his or her immediate family members, or the city, for a period of two years after the termination of his or her official duties, unless a majority of the city council votes otherwise.

(A) Before that body;

(B) Before city staff having responsibility for making recommendations to, or taking any action on behalf of, that body, unless the body in question is only advisory in nature; or

(C) Before any other city body, or any state or federal agency, court or entity that has appellate jurisdiction over the body of which the former member served, if any issue relates to his or her former duties.

(2) *Representation before a city body.*

(A) A former paid city employee shall not represent for compensation any person, group or entity, other than himself or herself, or his or her immediate family members, before any city body for a period of two years after termination of his or her official duties, except by permission of the city council.

(B) In connection with the representation of private interests before any city body, a former public servant shall not state or imply that he or she is able to influence city action on any basis other than the merits.

(3) *Representation in litigation adverse to the city.* A former city public servant shall not, absent consent from the city, represent any person, group, or entity, other than himself or herself, or his or her spouse or minor children, in any litigation to which the city is a party for a period often years following the termination of his or her official duties, if the interests of that person, group or entity are adverse to the interests of the city and the matter is one in which the former public servant personally and substantially participated prior to termination of his or her official duties.

(Ordinance 16-006-00, art. 4, adopted 1/7/16; Ordinance 21-016-00, sec. 4, adopted 3/18/21)

Sec. 9.05.006. Contracts.

(a) No officer or employee of the city shall have a financial interest direct or indirect, or by reason of ownership of stock in any corporation, in a contract with the city, or be financially interested directly or indirectly in the sale to the city of land, materials, supplies or services except on behalf of the city as an officer or employee; provided, however, that if the direct or indirect interest results from the ownership of stock the provision of this section shall only be applicable when the stock owned by the officer or employee exceeds one percent of the total capital stock of the corporation. Any violation of this section shall render the contract voidable. This section shall not apply or be applicable to employment agreements approved by the city manager and/or the city council.

(b) Except on behalf of the city, a former city council member, official, or employee may not, within one year of the termination of official duties, perform work for any person or entity other than the city on a compensated basis relating to a discretionary contract, if he or she personally and substantially participated in the negotiation of awarding of the contract. A former city official or employee, within one year of termination of official duties must disclose to the city secretary immediately upon knowing that he or she will perform work on a compensated basis relating to a discretionary contract.

(c) Upon being notified of a disclosure under this section, the city secretary shall notify the city council of the disclosure and shall follow the notification process pursuant to section 9.05.010(j)(4) unless the ethics commission is notified directly.

(Ordinance 16-006-00, art. 5, adopted 1/7/16; Ordinance 19-015-00 adopted 2/21/19)

Sec. 9.05.007. Persons doing business with the city.

(a) *Persons seeking discretionary contracts.*

(1) For the purpose of assisting the city in the enforcement of provisions contained in this article, an individual or business entity seeking a discretionary contract from the city is required to disclose in connection with a proposal for a discretionary contract any conflict of interest. This is set forth in sections 9.05.004 and 9.05.005 of this article. Further, the individual or business entity agrees to abide by the same ethical standards as set forth for public servants in this article.

(2) Subsection (a) of this section will become a permanent footnote on documents contained in city bid packets for discretionary contracts.

(b) *Disclosure of conflicts of interest by persons appearing before a board or city body.* A person appearing before any city board or other city body for the purpose of doing business with the city shall disclose to that board or body any facts known to such person which may show or establish that:

(1) An employee or officer of the city that advises or makes presentations to the board or city body; or

(2) Any member of the board of city body;

has or may have a conflict of interest pursuant to V.T.C.A., Local Government Code ch. 171 or an interest which would violate the ethical standards set forth in this article, if he or she were to participate in the processing or consideration of the subject matter.

(Ordinance 16-006-00, art. 6, adopted 1/7/16)

Sec. 9.05.008. Lobbyist.

(a) *Purpose.* For the purpose of minimizing the risk of improper lobbying, while at the same time recognizing that not all forms of lobbying are improper, the following rules are adopted.

(b) *Registration requirements.*

(1) Lobbying, except as provided below, means any oral or written communication (including an electronic communication) to a city official, made directly or indirectly by any person working for pay or profit for any third party in an effort to influence or persuade an official to favor or oppose, recommend or not recommend, vote for or against, or take or refrain from taking any action on any municipal question. A lobbyist is an individual or group of individuals who, for compensation, work to influence the opinions of any city body or its members in support of the interests of another individual, group, business, group of businesses, political or apolitical organization.

(2) The term lobbying does not include a communication:

(A) Merely requesting information or inquiring about facts or status of any municipal question, matter or procedure, and not attempting to influence a city official;

(B) Made by a public official or employee (including, but not limited to, any employee of the city) acting in his or her official capacity;

(C) Made by a representative of a media organization if the purpose of the communication is gathering and disseminating news and information to the public;

(D) Made in a speech, article, publication, or other material that is distributed and made available to the public, or through radio, television, cable television, or any other medium of mass communication;

(E) Made at a meeting open to the public under the Open Meetings Act;

(F) Made in the form of a written comment filed in the course of a public proceeding or any other communication that is made on the record pursuant to established city procedures;

(G) Made in writing as a request or petition for official action and required to be a public record pursuant to established city procedures;

(H) Made in writing to provide information in response to an oral or written request by a city official for specific information;

(I) The content of which is compelled by law;

(J) Made in response to a public notice soliciting communications from the public and directed to the official specifically designated in the notice to receive such communications;

(K) Made on behalf of an individual with regard to that individual's employment or benefits;

(L) Made by a fact witness or expert witness at an official proceeding;

(M) Made by a person solely on behalf of himself or herself, his or her spouse, of his or her immediate family;

(N) Made by an employee or representative of an economic development prospect and potential future employer within the city, which prospect is not at the time of the contact located within the city; or

(O) A licensed attorney or engineer to assist or aid any person with respect to a matter in which the city is exercising its regulatory authority, and which representation is a matter of public record.

(3) No person shall engage in lobbying without registering as a lobbyist with the city. A person engaged to lobby, including any employee of a third party that is assigned the duty of lobbying, within the city shall register as a lobbyist no later than three business days after first contacting any public servant or employee regarding the subject matter for which such person is engaged or assigned to lobby the city.

(4) The lobbyist must file a separate registration form for each client for whom they are lobbying; provided that a lobbyist that has a current registration on file with the city may add additional clients to such registration by filing an updated list of such clients to be added to the registration.

(Ordinance 16-006-00, art. 7, adopted 1/7/16; Ordinance 21-016-00, sec. 5, adopted 3/18/21; Ordinance 22-088-00 adopted 9/15/22)

Sec. 9.05.009. Financial disclosure.

(a) *Disclosure deadlines for city officials and candidates.*

(1) *Existing city officials.* "City official" means the mayor, every member of the city council, the city manager, the assistant city manager, the city attorney, the city secretary, the executive director of development services (if any), the executive director of public works (if any), the executive director of finance (if any), the city engineer, and persons acting in the capacity of the aforementioned officers or employees. No later than April 30 of each year, or 30 calendar days after notice of such requirement is mailed by the city secretary, whichever date is later, each city official shall file a sworn financial disclosure statement with the city secretary in a form prepared by the city secretary reflecting the financial situation of the city official as of December 31 of the previous year.

(2) *New city officials.* A newly employed, elected, or appointed city official shall file a sworn financial disclosure statement with the city secretary in a form prepared by the city secretary within 30 calendar days from the date the position with the city is assumed. Said statement shall reflect the financial situation as of the date of employment, election, or appointment and for the previous 12 months, provided, however, such city official shall not be required to include in such statement the requirements of subsection (b)(7) of this section.

(3) *Candidates.* Each candidate shall file a sworn financial disclosure statement with the city secretary within 15 business days of filing for office, reflecting the financial situation of the candidate as of December 31 of the year previous to the election date.

(b) *Use of financial disclosure reporting form.* Each person required to file a financial disclosure statement shall do so on a form supplied by the city which shall include the following information:

(1) The person's name, residence address, business address (if any), telephone number, name of all immediate family members, i.e., husband or wife, children, father, mother, brothers or sisters, and all names or titles under which the person or family member does business.

(2) Identification by street address and legal description of all real property located within the city or its extraterritorial jurisdiction in which the person has a substantial interest.

(3) Identification of each business entity owning property or doing business within the city or its extraterritorial jurisdiction in which the person has a substantial interest.

(4) Identification of each person or business entity to whom the person or family member owed a debt of $10,000.00 or more during the reporting period, but not including debts owed to persons related within the second degree of consanguinity or affinity and excluding loans to a political campaign which were reported as required by law; if repaid during the reporting period, the date of repayment shall be stated.

(5) Identification of each source of income amounting to ten percent or more of the person's or family member's gross annual income as defined by the United States Internal Revenue Code.

(6) Identification of the donor of each gift of more than $200.00 in value received by the person or family member, including the value of the gift, where such donor has appeared before and requested action of the city council during the reporting period.

(7) Identification of all individuals or business entities that:

(A) He or she, or a business entity in which he or she has substantial interest has had business dealings involving one or more transactions of $500.00 or more each quarter, or for a total of $2,500.00 or more within the immediately preceding 12-month period; and

(B) Have appeared before and requested action of the city council during the reporting period.

(8) Identification shall also be required of all individuals who have an ownership interest of 25 percent or more in a business entity as described in subsection (7)(A) above and who appears before and requests some action on the part of the city council, even though the action does not concern such business entity.

(c) *Retention of financial disclosure statements.* The city secretary shall log and maintain all financial disclosure statements required to be filed herein as public records and retain them for a period of three years after which statements shall either be returned to the person filing them or be destroyed.

(d) *Immediate public identification by public servants.*

(1) All public servants of the city shall immediately publicly identify, either verbally at an open meeting or in writing, all individuals or business entities that:

(A) He or she, or a business entity in which he or she has a substantial interest which has had business dealings involving one or more transactions of $500.00 or more each quarter, or for a total of $2,500.00 or more within the immediately preceding 12-month period; and

(B) Have appeared before and requested action of the city council during the reporting period.

(2) Such immediate identification shall also be required of all individuals who have an ownership interest of 25 percent or more in a business entity as described in subsection (1)(A) above and who appear and request action by the city council, even though the action does not concern such business entity. Such identification shall be made prior to any decision or determination of the matter or immediately upon discovery of such business dealings.

(e) *Planning and zoning commission members.* Within 30 calendar days of being appointed to the planning and zoning commission and on each anniversary of that date, each member of such commission shall file with the city secretary a sworn statement identifying by street address and legal description all real property located within the city or its extraterritorial jurisdiction in which the member has a substantial interest.

(f) *Disclosure by persons appearing before a city body.* Any person who appears before any city body who has had business dealings within the preceding 12-month period involving one or more transactions of $500.00 or more each quarter, or for a total of $2,500.00 or more, within the preceding 12-month period with a council member, commissioner, or business entity in which a council member or commissioner has a substantial interest, shall disclose such business dealings at the time of the appearance. Any person who shall intentionally or knowingly fail to make the aforesaid disclosure shall be guilty of a misdemeanor and shall be fined in accordance with this article.

(Ordinance 16-006-00, art. 8, adopted 1/7/16; Ordinance 21-016-00, sec. 6, adopted 3/18/21; Ord. No. 23-004-00, § 2, 1-5-2023; Ord. No. 25-008-00, § 2, 1-16-2025)

Sec. 9.05.010. Ethics commission.

(a) *Establishment of an ethics commission.* The ethics commission established by section 12.01 of the City Charter shall be composed of seven members, all of whom shall reside in the city.

(b) *Enumeration.* Each commission member shall be appointed by the city council and shall occupy a position on the commission, such positions being numbered 1 through 7. Commission members serve at the will of city council and may be removed by the city council upon five members of the council, or more, voting for removal.

(c) *The members of the commission shall be identified by place numbers 1 through 7.* Commission members shall serve three-year terms, with the term beginning on November 1st of the year of appointment and expiring on October 31st three years later. The term for commission places 2, 4, 6, and 7 shall begin on November 1st following the general election of the mayor and city council places 2, 4, and 6, and shall expire on October 31st three years later. The term for commission places 1, 3, and 5 shall begin on November 1st following the general election of city council places 1, 3, and 5, and shall expire on October 31st three years later.

(d) *Vacancies.* All vacancies shall be filled by the city council for the unexpired term. A member shall hold office until his successor has been appointed by the city council.

(e) *Election of chairperson and vice-chairperson.* The commission shall elect a chairperson and a vice-chairperson to one-year terms. The vice-chairperson shall act as chairperson in the absence of the chairperson. In the event the chairperson or vice-chairperson vacates their position then an election to fill the vacancy shall occur at the next meeting when the full board is seated.

(f) *Quorum.* Four or more members of the commission shall constitute a quorum, but no action of the commission shall be of any force or effect unless it is adopted by the favorable vote of four or more members.

(g) *Annual review of ethics ordinance.* The commission shall meet at least once a year to review this article and may make recommendations to the city council for amendments thereto.

(h) *Advisory opinions and recommendations.* The commission shall render advisory opinions and make recommendations to the city council on potential conflicts of interest or violations of this article at the request of a public servant. Such advisory opinions and recommendations shall be rendered 30 calendar days after a request or complaint is received by the commission, unless the commission requests, and is granted one 30-calendar-day extension by the city council. This subsection shall not be applicable to complaints filed with the commission.

(i) *Defense to alleged violations.* It shall be a defense to an alleged violation of this article that the person accused previously requested, and received, an advisory opinion and recommendation from the commission, and acted on such opinion or recommendation in good faith, unless material facts were omitted or misstated by the person requesting the opinion. Such advisory opinion and recommendation shall also be binding on the commission in any subsequent charges concerning the person who requested the opinion and recommendation.

(j) *Disposition of alleged ethics violations.*

(1) A sworn complaint based on personal knowledge alleging a violation(s) of this article shall specify the provision(s) of this article alleged to have been violated, and shall name the public servant being charged.

(2) Upon the aforesaid sworn complaint of any person being filed with the city secretary's office, or on its own initiative, the commission shall consider possible violations of this article by any public servant. A complaint shall not be deemed to be filed on the initiative of the commission, save and except the

complaint be signed and sworn by two members of the commission, one of which is the chairperson of the commission, after consultation with the legal counsel of the commission. A complaint filed by an individual member of the commission shall be deemed to have been filed in the commission member's capacity as a private citizen and, in such event, the member of the commission filing the complaint shall not thereafter participate in a commission meeting at which such complaint is considered save and except the commissioner filing the complaint may participate as a complainant at such meeting.

(3) A complaint alleging a violation of this article must be filed with the city secretary within two years from the date of the action alleged as a violation, and not afterward.

(4) Not later than three business days after the city secretary receives a sworn complaint, the city secretary shall acknowledge the receipt of the complaint to the complainant, and provide a copy of the complaint to the city attorney, the independent counsel, the commission chair, and the person against whom the complaint was alleged. The commission chair with advice of the commission's legal counsel shall review the complaint to ensure compliance with subsection (1) above within five business days of receipt of the complaint. If the complaint does not comply with the requirements of subsection (1) it shall be returned to the complainant with a written explanation of noncompliance. If the complainant does comply it shall be accepted by the commission. Not later than ten business days after receipt of a complaint, the commission shall notify in writing the person who made the complaint and the person against whom the complaint was alleged, of a date for a preliminary hearing. If the commission does not hold a preliminary hearing within 20 business days of receipt of the complaint, it shall notify the person who made the complaint of the reasons for the delay and shall subsequently give the complainant the appropriate notification.

(5) The commission may consider possible violations on its own initiative. Within seven business days of the commission's decision to consider a possible violation of this the commission shall draft a written complaint specifying the provision(s) of this article alleged to have been violated and shall file a copy with the city secretary, and provide a copy to the city attorney, the independent counsel, and the person against whom the complaint was alleged. Not later than 15 business days after the drafting of the complaint, the commission shall notify in writing the person against whom the complaint was alleged of the date for the preliminary hearing.

(6) After a complaint has been filed, and during the pending hearing of a complaint before the commission, a member of the commission may not communicate directly or indirectly with any party or person about any issue of fact or law regarding the complaint, except at a meeting of the commission; provided that the chairperson may consult and coordinate with independent legal counsel.

(7) As soon as reasonably possible, but in no event more than 60 days after receiving a complaint, the commission shall conduct a preliminary hearing.

(A) The issue at a preliminary hearing shall be the existence of reasonable grounds to believe that a violation of this article has occurred. The person filing a complaint, or the independent counsel in cases considered upon the commission's own initiative, shall state the alleged violation and shall describe in narrative form the testimony and other evidence which would be presented to prove the alleged violations stated in the written complaint. Statements at a preliminary hearing shall be under oath, but there shall be no cross-examination or requests for persons or evidence issued for the hearing. Members of the commission may question the complainant, the public servant named in the complaint, or consult with the independent counsel for the commission in executive session.

(B) The public servant named in the complaint shall have the opportunity to respond, but is not required to attend or make any statement. The public servant may describe in narrative form the testimony and other evidence that would be presented to disprove the alleged violation. If the

public servant agrees that a violation has occurred, he or she may so state and the commission may consider the appropriate sanction.

(C) The complainant and the public servant named in the complaint shall have the right to representation by counsel.

(D) At the conclusion of the preliminary hearing, the commission shall decide whether a final hearing should be held. If the commission determines that there are reasonable grounds to believe that a violation of this article has occurred, it shall schedule a final hearing. If the commission does not determine that there are reasonable grounds to believe that a violation has occurred, the complaint shall be automatically dismissed. A decision to conduct a final hearing is not a finding that a violation has occurred.

(E) The commission, at any time during the preliminary hearing, may also dismiss a complaint if the complaint does not allege conduct which would be a violation of this article. Before a complaint is dismissed for failure to allege a violation, the complainant shall be permitted one opportunity, within ten business days of such a preliminary hearing, to revise and resubmit the complaint.

(F) The complainant, the independent counsel, and public servant named in the complaint may ask the commission at a preliminary hearing to request certain persons and evidence for a final hearing, if one is scheduled.

(8) Final hearing.

(A) The final hearing shall be held as expeditiously as possible following the determination by the commission that there are reasonable grounds to believe that a violation of this article has occurred. In no event shall the hearing be held more than 30 calendar days after said determination. The commission may grant two postponements, not to exceed 15 calendar days each, upon the request of the public servant named in the complaint.

(B) The issue at a final hearing shall be whether a violation of this article has occurred. The commission shall make its determination based on clear and convincing evidence in the record. All witnesses shall make their statements under oath.

(C) If the commission determines that a violation has occurred, it shall state its findings in writing, shall identify the particular provision(s) of this article which have been violated, and within five business days shall deliver a copy of the findings to the complainant, if any, the public servant named in the complaint, and the city secretary.

(D) If a complaint proceeds to a final hearing, the commission may request witnesses to attend and testify, administer oaths and affirmations, take evidence and request the production of books, papers records, or other evidence needed for the performance of the commission's duties or exercise of its powers, including its duties and powers of investigation.

(9) Sanctions.

(A) If the commission determines that a violation of this article has occurred, it shall proceed directly to determination of the appropriate sanction(s), if any. Save and except for a violation of section 9.05.004(f)(2)(A)(iv), section 9.05.008(b) or section 9.05.009(f) of this article, a violation of this article shall not be subject to criminal penalties. The commission may receive additional testimony or statements before considering sanctions, but is not required to do so. If the public servant named in the complaint acted in reliance upon a written opinion of the city attorney, the commission shall consider that fact.

(B) If the commission determines that a violation of this article has occurred, it may recommend that the city council impose one of the following sanctions:

(i) A letter of notification shall be the appropriate sanction when the violation is clearly unintentional, or when the public servant's violation was made in reliance on a written opinion of the city attorney. A letter of notification shall advise the public servant to whom it is directed of any steps to be taken to avoid future violations.

(ii) A letter of admonition shall be the appropriate sanction in those cases in which the commission finds that the violation is minor and/or may have been unintentional, but calls for a more substantial response than a letter of notification.

(iii) A reprimand shall be the appropriate sanction when the commission finds that a violation has been committed intentionally or through disregard of this article. A reprimand directed to a city official, council member, commission member shall be sent to the city council. A reprimand directed to an employee of the city shall be sent to the city manager and included in said employee's personnel file. A letter of reprimand directed to an elected city official shall be transmitted to the city secretary and shall be sent to the city council, and thereafter published in the official newspaper of the city.

(iv) A recommendation of removal from employment or a recommendation of suspension from employment, as well as a recommendation for length of suspension, shall be the appropriate sanction when the commission finds that a serious or repeated violation(s) of this article has been committed intentionally or through culpable disregard of this article by city employees. A recommendation of suspension of city employees shall be directed from the commission to the city manager. In most cases, the final authority to carry out such recommendations to suspend from employment and the length of suspension shall be with the city manager.

(v) A letter of censure shall be the appropriate sanction when the commission finds that a serious or repeated violation(s) of this article has been committed intentionally or through culpable disregard of this article by an elected city official. A letter of censure directed to an elected city official shall be transmitted to the city secretary, and shall be sent to the city council, and thereafter published in the official newspaper of the city.

(Ordinance 16-006-00, art. 9, adopted 1/7/16; Ordinance 18-019-00, sec. 11, adopted 4/19/18; Ordinance 21-016-00, sec. 7, adopted 3/18/21)

Sec. 9.05.011. Independent legal counsel.

Independent legal counsel shall be utilized to advise the commission and participate in hearings. The city council shall annually designate and retain independent counsel who shall be a duly licensed attorney in the state.

(Ordinance 16-006-00, art. 10, adopted 1/7/16)

Sec. 9.05.012. Baseless complaints.

(a) In the event a complaint is received by the commission that is subsequently found to be knowingly baseless, and the commission deems based upon the substance of the complaint and evidence presented that the complaint was filed with the intent to:

(1) Harass the person named in the complaint;

(2) Damage the respondent's reputation;

(3) Benefit the person filing the complaint either personally, professionally, or politically; or

(4) Damage a related third party;

the commission may recommend to the city council to take disciplinary action(s) against the individual who filed the complaint including but not limited to referral to law enforcement for investigation and filing of legal charges as outlined in subsection(s) (b), (c), or (d) of this section. The commission may also make recommendations for what other action(s) should be taken up to and including barring from the filing of further ethics complaints on the same or similar subject matter or event.

(b) A person commits an offense if he knowingly communicates or circulates a report of a violation of this article by a public servant that he knows is false or baseless and that would ordinarily cause an official proceeding to be held by the ethics commission in response to the complaint. An offense under this section may be punishable by fine not to exceed the sum of $500.00. The commission may recommend to the city council that violations under this subsection (b) may be referred for criminal prosecution.

(c) Any person who knowingly files a false sworn statement under this chapter is subject to criminal prosecution for perjury under V.T.C.A., Penal Code § 37.02. The commission may recommend to the city council that violations under this subsection (c) may be referred for criminal prosecution.

(d) Any person who knowingly testifies under oath before the commission and knowingly makes a false statement material to the proceedings is subject to criminal prosecution for aggravated perjury under V.T.C.A., Penal Code § 37.03. The commission may recommend to city council that violations under this subsection (d) may be referred for criminal prosecution.

(e) Proceedings under this section may be undertaken by the commission at any time after a complaint is dismissed.

(Ordinance 16-096-00, sec. 4, adopted 1/5/17)

Sec. 9.05.013. Penalties.

Any person who shall violate section 9.05.008(b) or section 9.05.009(f) of this article, or shall fail to comply therewith, or with any of the requirements thereof, shall be deemed guilty of an offense and shall be liable for a fine not to exceed the sum of $500.00. Each calendar day the violation exists shall constitute a separate offense. Such penalty shall be in addition to all the other remedies provided herein.

(Ordinance 21-016-00, sec. 8, adopted 3/18/21)

Sec. 9.05.014. Reservations and exceptions.

Notwithstanding any other term or provision of this article, this article:

(1) Is not applicable to the performance and behavior of officers, employees and public servants that does not violate a standard or provision set forth in this article;

(2) Does not waive the authority and discretion of the city council to enforce higher standards for, or to supervise, provide oversight, appoint and remove, any officer, employee or public servant that is appointed by the city council; and

(3) Does not transfer or limit the authority of the city manager to act in his or her discretion to enforce higher standards for, or to supervise, provide oversight, appoint and remove, all officers, employees and public servants of the city that are not appointed and removed by the council.

(Ordinance 16-006-00, art. 12 (12.3), adopted 1/7/16)