

**Bastrop, TX City Council Meeting Agenda**  
Bastrop City Hall City Council Chambers  
1311 Chestnut Street  
Bastrop, TX 78602  
(512) 332-8800



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**March 26, 2019 at 5:00 P.M.**

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*City of Bastrop City Council meetings are available to all persons regardless of disability. If you require special assistance, please contact the City Secretary at (512) 332-8800 or write 1311 Chestnut Street, 78602, or by calling through a T.D.D. (Telecommunication Device for the Deaf) to Relay Texas at 1-800-735-2989 at least 48 hours in advance of the meeting.*

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As authorized by Section 551.071 of the Texas Government Code, this meeting may be convened into closed Executive Session for the purposes of seeking confidential legal advice from the City Attorney on any item on the agenda at any time during the meeting.

The City of Bastrop reserves the right to reconvene, recess, or realign the Regular Session or called Executive Session or order of business at any time prior to adjournment.

**PLEASE NOTE: ANYONE WISHING TO ADDRESS THE COUNCIL MUST COMPLETE A CITIZEN COMMENT FORM AND GIVE THE COMPLETED FORM TO THE CITY SECRETARY PRIOR TO THE START OF REGULAR SESSION PORTION OF THE CITY COUNCIL MEETING.**

1. **CALL TO ORDER – EXECUTIVE SESSION – 5:00 P.M.**
  
2. **EXECUTIVE SESSION**
  - 2A. City Council shall convene into closed executive session pursuant to Section 551.074 of the Texas Government Code to discuss Interview Process for an Associate Judge.
  - 2B. City Council shall convene into closed executive session pursuant to Section 551.071 of the Texas Government Code to confer with City Attorney regarding status of Building Bastrop Codes.
  
3. **TAKE ANY NECESSARY OR APPROPRIATE ACTION ON MATTERS POSTED FOR CONSIDERATION IN CLOSED/EXECUTIVE SESSION**
  
4. **CALL TO ORDER**

A handwritten signature in blue ink, appearing to be "C. Smith", is located in the bottom right corner of the page.

5. **PLEDGE OF ALLEGIANCE** – Zoey Croft and Alex Mitchell, Bastrop High School Student Council

**TEXAS PLEDGE OF ALLEGIANCE**

*Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.*

6. **INVOCATION** – Cliff Sparks, Police Chaplain

7. **PRESENTATIONS**

- 7A. Mayor's Report
- 7B. Councilmembers' Report
- 7C. City Manager's Report.
- 7D. A proclamation of the City of Bastrop, Texas recognizing the month of April as Child Abuse Prevention Month for the City of Bastrop.

8. **WORK SESSION/BRIEFINGS**

- 8A. Receive presentation and discussion regarding update to the Transportation Master Plan, Chapter 5, Thoroughfare Plan by Tom Grant with Kimley-Horn.
- 8B. Receive presentation and hold discussion regarding the analysis of Gill's Branch 2-D Modeling from Paul Morales of Halff Associates.
- 8C. Receive presentation from Specialized Public Finance, the City's Financial Advisors, on utility system revenue bond projects and bond issuance timeline.
- 8D. Hold discussion regarding Parking Standards for Building Bastrop Codes.
- 8E. Discussion regarding Mobile Food Vehicle Pilot Program
- 8F. Review Established Purpose Statement and Evaluation Criteria to create Policy Statement for Council adoption for International Code Reviews by Construction Standards Board and Staff.
- 8G. Continue discussion from the February 26, 2019 work session regarding the creation of rates and standardized contracts for future wholesale water and wastewater customers.
- 8H. Receive presentation and continue discussion regarding Storm Drainage Design Manual & Ordinance.
- 8I. Update and discussion of current Legislative Session and its impact on local municipalities.

9. **STAFF AND BOARD REPORTS**

- 9A. Receive Monthly Report from Visit Bastrop.
- 9B. Receive Quarterly Report on the Bastrop Convention & Exhibit Center.



- 9C. Provide an update on the Chicken Relocation Project in Downtown Bastrop, Texas.
- 9D. Receive presentation on the unaudited Monthly Financial Report for the period ending February 28, 2019.
- 9E. Receive Monthly Development Update.

**10. CITIZEN COMMENTS**

*At this time, three (3) minute comments will be taken from the audience on any topic. To address the Council, please submit a fully completed request card to the City Secretary prior to the beginning of the Council meeting. In accordance with the Texas Open Meetings Act, if a citizen discusses any item not on the agenda, City Council cannot discuss issues raised or make any decision at this time. Instead, City Council is limited to making a statement of specific factual information or a recitation of existing policy in response to the inquiry. Issues may be referred to City Staff for research and possible future action.*

*To address the Council concerning any item on the agenda, please submit a fully completed request card to the City Secretary prior to the start of the meeting.*

*It is not the intention of the City of Bastrop to provide a public forum for the embarrassment or demeaning of any individual or group. Neither is it the intention of the Council to allow a member of the public to slur the performance, honesty and/or integrity of the Council, as a body, or any member or members of the Council individually or collectively, or members of the City's staff. Accordingly, profane, insulting or threatening language directed toward the Council and/or any person in the Council's presence will not be tolerated.*

**11. CONSENT AGENDA**

*The following may be acted upon in one motion. A Councilmember or a citizen may request items be removed from the Consent Agenda for individual consideration.*

- 11A. Consider action to approve City Council minutes from the March 12, 2019, regular meeting.

**12. ITEMS FOR INDIVIDUAL CONSIDERATION**

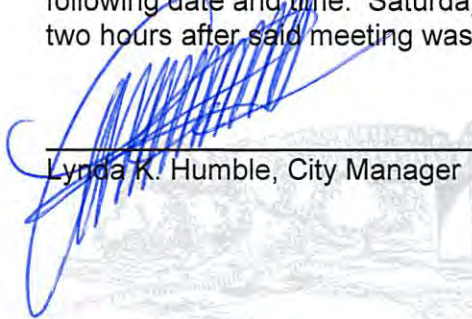
- 12A. Consider action and approve Resolution No. R-2019-29 of the City Council of the City of Bastrop, Texas, making determinations regarding certain project-specific Exceptions and/or Exemptions as provided by Emergency Ordinance 2018-1, Section 8 (Temporary Moratorium); and Emergency Ordinance 2018-2, Section 7 (Emergency Drainage Application Rules).
- 12B. Consider action to approve first reading of Ordinance No. 2019-05 of the City Council of the City of Bastrop, Texas amending the City of Bastrop, Texas Code of Ordinances, Chapter 3 Building Regulations, Article 3.17 Flood Damage Prevention, Section 3.17.007 Administration to allow the City Manager to appoint a designee to serve as Floodplain Administrator; repealing conflicting provisions; providing for severability; proper notice and meeting; establishing for an effective date; and move to include on the April 9, 2019 consent agenda for second reading.

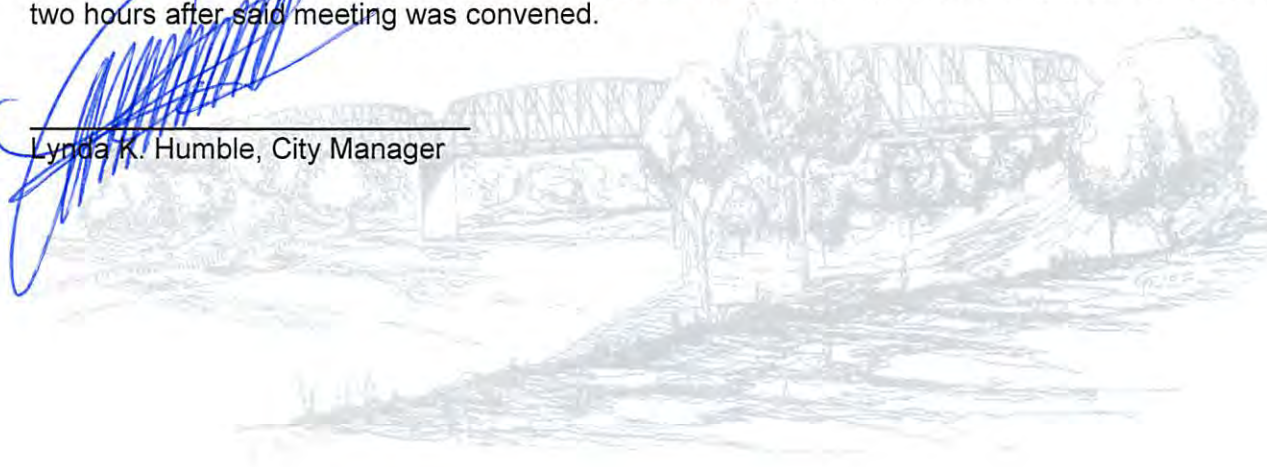


- 12C. Consider action to approve Resolution No. R-2019-30 of the City Council of the City of Bastrop, Texas approving a Professional Services Agreement between the City of Bastrop and SimpleCity Design, LLC dated February 6, 2019 to nullify the previous contract dated August 30, 2018 for Zoning and Sign Ordinances Update and replace those services with creation of the Bastrop Building Block (B<sup>3</sup>) Code, B<sup>3</sup> Pattern Book, and Technical Criteria Manual; and adding additional services for Urban Design Services for Thoroughfare Master Plan and Internal Development Process Alignment for B<sup>3</sup> Code in the amount of Two Hundred Fifty-Six Thousand Six-Hundred (\$256,600.00); authorizing the City Manager to execute all necessary documents; providing for a repealing clause; and establishing an effective date.

### 13. ADJOURNMENT

I, the undersigned authority, do hereby certify that this Notice of Meeting as posted in accordance with the regulations of the Texas Open Meetings Act on the bulletin board located at the entrance to the City of Bastrop City Hall, a place of convenient and readily accessible to the general public, as well as to the City's website, [www.cityofbastrop.org](http://www.cityofbastrop.org) and said Notice was posted on the following date and time: Saturday, March 23, 2019 at 2:45 p.m. and remained posted for at least two hours after said meeting was convened.

  
\_\_\_\_\_  
Lynda K. Humble, City Manager





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 2A

**TITLE:**

City Council shall convene into closed executive session pursuant to Section 551.074 of the Texas Government Code to discuss Interview Process for an Associate Judge.

**STAFF REPRESENTATIVE:**

Lynda K. Humble, City Manager





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 2B

**TITLE:**

City Council shall convene into closed executive session pursuant to Section 551.071 of the Texas Government Code to confer with City Attorney regarding status of Building Bastrop Codes.

**STAFF REPRESENTATIVE:**

Lynda K. Humble, City Manager





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 14

**TITLE:**

Take any necessary or appropriate action on matters posted for consideration in closed/executive session

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 3

**TITLE:**

Take any necessary or appropriate action on matters posted for consideration in closed/executive session

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager







# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 7A

**TITLE:**

Mayor's Report

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager

**POLICY EXPLANATION:**

Texas Local Government Code, Section 551.045 – Governing Body of Municipality or County: Reports about Items of Community Interest Regarding Which No Action Will Be Taken:

(a) Notwithstanding Sections 551.041 and 551.042, a quorum of the governing body of a municipality or county may receive from staff of the political subdivision and a member of the governing body may make a report about items of community interest during a meeting of the governing body without having given notice of the subject of the report as required by this subchapter if no action is taken and, except as provided by Section 551.042, possible action is not discussed regarding the information provided in the report.

(b) For purposes of Subsection (a), "items of community interest" includes:

- (1) expressions of thanks, congratulations, or condolence;
- (2) information regarding holiday schedules;
- (3) 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;
- (4) a reminder about an upcoming event organized or sponsored by the governing body;
- (5) 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
- (6) 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.

**ATTACHMENTS:**

- Power Point Presentation

*Mayor's Report*  
*March 26, 2019*



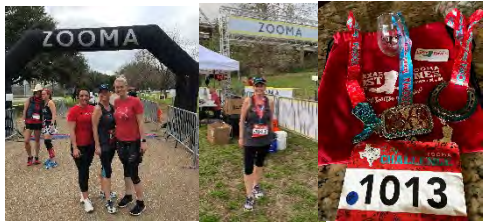
# Latest Activities

March 1 - 14

Events in 2019: 69



Texas Free! Victory or Death



ZOOMA Lost Pines Challenge



Girl Scout Troop 990



Chamber Luncheon



The PITSTOP Sports Grill



Go Texan! Cook-off



Mayor's Prayer Breakfast

TWC Commr Alvarez  
BCMA Pres. Dale Burke



TML Region X Mtg  
Rockdale



Bastrop High School  
FFA & 4H  
Livestock Show



PBMC – MD Anderson  
Dr. Steve Shapiro  
Peterson Brothers





## Bastrop

The 2019 Community Challenge is over. We're currently reviewing community uploads and activities and will announce this year's winners on our [Facebook page](#), Monday, March 11th.

[Click here](#) to learn about prizes for the winning communities and school districts.

### COMMUNITY IMPACT

CONTENT & ACTIVITIES ARE BEING REVIEWED. STATS WILL UPDATE ACCORDINGLY & DO NOT UPDATE IN REALTIME



### ITT 2019 Fun Facts:

- ❖ 25,000 Registered Users
- ❖ 360 Communities
- ❖ > 13 MILLION Minutes of Activity



# *Planned Events*

*March 15- 26*

- March 18 – BEDC Board Meeting
- March 22 – Legislative Conference (New Braunfels)
- March 25 –
  - CRCA Guest Speaker
  - Monday Mentoring at Gateway
- March 26 - City Council Meeting



# *Upcoming Events & City Meetings*

- March 27/28 – WaterNOW Alliance Conference
- March 29
  - BEST Breakfast: Workforce Solutions
  - TML Board Meeting (Austin)
- March 30 –
  - YMCA Re-Launch Air Fitness Unit (Bob Bryant Park)
  - Friends of the Library – Plant Sale
- April 1 – Library Board Meeting
- April 2 – Texas Colorado River Floodplain Coalition Board Meeting
- April 3 – Chamber Luncheon
- April 9 - City Council Meeting





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 7B

**TITLE:**

Councilmembers' Report

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager

**POLICY EXPLANATION:**

Texas Local Government Code, Section 551.045 – Governing Body of Municipality or County: Reports about Items of Community Interest Regarding Which No Action Will Be Taken:

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# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 7C

**TITLE:**

City Manager's Report

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager

**POLICY EXPLANATION:**

Texas Local Government Code, Section 551.045 – Governing Body of Municipality or County: Reports about Items of Community Interest Regarding Which No Action Will Be Taken:

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- (6) 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.





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 7D

**TITLE:**

A proclamation of the City of Bastrop, Texas recognizing the month of April as Child Abuse Prevention Month for the City of Bastrop.

**STAFF REPRESENTATIVE:**

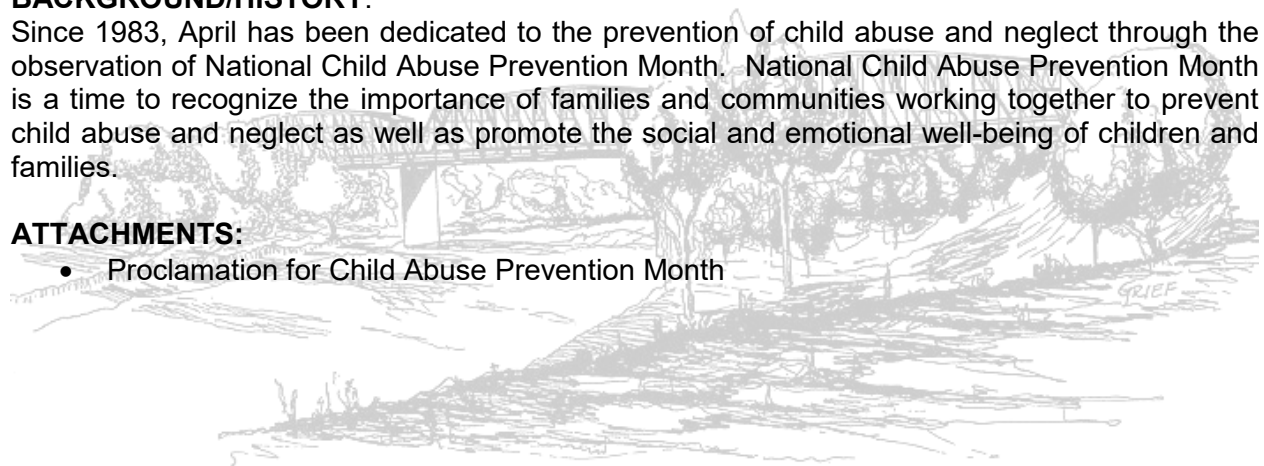
James K. Altgelt, Director of Public Safety/Chief of Police

**BACKGROUND/HISTORY:**

Since 1983, April has been dedicated to the prevention of child abuse and neglect through the observation of National Child Abuse Prevention Month. National Child Abuse Prevention Month is a time to recognize the importance of families and communities working together to prevent child abuse and neglect as well as promote the social and emotional well-being of children and families.

**ATTACHMENTS:**

- Proclamation for Child Abuse Prevention Month



# P

# ROCLAMATION



**BASTROPTX**  
Heart of the Lost Pines / Est. 1832

**WHEREAS**, every child is a precious and unique gift who deserves the security of a loving and nurturing home; and

**WHEREAS**, every child deserves to grow up in a nurturing environment, free from abuse, neglect, violence, or endangerment of any kind; and

**WHEREAS**, children are vital to our community's future success, prosperity, and quality of life as well as being our most valuable assets; and

**WHEREAS**, child abuse and neglect cause serious harm to child development and have lifelong effects that endanger safety, hinder permanency in relationships, and reduce well-being, creating greater demands on society; and

**WHEREAS**, child abuse is considered to be one of the most serious public health problems with scientific studies documenting the link between the abuse and neglect of children and a wide range of medical, emotional, psychological, and behavioral disorders; and

**WHEREAS**, child abuse and neglect are a community responsibility affecting both the current and future quality of life of a community; and

**WHEREAS**, communities that provide parents with the social support, knowledge of parenting, child development, and concrete resources they need to cope with stress and how to nurture their children will ensure all children grow to their full potential; and

**WHEREAS**, effective child abuse prevention strategies succeed because of partnerships created among citizens, human service agencies, faith communities, health care providers, civic organizations, law enforcement agencies, and the business community.

**NOW, THEREFORE**, I, Connie B. Schroeder, Mayor of the City of Bastrop, Texas, do hereby proclaim the month of April 2019 as:

### **Child Abuse Prevention Month**

**IN WITNESS WHEREOF**, I have hereunto set my hand and caused the Official Seal of the City of Bastrop, Texas to be affixed this 26<sup>th</sup> day of March, 2019.

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Connie B. Schroeder, Mayor



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8A

**TITLE:**

Receive presentation and discussion regarding update to the Transportation Master Plan, Chapter 5, Thoroughfare Plan by Tom Grant with Kimley-Horn.

**STAFF REPRESENTATIVE:**

Lynda K. Humble, City Manager

**BACKGROUND/HISTORY:**

As a part of the Bastrop 2036 Comprehensive Plan Update, the City Council adopted the City of Bastrop Transportation Master Plan in November 2016. The 2016 Transportation Master Plan (TMP) provides a guideline for managing investment in the transportation system within the City and its Extraterritorial Jurisdiction (ETJ).

The TMP is a long-range planning document used to guide the development of a community's transportation system. The purpose of the plan is to ensure the future transportation network meets the travel needs of the growing region for all modes of travel, including walking, bicycling, driving, and public transportation. A transportation master plan does not represent a short-term list of construction projects, nor the precise alignments of proposed roadways intended to be fixed. Instead, the plan serves as a general guidance document intended to help city officials plan the future of the transportation system, while weighing a variety of other factors, many of which may evolve over time.

The TMP was developed using the Capital Area Metropolitan Planning Organization (CAMPO) Platinum Planning Principles, and follows the planning guidelines established by TxDOT and the Federal Transportation funding legislation, the Fixing America's Surface Transportation Act (FAST Act). The alignment with these regional, state, and national planning and funding regulations will allow the projects contained in this TMP to qualify for funding from these sources, wherever possible.

The TMP recommends that the City of Bastrop periodically review and update the plan to ensure the plan reflects the most up-to-date information regarding growth and development trends, as well as community goals. Chapter 5 – City of Bastrop's Thoroughfare Plan dictates the functional street classifications and typical street cross sections. Recognizing that a grid street pattern is the most important element of achieving fiscal sustainability as a community, Chapter 5 needs to be amended with functional street classifications and typical street cross sections that require a grid network pattern.

Kimley-Horn has been retained to update Chapter 5. Fieldwork is scheduled for April 9<sup>th</sup>. Kimley-Horn and SimpleCity Design Consulting Teams will participate in a Transportation & Drainage Rodeo on April 10<sup>th</sup>, which will include participation from citizens and the development community.

A final draft of Chapter 5 will be submitted for review by end of May. Action to amend Chapter 5 of the TMP will occur as a part of the Development Code adoption process.

**ATTACHMENTS:**

- PowerPoint from Kimley-Horn



City of Bastrop  
Transportation Planning  
Services  
and  
Master Thoroughfare Plan Map  
Update

City Council Meeting  
March 26, 2019

Tom Grant, PE, PTOE

Kimley»Horn

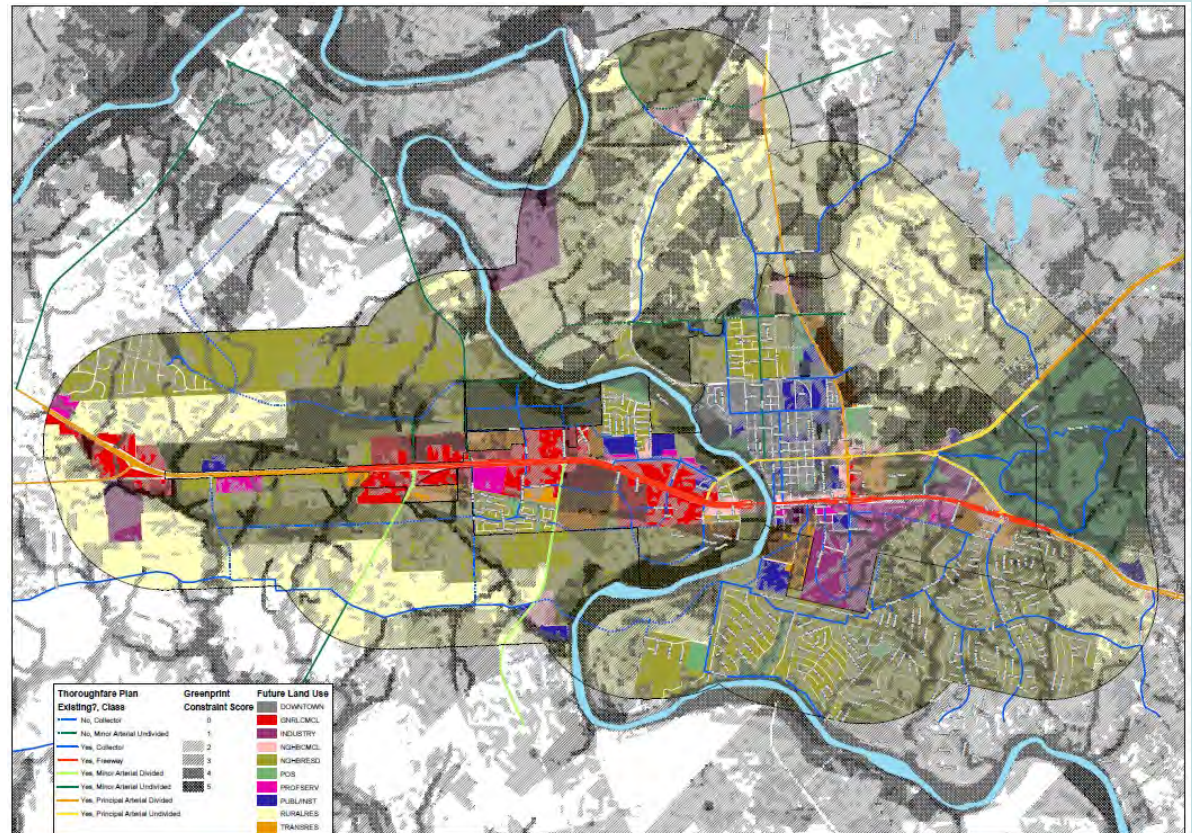
# Project Background

- The City's existing development codes are currently being evaluated and updated by SimpleCity Design
- Updated code would:
  - Reduce growth's impact on drainage and flooding issues
  - Be in alignment with Comprehensive Plan goals for walkability and development character priorities
- The Master Thoroughfare Plan Map also needs to be brought in alignment with the new code
  - Plan should better consider development feasibility, natural constraints, and improved walkability
  - Mandatory street system to create the walkable network

# Project Services

## Data Collection

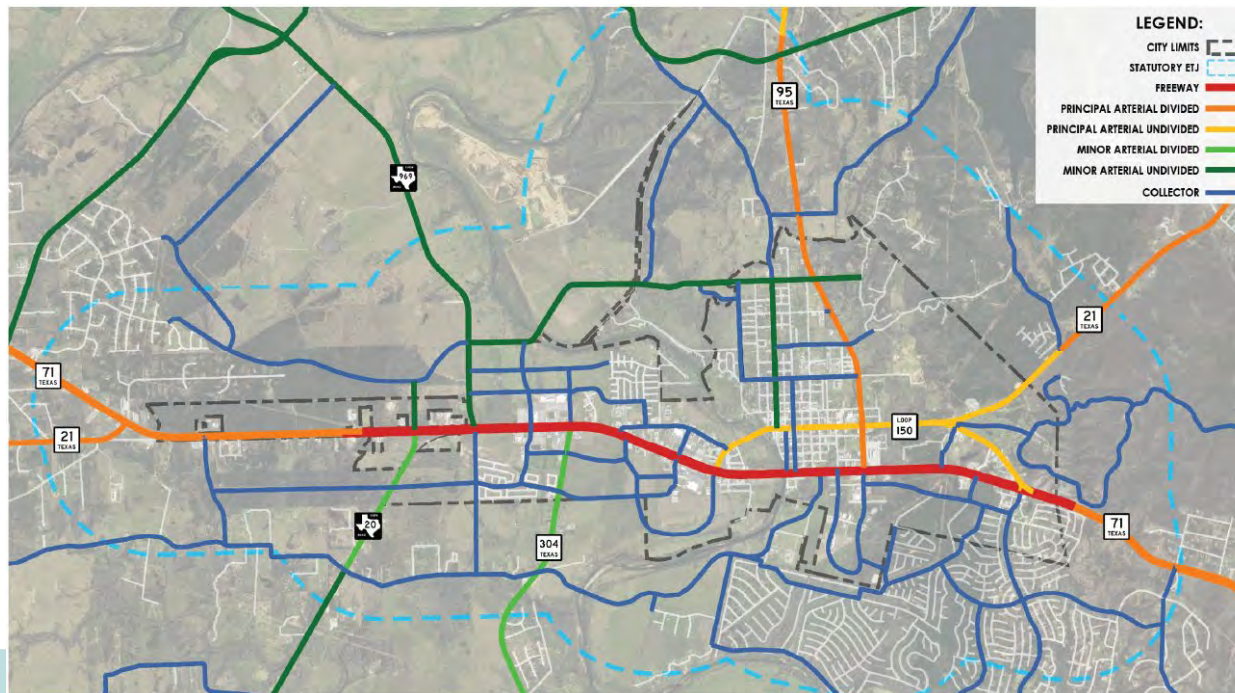
- Compile and analyze GIS data
- Review existing plans
- Field review



# Project Services

## Master Thoroughfare Plan Analysis and Map Update

- Analyze thoroughfare connectivity feasibility, street spacing, and street types in alignment with the proposed development code update





# Project Services

Update Chapter 5 (Thoroughfare Plan) of the 2017 Transportation Master Plan

- Thoroughfare Plan Map 5.1
- Street cross sections



# Transportation Rodeo

- Transportation Rodeo on Wednesday, April 10<sup>th</sup>
- Collaborative workshops to discuss proposed updates to street sections and future roadway network
  - Morning – Staff Work Session
  - Afternoon – Development Community and Stakeholders Work Session
  - Evening – City Council Work Session

# Schedule

- Transportation Rodeo on Wednesday, April 10<sup>th</sup>
- Draft updated MTP Map and Chapter 5 by end of May
- Adoption process as part of the Development Code update

# Questions?

Tom Grant, P.E., PTOE

[Tom.grant@kimley-horn.com](mailto:Tom.grant@kimley-horn.com)

214-420-5622



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8B

**TITLE:**

Receive presentation and hold discussion regarding the analysis of Gill's Branch 2-D Modeling from Paul Morales of Halff Associates.

**STAFF REPRESENTATIVE:**

Trey Job, Managing Director of Public Works and Leisure Services

**BACKGROUND/HISTORY:**

The City of Bastrop has experienced four significant storm events since September of 2015. Since that time, the City Council held many public meetings and drainage workshops. Discussions took place regarding the impact of local drainage concerns and the continuing development within the City of Bastrop and the impact to the City of Bastrop's watershed. City Council recognized the importance of focusing on drainage and approved a temporary moratorium on development permits to ensure development would not negatively impact the existing population and/or environment.

Halff Associates completed a regional drainage study in early 2018 for all of Bastrop County. The City of Bastrop agreed to fund the portion of the study performed within the City limits. The \$70,000.00 in funds were used as the City's 50% match to a grant received from the Texas Water Development Board. Now that the study is complete, this data has been submitted to FEMA. Although the local maps have not been updated in Bastrop County, they will be updated approximately within the next two years. Additionally, the National Oceanic and Atmospheric Administration (NOAA) updated the rain fall totals for the entire state of Texas. This data will change drainage calculation formulas, which will likely increase the size of drainage infrastructure state-wide.

On September 11, 2018, City Council approved Resolution No. R-2018-81 of the City Council of the City of Bastrop, Texas, approving an agreement with Halff Associates to study the drainage impact east of SH 95 and SH 71 to develop 2-dimensional (2D) model to better understand Gills Branch overflow and determine flood mitigation solutions in a watershed holistic fashion. Halff Associates have completed their model and Paul Morales will present their findings at the March 26, 2019 Council Meeting.

**ATTACHMENTS:**

- PowerPoint from Halff Associates
- Draft Technical Memo

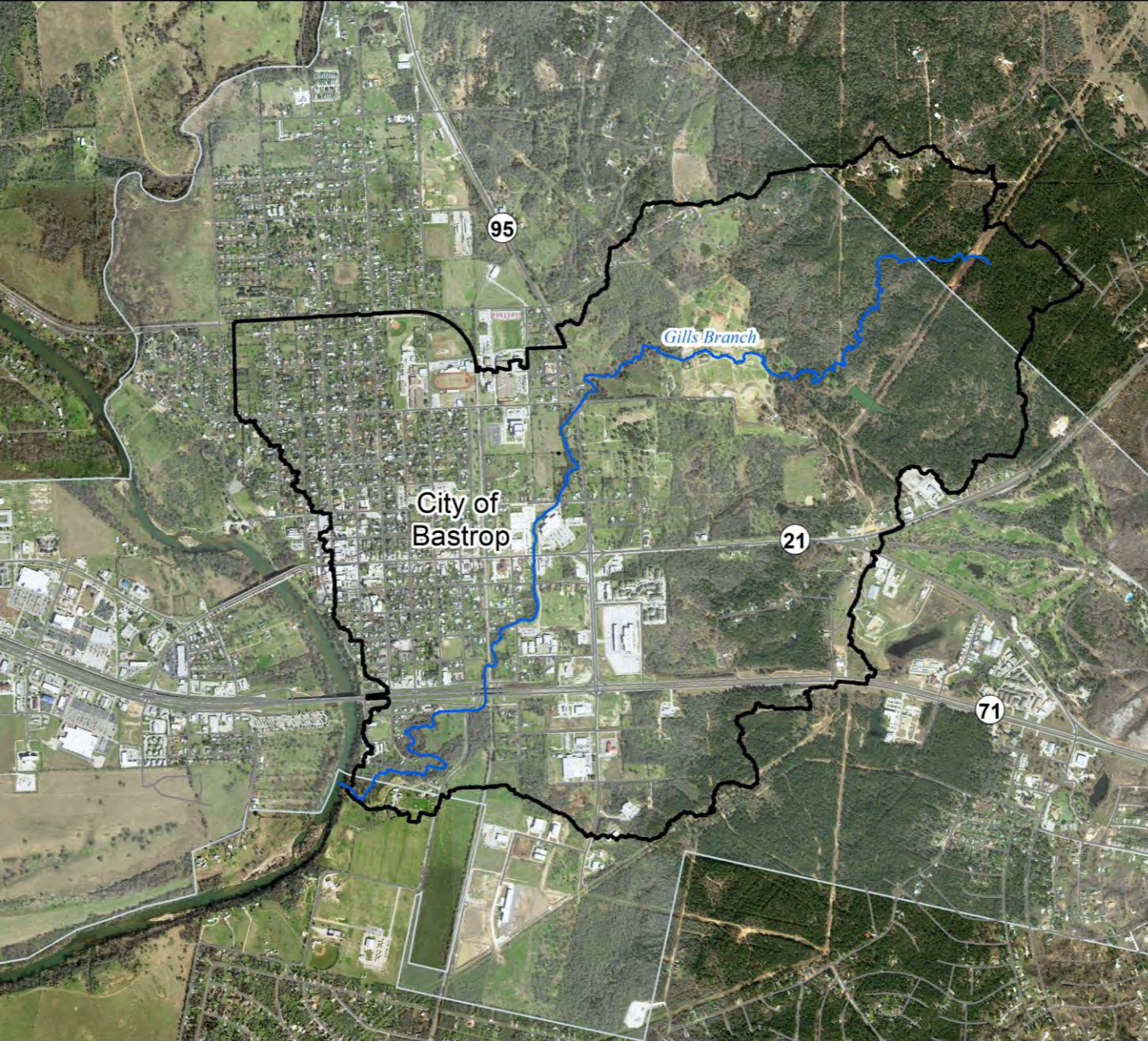


# CITY OF BASTROP

## GILLS BRANCH OVERFLOW 2D ANALYSIS

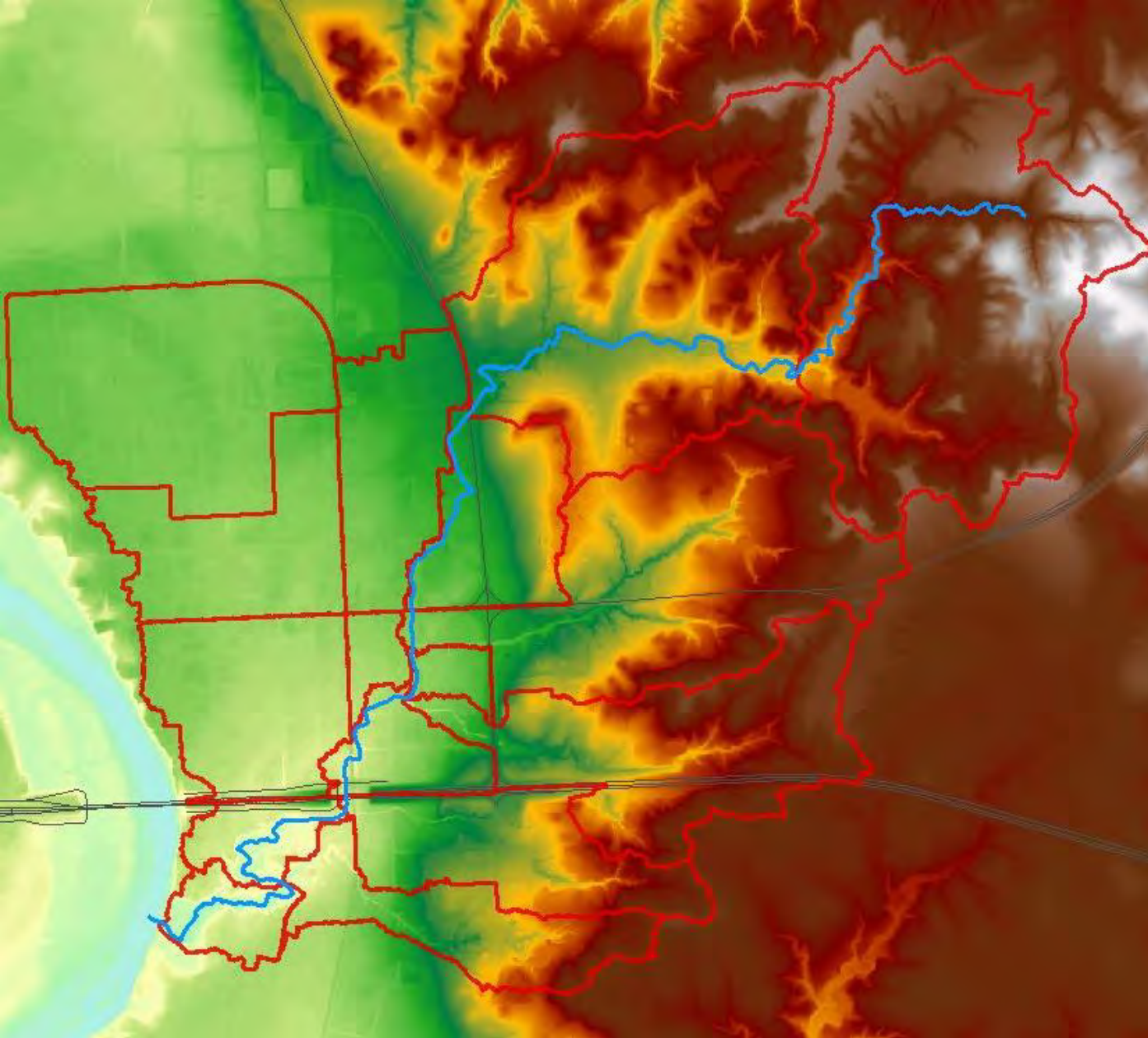
MARCH 26, 2019

BASTROP CITY HALL



## OUTLINE

- BASTROP COUNTY FPP STUDY
- PROJECT OBJECTIVES
- ANALYSIS RESULTS
- MITIGATION SOLUTIONS

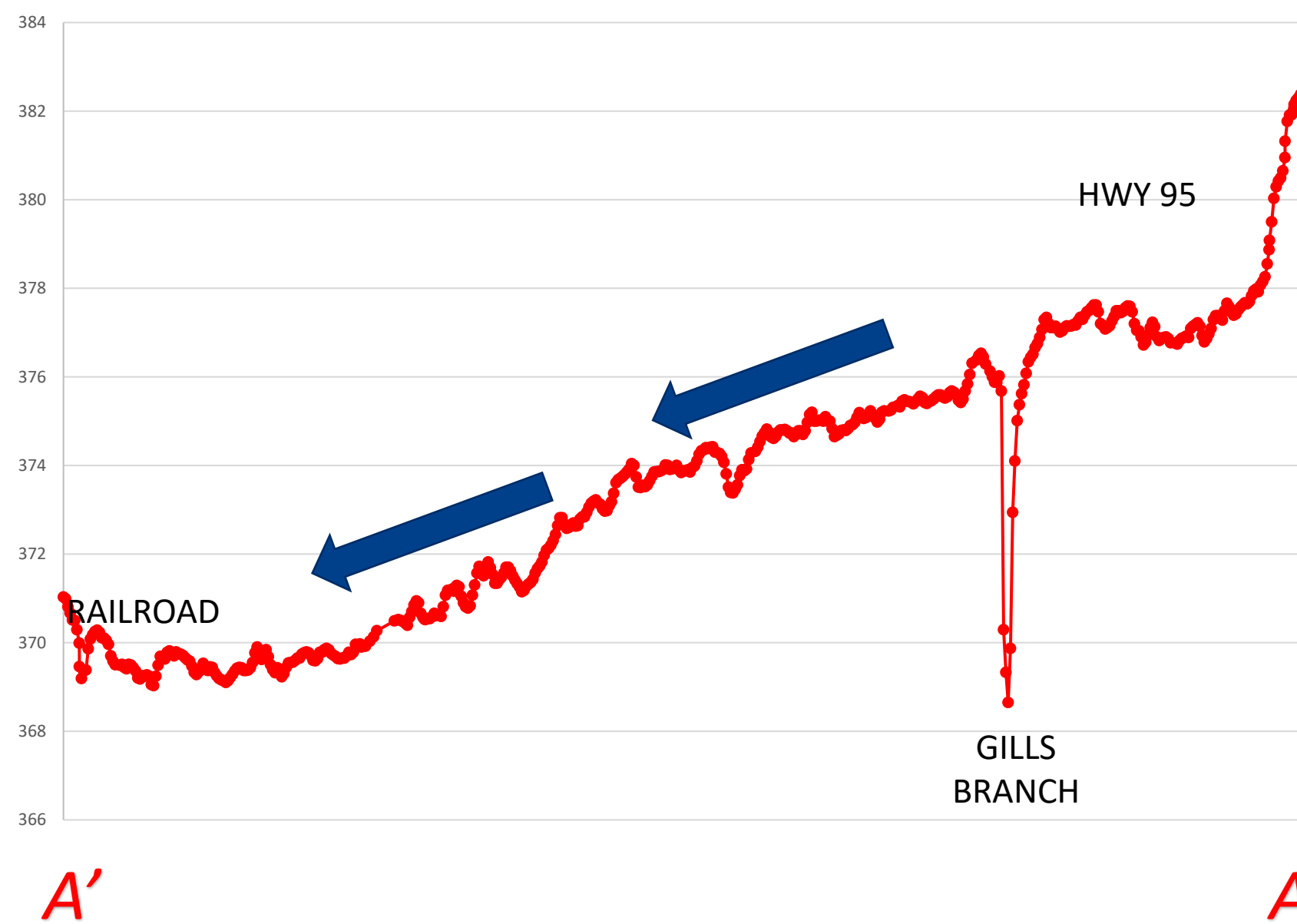
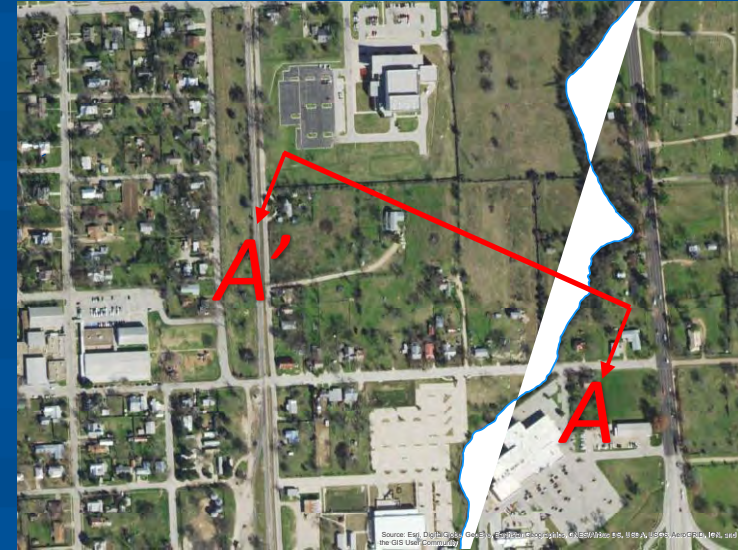


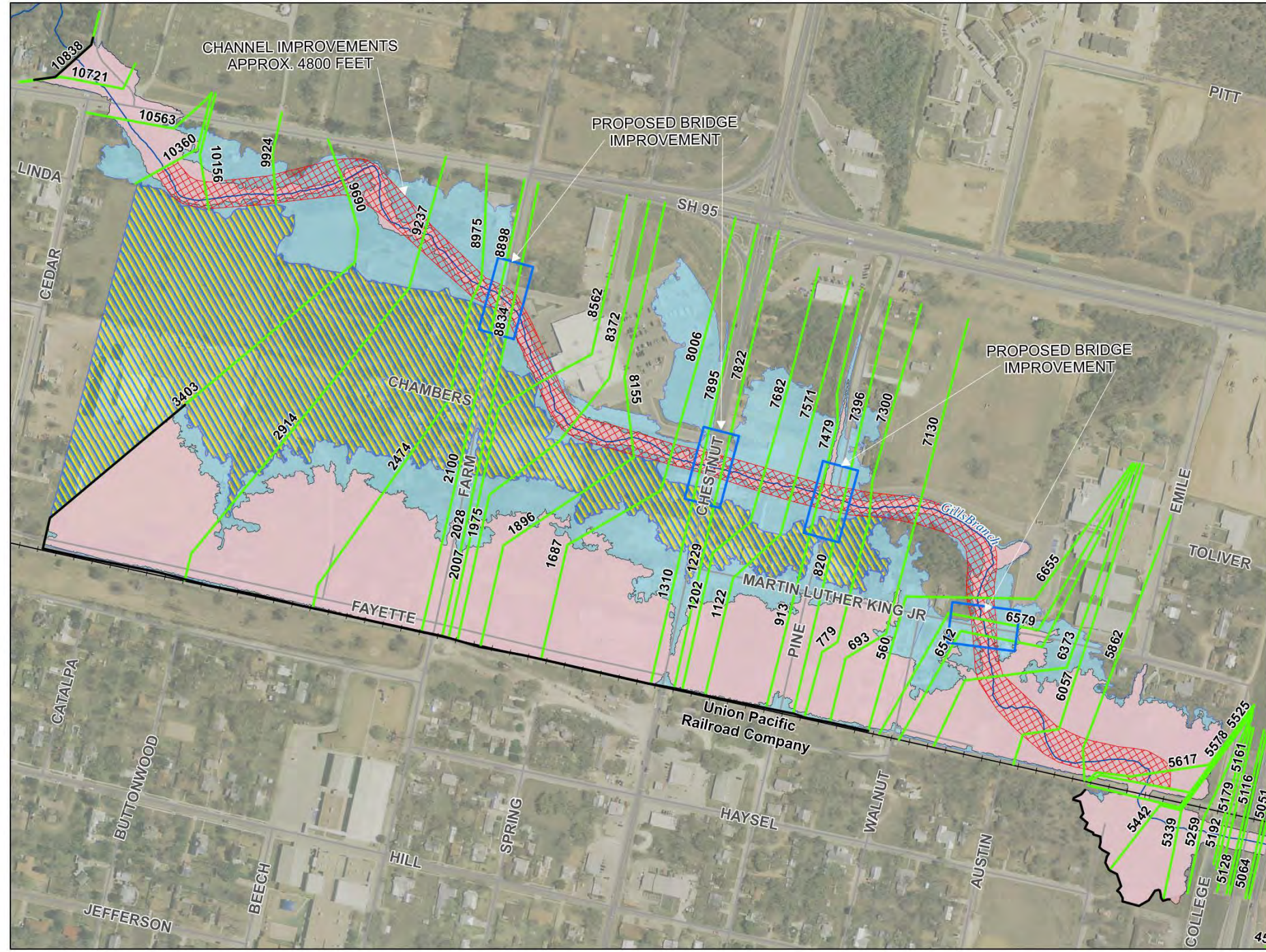
## BASTROP CO. FPP

- Completed 2018
- USGS Rainfall
- Existing Land Use
- Estimate 1D overflow
- Developed multiple flood mitigation solution options



# GILLS BRANCH

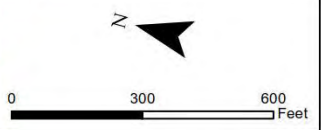
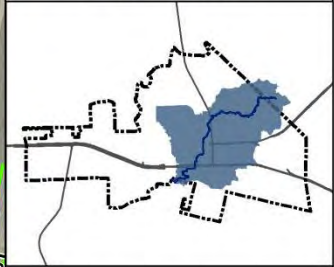




**Bastrop County & City of Bastrop Flood Protection Planning Study**

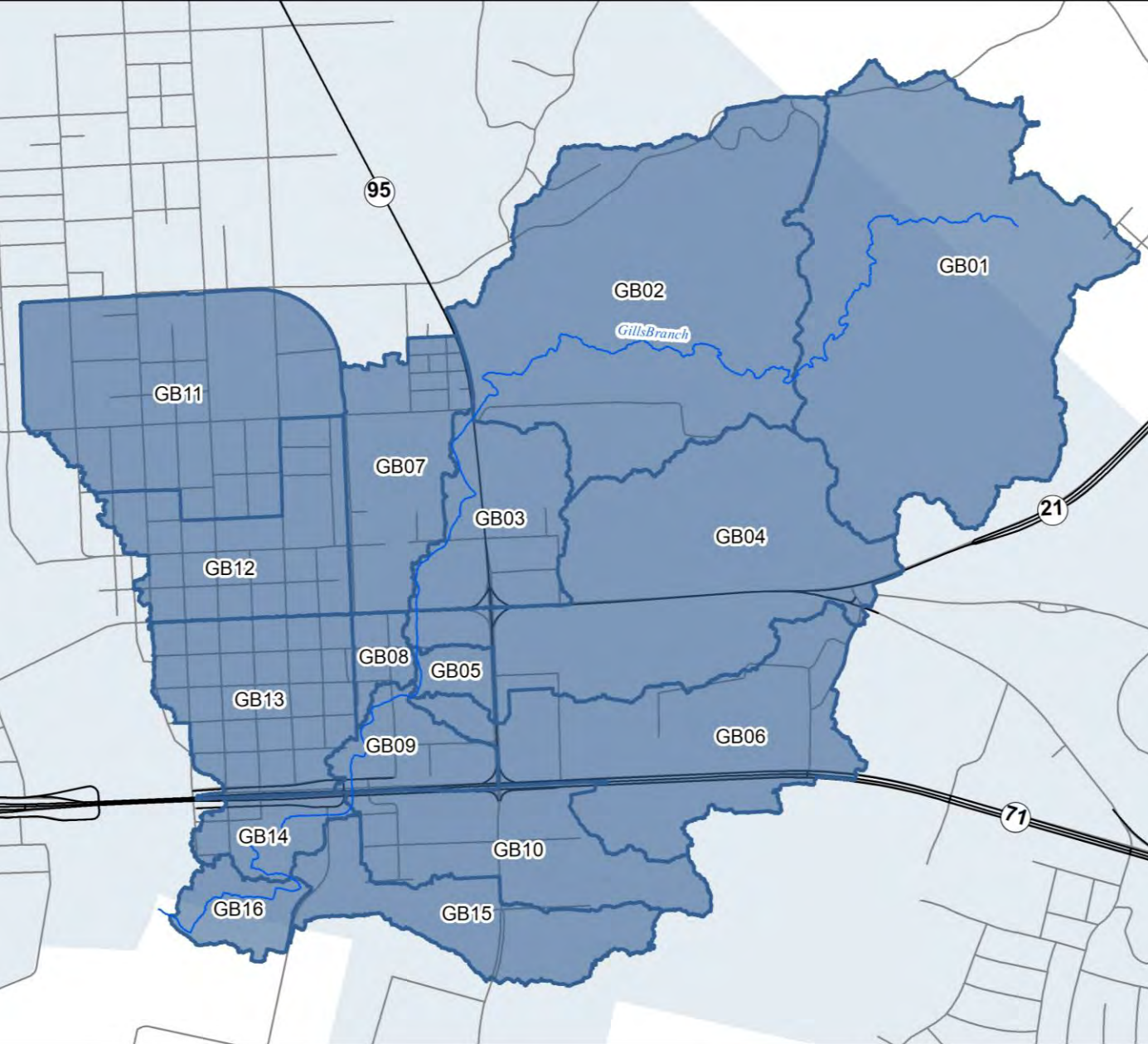
- Stream Centerline
- XS Cut Lines
- End of Study
- Roadway
- Railroad
- Proposed Crossing Improvements
- Proposed Channel Improvements
- City Boundary
- Existing 100YR Floodplain
- Existing Overland Flow
- Proposed Alt 2 100YR

**Appendix H-2  
Alternative 2  
Channel and Crossing Improvements**



# PROJECT OBJECTIVES

1. Refine 1D with 2D modeling
2. Develop flood mitigation solutions
3. Evaluate with Atlas 14 rainfall



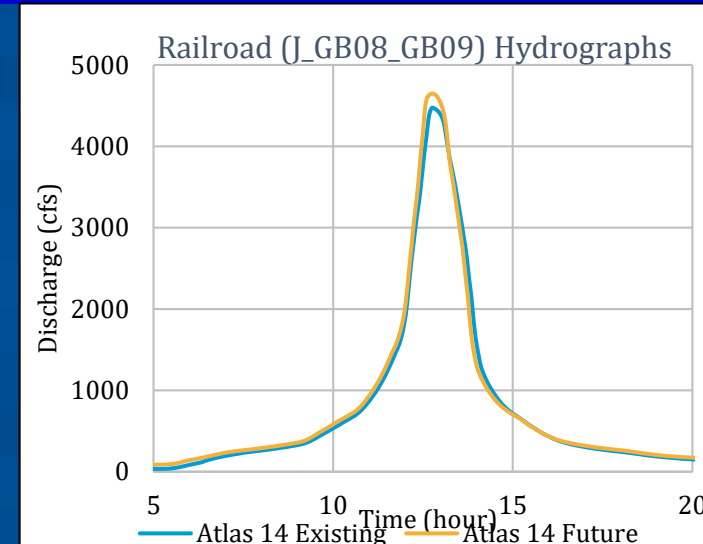
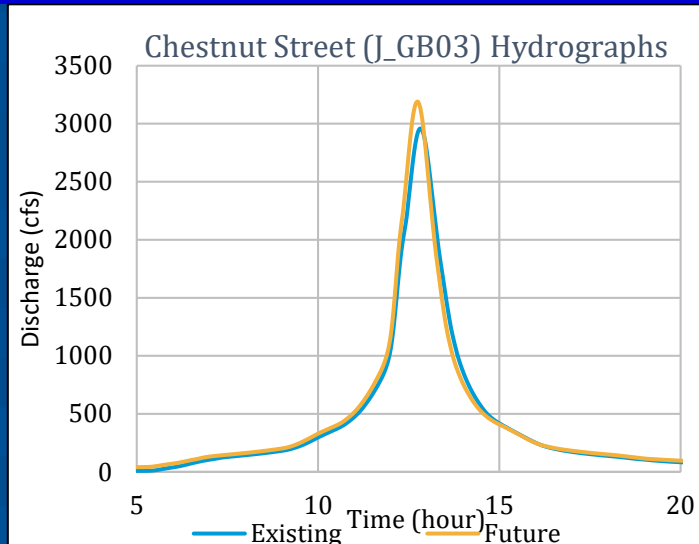
## 2D ANALYSIS

Frequency Event	Annual Chance Probability	Countywide Average 24-hour Precipitation Depths (inches)	
		USGS (1998)	ATLAS 14 (2018)
500-year	0.2%	12.8	18.4
100-year	1%	9.1	12.5
50-year	2%	7.9	10.5
25-year	4%	6.7	8.8
10-year	10%	5.5	6.8
5-year	20%	4.6	5.5
2-year	50%	3.4	4.2
1-year	100%	0.9	3.2

- Existing and Future (Fully Developed) Land Use
- 2017 LiDAR Terrain
- Atlas 14 Rainfall
- 100-year increased by 3.4 inches
- ~30% Runoff Volume Increase

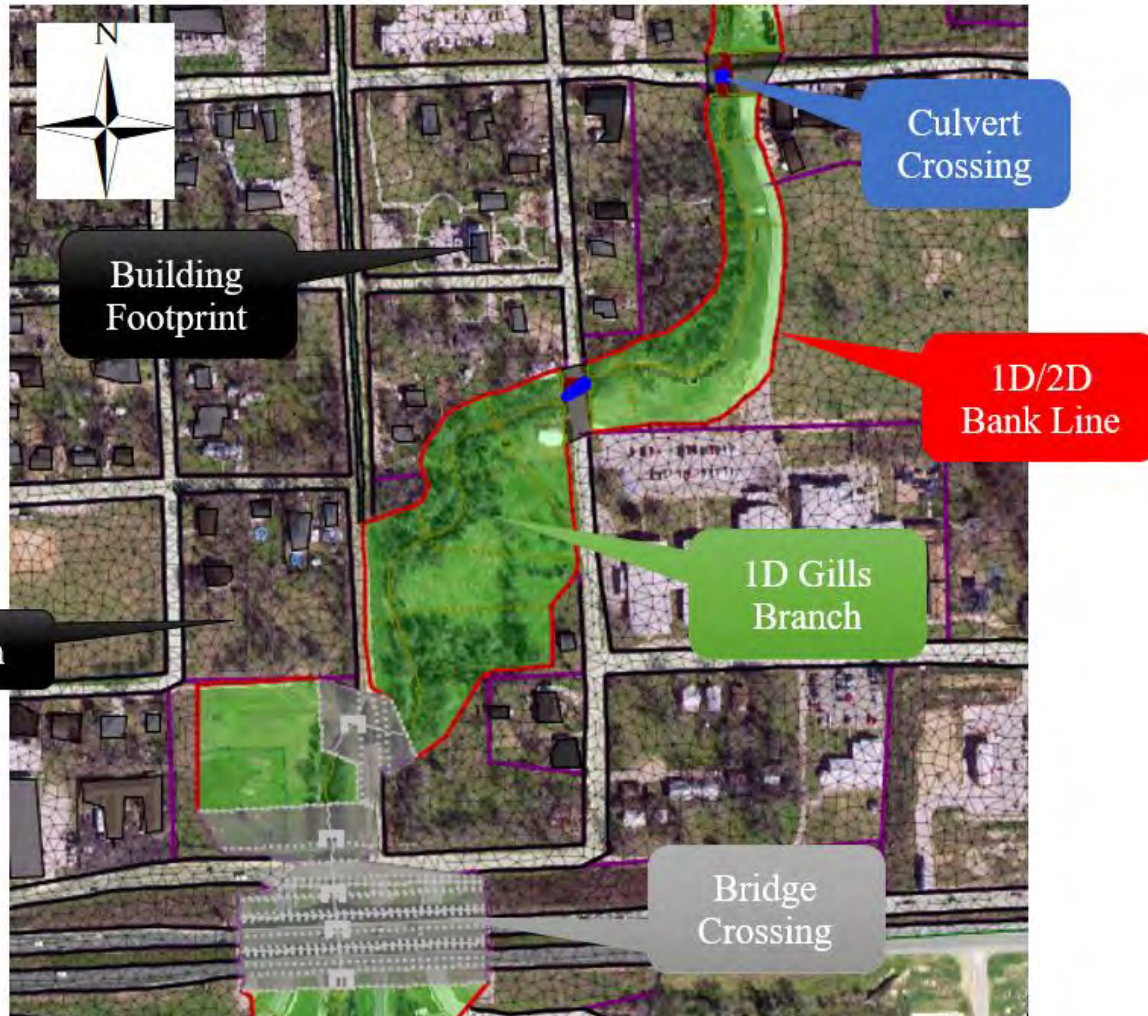
# HYDROLOGY FLOWS

Subbasin	Location	Existing		Future		EX vs FUT	
		Peak Q (cfs)	Volume (ac-ft)	Peak Q (cfs)	Volume (ac-ft)	% Change Peak Q	% Change Volume
<b>Mainstem Junctions</b>							
J_GB02	Hwy. 95	3,011	542	3,296	575	9%	6%
<b>J_GB03</b>	<b>Chestnut St.</b>	<b>2,956</b>	<b>611</b>	<b>3,189</b>	<b>647</b>	<b>8%</b>	<b>6%</b>
J_GB04	Pine St.	3,586	810	3,814	857	6%	6%
J_GB05_GB06	MLK Dr.	4,247	959	4,549	1,014	7%	6%
<b>J_GB08_GB09</b>	<b>Hwy. 71/UPRR</b>	<b>4,473</b>	<b>1,077</b>	<b>4,649</b>	<b>1,135</b>	<b>4%</b>	<b>5%</b>
J_GB16	Colorado River	6,053	1,621	6,223	1,696	3%	5%



# GILLS BRANCH 2D MODEL

- Triangulated Mesh Terrain
- Building Footprints
- 1D Stream Flow
- 2D Overland Flow
- Observation Validation

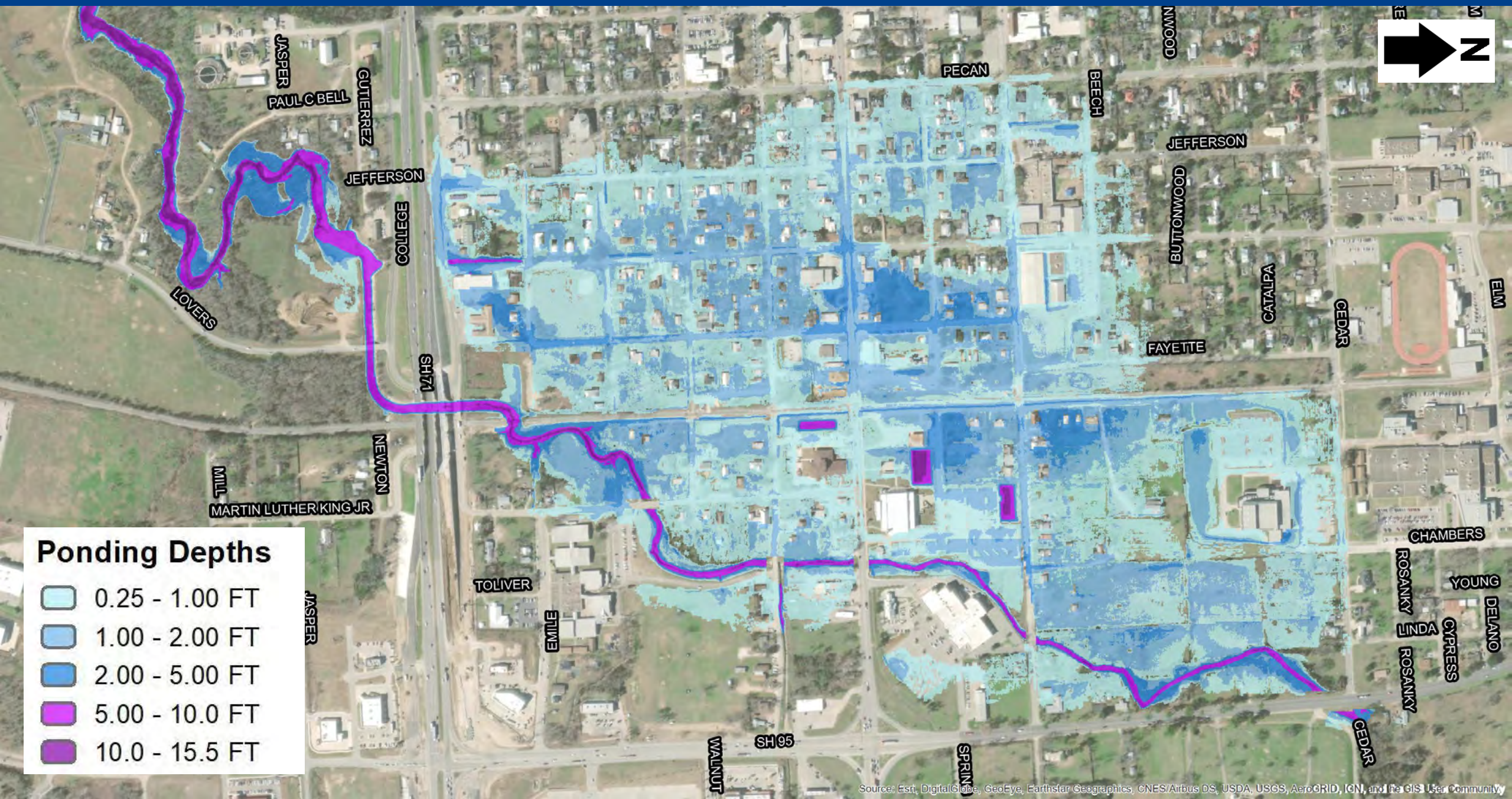




## GILLS BRANCH RESULTS

- ~3,000 cfs peak flow at Hwy. 95
- Channel capacity = 1,200 cfs
- Overflow = ~1,800 cfs
- Initial overflow between Pine St & Hwy 85

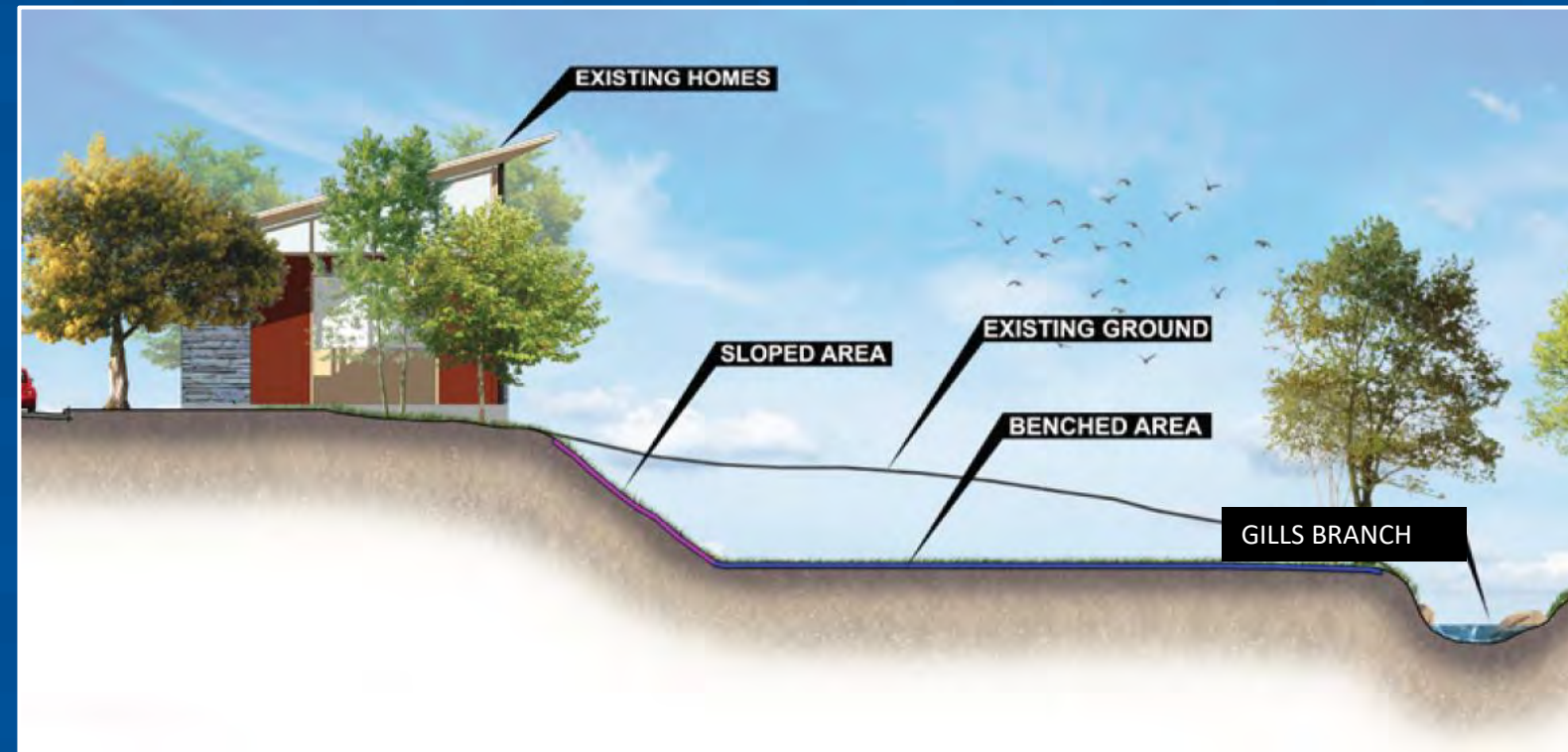
# GILLS BRANCH 2D MODEL – FULLY DEVELOPED



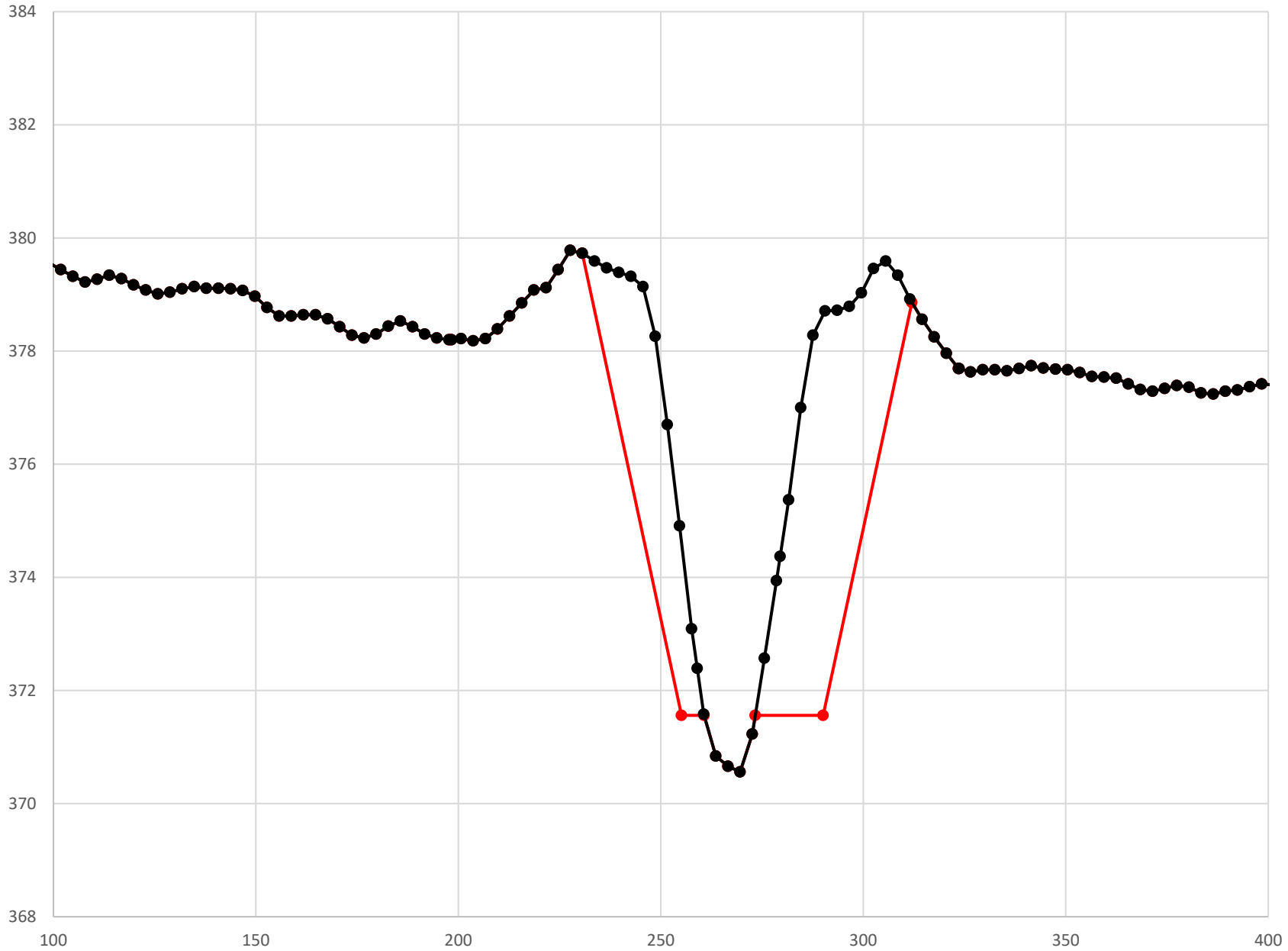


# CHANNEL BENCHING IMPROVEMENTS

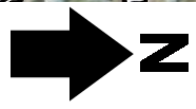
- Increases Channel Area
- Reduces Channel Overflow
- Minimize Environmental Permitting Needs
- Trail Connectivity



# TYPICAL CHANNEL BENCHING IMPROVEMENTS

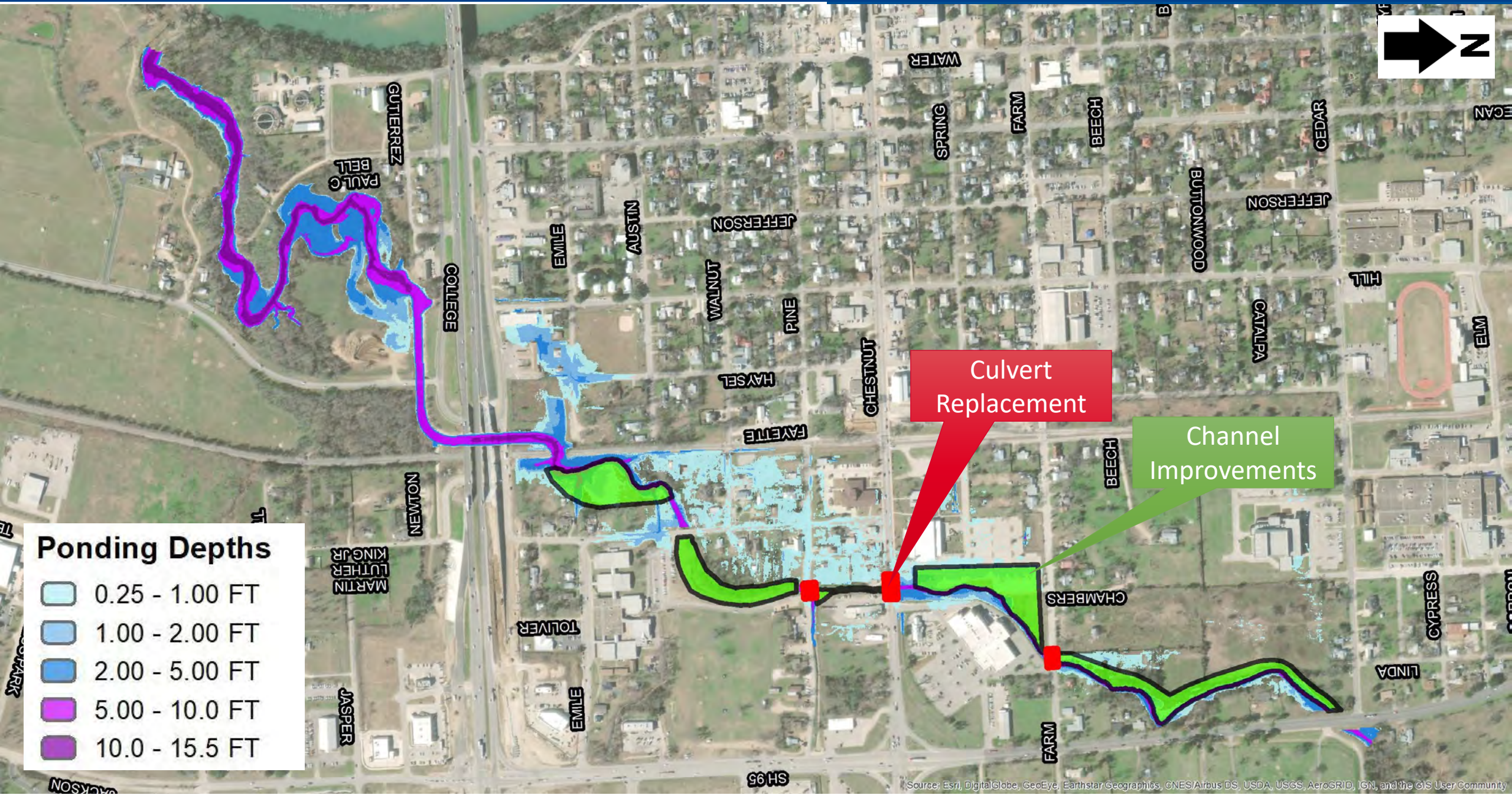


# GILLS BRANCH 2D MODEL – PROPOSED IMPROVEMENTS



## Ponding Depths

- 0.25 - 1.00 FT
- 1.00 - 2.00 FT
- 2.00 - 5.00 FT
- 5.00 - 10.0 FT
- 10.0 - 15.5 FT



Culvert Replacement

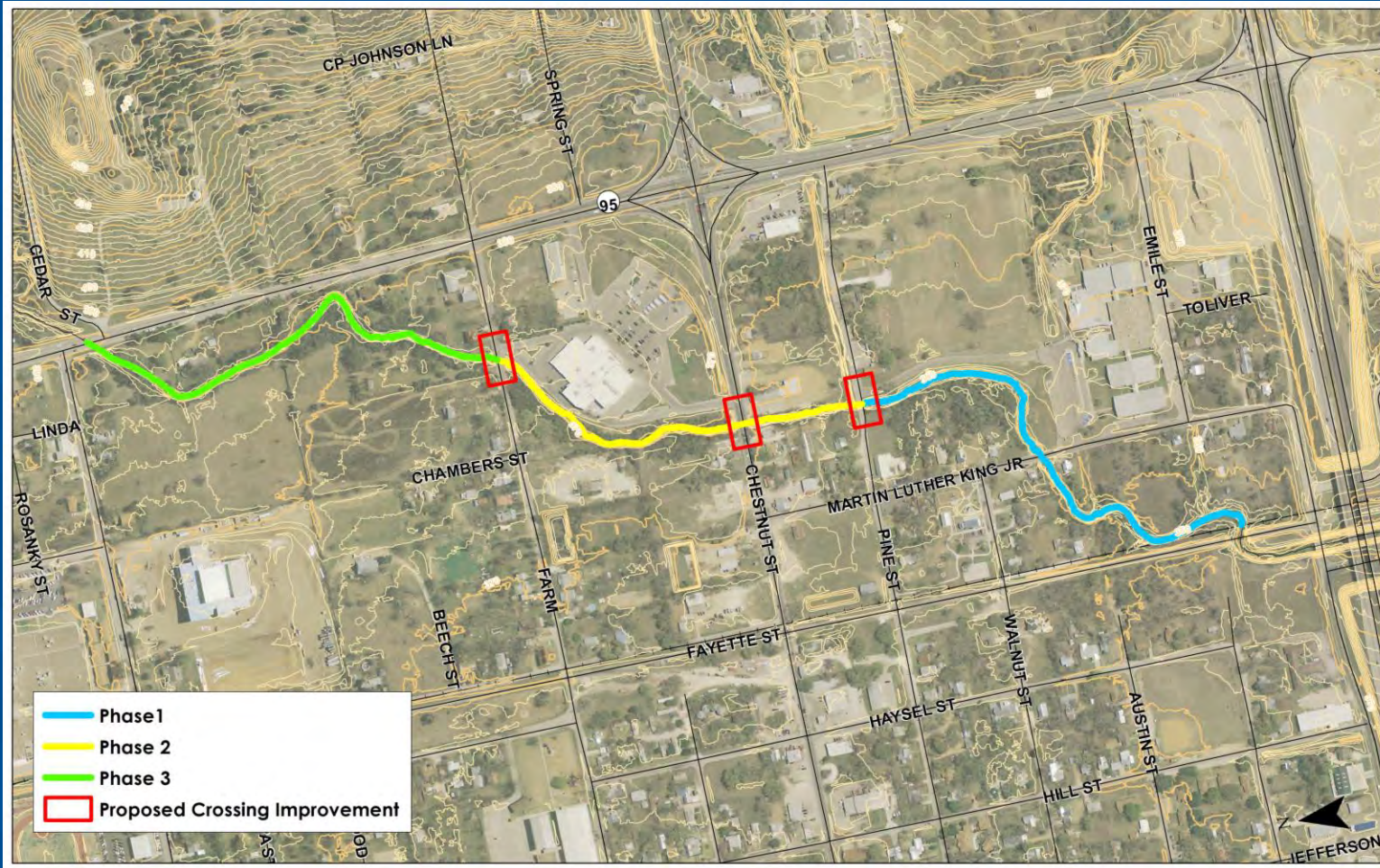
Channel Improvements

# GILLS BRANCH 2D – INTERSECTION DEPTHS

Intersection	Existing 1% ACE Ponding Depths (ft)	Mitigated 1% ACE Ponding Depths (ft)	Ponding Reduction (ft)
Farm & Haysel	1.79	0.00	-1.79
Farm & Railroad	1.15	0.00	-1.15
Spring & Haysel	2.3	0.00	-2.30
Chestnut & Haysel	1.57	0.00	-1.57
Chestnut & Railroad	0.25	0.00	-0.25
Pine & Haysel	1.44	0.00	-1.44
Pine & Railroad	0.12	0.00	-0.12
Pine & MLK	0.79	0.40	-0.39
Walnut & Haysel	1.35	0.00	-1.35
Walnut & MLK	0.75	0.28	-0.47
Austin & Haysel	1.98	0.00	-1.98

- Eliminated or significantly reduced road ponding
- Improves safety during large storm events

# GILLS BRANCH 2D – PROJECT PHASING



## PHASE 1 – UPRR TO PINE ST.

- 1,850 LF of Channel Improvements
- No Road Crossing Improvements

## PHASE 2 – PINE ST. TO FARM ST.

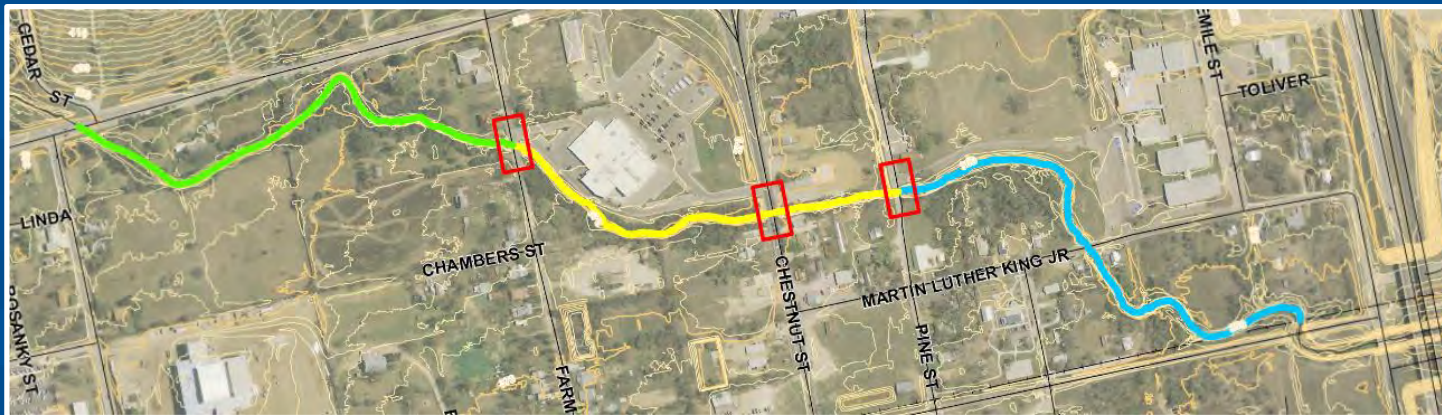
- 1,420 LF of Channel Improvements
- 2 Road Crossing Improvements

## PHASE 3 – FARM ST. TO SH 95

- 1,700 LF of Channel Improvements
- 1 Road Crossing Improvements

# GILLS BRANCH PREFERRED MITIGATION SOLUTION

- 4,970 LF of channel benching improvements
  - Channel improvements from Hwy. 95 to the railroad crossing
  - Single span bridges at Farm St., Chestnut St., and Pine St.
  - Total cost = \$4.3M
- 
- Mitigates 195 structures from the 100yr floodplain
  - Mitigates 102 acres from the 100yr floodplain
  - Keeps flow in Gills Branch eliminates overflow for 100yr event





QUESTIONS?

## **TECHNICAL MEMORANDUM**

**TO:** Trey Job  
Director of Public Works

**DATE:** 3/19/2019

**FROM:** Paul Morales, PE, CFM, CPESC  
C. Andrew Moore, PE, CFM

**AVO:** 35510

**EMAIL:** pMorales@halff.com  
aMoore@halff.com

**SUBJECT:** City of Bastrop – Gills Branch Overflow 2D Analysis - *DRAFT*

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The City of Bastrop (City) has retained Halff Associates, Inc. (Halff) to develop a two-dimensional (2D) hydraulic model of Gills Branch to better understand the overflow patterns and develop flood mitigation solutions. Halff initially conducted a watershed study which consisted of developing hydrology and a one-dimensional (1D) hydraulic analysis of Gills Branch that extended from Highway 95 to the confluence with the Colorado River as part of the 2018 Bastrop County Flood Protection Planning Study. This study indicated a significant amount of flow from Gills Branch leaves its banks and flows westward through the streets and neighborhoods of the City. The 1D hydraulic model indicated the overflow but did not fully convey the complex drainage through the streets.

The Gills Branch Overflow 2D Analysis provided a comprehensive analysis of the existing watershed and an understanding of the behavior of the overflow from the creek. The hydraulic model developed as part of the study incorporated 1D cross sections of the creek between the banks and the 2D overbanks encompassing the City of Bastrop neighborhoods and streets. The 1D/2D hydraulic model was developed using Infoworks ICM 8.0.2 and provided more detail of the overland ponding. In addition to the 1D/2D hydraulic model, hydrologic calculations were updated based the new Atlas 14 precipitation data provided by the National Oceanic and Atmospheric Administration (NOAA) and fully developed land use conditions provided by the City. Several mitigation alternatives were explored to reduce flooding impacts from Gills Branch that included road crossing improvements, channel improvements, and detention. The recommended alternative includes road crossing and channel improvements from Highway 95 downstream to the UPRR railroad which is approximately 1 stream mile. A vicinity map of the project area is shown in **Exhibit 1**.

### **Data Collection/Previous Studies**

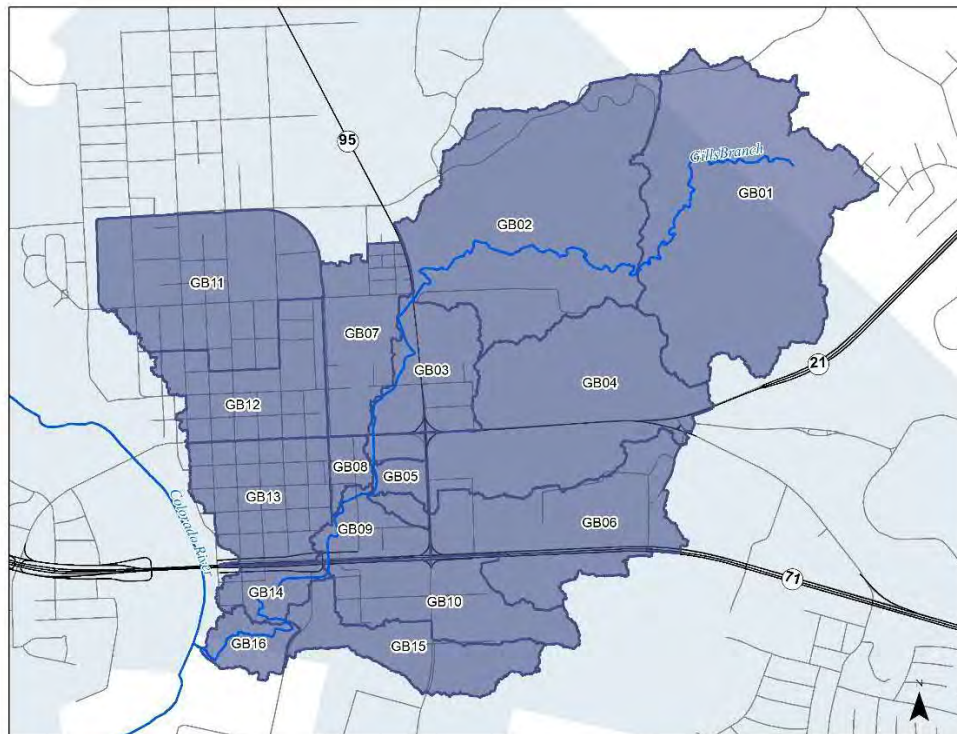
Several datasets were collected to facilitate the updates to the hydrologic model and the creation of the 1D/2D hydraulic model. The items utilized are listed below:

- NOAA Atlas 14 Rainfall Frequency
- City of Bastrop 2036 Comprehensive Plan (Fully Developed Land Use)
- 2017 StratMap Central Texas 50cm LiDAR terrain
- Bastrop County Flood Protection Planning Study (*2018 Study*)



## Hydrology

The Gills Branch watershed is located within the City of Bastrop, encompassing the downtown district. The headwaters of Gills Branch extends approximately a half mile northeast of the City limits and flows southwest through the City to its confluence with the Colorado River, just downstream of the Texas SH71 bridge. The 2.8 square mile Gills Branch watershed study area is shown below in **Figure 1**.



*Figure 1: Gills Branch Watershed Delineation*

The Gills Branch watershed was originally studied as part of 2018 Bastrop County's Flood Protection Plan (FPP) completed by Halff Associates. This study's hydrologic modeling was conducted using the United States Army Corps of Engineers (USACE) Hydrologic Engineering Center's Hydrologic Modeling System (HEC-HMS) version 4.2. The hydrologic model developed for the FPP served as the baseline hydrology model for this project. A map of the drainage basins is shown in **Exhibit 2**.

### *Hydrologic Parameters*

During the FPP study, the Gills Branch watershed was analyzed as 16 subbasins ranging in size from 0.02 square miles to 0.52 square miles, with an average of 0.18 square miles. The drainage areas were originally delineated based on CAPCOG 2008 LiDAR data with the support of as-builts and storm sewer data provided by the City. Drainage area divides and longest flowpaths were validated by newly released TNRIS 2017 LiDAR for Bastrop County. It was determined that the subbasins and flow paths reflected the characteristics of the 2017 topographic data, therefore no changes or alterations were made to the geometry of the watershed parameters. The existing land use and land cover was developed based on the

2016 Bastrop Comprehensive Plan completed for the City of Bastrop using the Bastrop zoning parcels. Fully developed land use was determined based on the 2036 Bastrop Comprehensive Plan provided by the City of Bastrop and eliminates all vacant and agricultural space providing more residential and commercial space to accommodate a growing population. Maps of both the existing and fully developed land use are shown in **Exhibit 3 and 4** respectively.

A summary of the hydrologic methodology and procedures used in the hydrologic analysis of Gills Branch for the 1% Annual Chance of Exceedance (ACE) include:

- Unit hydrograph method: Snyder’s Unit Hydrograph
- Loss method: Initial and Constant Loss using Fort Worth District USACE Procedures
- Precipitation: NOAA Atlas 14 Precipitation-Frequency Atlas of the United States (2018)

A summary of the hydrologic parameters used for the existing conditions is shown in **Table 1**.

*Table 1: Existing Conditions Hydrologic Parameters*

Subbasin	Area (mi <sup>2</sup> )	Lag Time, T <sub>p</sub> (hr)	Peaking Coefficient	Initial Loss 1% ACE (in)	Constant Rate 1% ACE (in/hr)	% Impervious Cover
GB01	0.52	0.51	0.75	0.87	0.09	2.9
GB02	0.47	0.49	0.75	0.81	0.08	6.2
GB03	0.12	0.27	0.75	0.85	0.09	28.4
GB04	0.35	0.37	0.75	0.80	0.08	17.2
GB05	0.02	0.18	0.75	0.90	0.10	27.3
GB06	0.24	0.42	0.75	0.84	0.09	26.4
GB07	0.12	0.48	0.75	0.90	0.10	44.3
GB08	0.02	0.23	0.75	0.90	0.10	47.5
GB09	0.06	0.20	0.75	0.87	0.09	46.6
GB10	0.14	0.27	0.75	0.81	0.08	26.8
GB11	0.28	0.59	0.75	0.90	0.10	46.7
GB12	0.15	0.37	0.75	0.88	0.10	50.2
GB13	0.15	0.36	0.75	0.90	0.10	50.1
GB14	0.05	0.17	0.75	0.81	0.08	29.7
GB15	0.12	0.35	0.75	0.82	0.08	22.0
GB16	0.04	0.27	0.75	0.90	0.10	14.0

Hydrologic analysis of the fully developed conditions resulted in shorter lag times and increased impervious cover. A summary of the hydrologic parameters for the fully developed conditions is shown in **Table 2**.

Table 2: Fully Developed Conditions Hydrologic Parameters

Subbasin	Area (mi <sup>2</sup> )	Lag Time, T <sub>p</sub> (hr)	Peaking Coefficient	Initial Loss 1% ACE (in)	Constant Rate 1% ACE (in/hr)	% Imperv. Cover
GB01	0.52	0.41	0.75	0.87	0.09	30.4
GB02	0.47	0.40	0.75	0.81	0.08	30.8
GB03	0.12	0.24	0.75	0.85	0.09	43.7
GB04	0.35	0.31	0.75	0.80	0.08	41.2
GB05	0.02	0.13	0.75	0.90	0.10	64.1
GB06	0.24	0.35	0.75	0.84	0.09	50.0
GB07	0.12	0.44	0.75	0.90	0.10	54.2
GB08	0.02	0.23	0.75	0.90	0.10	50.2
GB09	0.06	0.18	0.75	0.87	0.09	56.0
GB10	0.14	0.20	0.75	0.81	0.08	60.5
GB11	0.28	0.57	0.75	0.90	0.10	49.8
GB12	0.15	0.36	0.75	0.88	0.10	51.9
GB13	0.15	0.36	0.75	0.90	0.10	52.1
GB14	0.05	0.13	0.75	0.81	0.08	61.1
GB15	0.12	0.26	0.75	0.82	0.08	58.2
GB16	0.04	0.22	0.75	0.90	0.10	37.7

Summary of the Atlas 14 duration and cumulative rainfall totals for the 1% ACE event can be found in **Table 3**. These totals are centered based on the centroid of Bastrop County.

Table 3: Bastrop County 1% ACE Atlas 14 Rainfall Depths

5-min	15-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
1.15	2.29	4.29	5.82	6.89	8.77	10.6	12.60

### Results

Peak flows of the 1% ACE were evaluated and compared for existing and fully developed watershed conditions. There was an overall 5% average increase in peak discharges and an average 5% volume increase for the 1% ACE results. These increases are dependent of the faster lag times and the increase in impervious cover. The existing and fully developed hydrology was used to support the 2D overflow model created to analyze overland flooding issues caused by Gills Branch in the downtown district in the City of Bastrop and development of flood mitigation solutions.

## Hydraulics

### Model Development

The 1D/2D hydraulic model for Gills Branch was developed using Infoworks ICM 8.0.2. ICM provides detailed hydraulic computations using dynamic 2D modeling for complex overland flows. The 1D portion of the model consists of the Gills Branch channel and its immediate overbanks as well as any structures such as culverts and bridges along the creek. Overflow from each of these creeks was modeled using 2D methods which allows the flow to travel in multiple directions.

1D hydraulic cross sections were truncated at the high bank and imported from the HEC-RAS model developed as part of the *2018 Study*. Cross section station-elevation data were updated based on 2017 LiDAR except for surveyed information within the channel. The 2017 LiDAR generally confirmed the elevations of the previous dataset; however, some areas showed lower elevations. A cross section showing the comparisons between the old terrain and the 2017 LiDAR is shown below in **Figure 2**.

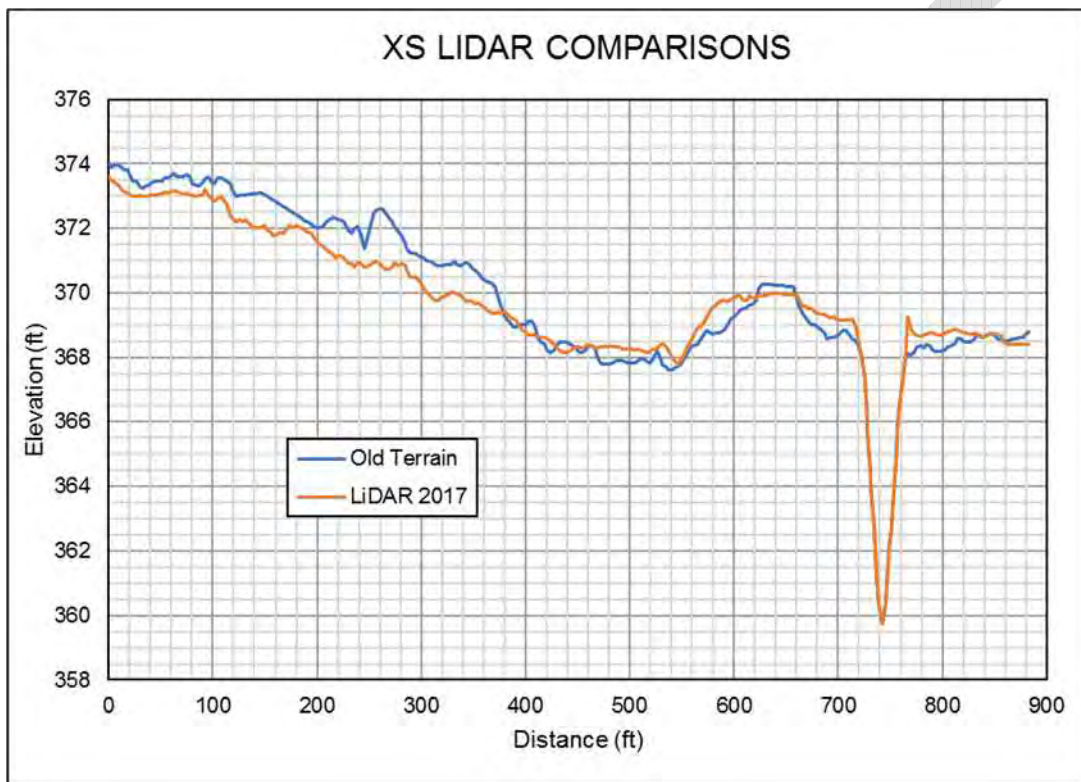


Figure 2: XS LiDAR Comparisons

Bank lines connect the 1D hydraulic cross sections to the 2D overflow regions allowing flow to leave the main channel. Bank lines were generally drawn along the channel high bank. Culvert and bridge data from the HEC-RAS model was used to model the crossings in ICM. Culvert crossings were blocked out of the 2D mesh and roadway overflows were modeled as a weir structure similar to the HEC-RAS culvert calculations.

The 2D mesh in ICM consists of a collection of triangular cells with an assigned elevation based on the terrain. Cell size limits were adjusted to capture better detail and breaklines were added to model drastic elevations changes at certain areas such as roadway curbs, the railroad, and roadside ditches. In addition, roughness values were assigned to the mesh based aerial imagery and typical 2D roughness value parameters. A map of the roughness values used in the ICM model is shown in **Exhibit 5**. Overland Manning’s n-values ranged from 0.02 (roadways) to 0.1 (woods).

Building footprints were digitized in GIS and removed from the system using the voids feature in InfoWorks. This approach allows the model to calculate depths adjacent to the structures as well as determine flow patterns around structures that might be in flooded areas. **Figure 3** shows a sample layout of the Gills Branch hydraulic model. A map of Infoworks ICM hydraulic layout is shown in **Exhibit 6**.

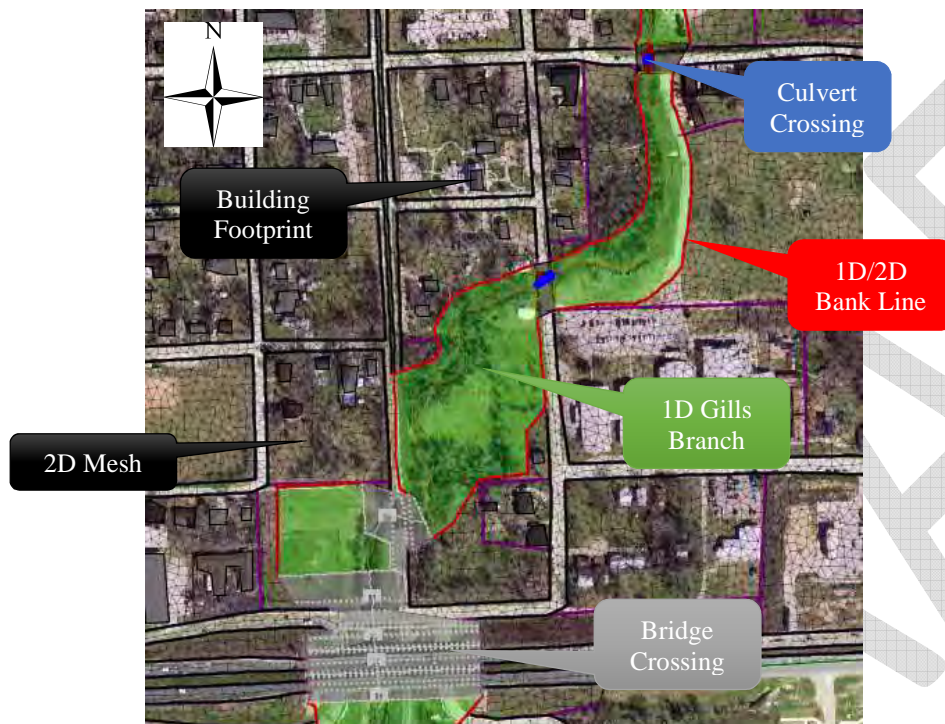


Figure 3. 1D/2D Infoworks ICM Layout

### Flow Applications

Inflows from the hydrology model were assigned based on the location of the drainage basin. As with traditional riverine hydraulics, flows are applied directly to the creek and runoff unable to be conveyed in the creek spills into the overbanks. Depending on the drainage basin location, flows were applied at either nodes (stream junctions) or river reaches (lateral inflows). **Table 4** shows the subbasin name and the respective ICM element.

Table 4: Flow Applications

HMS Node	ICM Element	Element Type
J_GB02	Gills_Branch_US	Node
GB03	TX95_DS.1	River Reach
GB04	Chestnut_DS.1	River Reach
GB05	PineStreet_DS.1	River Reach
GB06	MLK_US	Node
J_GB08	MLK_DS.1	River Reach
GB09	Railroad_DS.1	River Reach
GB10	East71_DS.1	River Reach
J_GB13	GillsBranch_US1	Node
GB14	GillsBranch_US1.1	River Reach
GB15	GillsBranch_US2	Node
GB16	GillsBranch_US2.1	River Reach

### Validation

The existing conditions model was validated with historical flooding information to confirm model results. The model was simulated with the USGS rainfall to match with the existing HEC-RAS model from the FPP study and areas noted by the City. The City noted certain areas within Bastrop that were inundated during intense storm events. One area was near the intersection of Hills St. and Emile St. where it was reported as much as 3 feet of ponding occurred in several buildings. The ICM model confirmed that buildings in this area had ponding up to 3 feet, consistent with the City reports.

Another area of validation was along Newton St which also reported up to 3 feet of ponding. By modeling the local drainage culverts along the railroad, the ICM model confirmed the 3 feet of ponding which was caused by backup from the railroad culverts. The City also reported extensive erosion downstream of SH 71. The ICM model shows velocities reach up to 20 feet per second for the 1% ACE storm event. The high velocities were likely a source of the erosion. The historical flooding observations validated the results of the hydraulic model.

### Results

Once the existing conditions were developed and validated with historical observations, the model was simulated for the 1% ACE USGS inflows as prepared in the 2018 Study as well as the Fully Developed 1% ACE flows and the NOAA Atlas 14 1% ACE flows. The hydraulic model confirmed the flow patterns noted in the 2018 Study and provided depth and velocities for the overflow regions west of the railroad.

The results showed overflows extended from the creek to the east to Pecan St. to the west. The existing Gills Branch channel has capacity for approximately 1,200 cfs. Depths in the channel range from 8 to 12 feet deep with channel velocities ranging from 3 to 20 feet per second. Flows greater than the capacity begin to spill west towards the railroad then south to SH 71. Overbank depths ranged from 3 inches to 3 feet with velocities ranging from 1 to 7 feet per second. Ponding maps of USGS 1% ACE, Fully Developed 1% ACE and Atlas 14 1% ACE conditions are shown in **Exhibits 7, 8 and 9** respectively.

Much of the overflow from Gills Branch occurs in the area between TX-95 and Chestnut St. The time-varying data provided from the model showed that flow overtops the bank and flows west through the streets and buildings. Eventually the excess flow overtops the UPP Railroad and is conveyed downstream towards MLK Dr. and the railroad bridge. Near the bridge, the flow re-enters Gills Branch. **Table 5** summarizes the flows leaving Gills Branch between the crossings for the simulated storm events. A map of the overflows from the USGS 1% ACE event is shown in **Exhibit 10**.

*Table 5: 1% ACE Existing Conditions Overflow from Gills Branch*

Overflow Area	USGS 1% ACE Flows (cfs)	Fully Developed 1% ACE Flows (cfs)	Atlas 14 1% ACE Flows (cfs)
TX-95 to Farm St	1394	1685	1349
Farm St to Chestnut St	707	765	691
Chestnut St to Pine St	264	1639	397
Pine St to MLK Dr	59	28	19
MLK Dr to Railroad	-476*	-643	-541
Railroad to College St	-803*	-902	-788

\*A negative value indicates runoff is spilling back into the Gills Branch Channel

Gills Branch passes through culverts and bridges at major roadway crossings. A table of water surface elevations at the road crossings is located below in **Table 6**. The table shows many of the road crossings create high head losses in the creek which contribute to ponding throughout the basin. Improvements to the crossing will be needed to improve the capacity of the creek and reduce the ponding within the basin.

*Table 6: 1% ACE USGS Water Surface Elevations at Road Crossings*

Crossing	USGS 1% ACE WSEL (ft)		Fully Developed 1% ACE Flows (cfs)		Atlas 14 1% ACE Flows (cfs)	
	U/S	D/S	U/S	D/S	U/S	D/S
TX-95	389.38	387.67	390.07	387.87	389.16	387.59
Farm Street	376.37	374.61	376.57	374.67	376.31	374.59
Chestnut Street	371.35	370.81	371.48	370.93	371.29	370.75
Pine Street	369.26	368.12	369.41	368.22	369.18	368.06
MLK Dr	363.43	363.03	363.56	363.12	363.35	362.97
Railroad Bridge	358.07	357.34	358.3	357.6	358.01	357.31
Highway 71 West	354.47	354.1	354.69	354.32	354.42	354.05
Highway 71 East	354.1	352.48	354.32	352.66	354.05	352.41
Lovers Lane	348.89	347.03	349.02	347.16	348.84	346.99

Several intersections near Gills Branch were analyzed to determine the ponding depths of the overflow areas at various locations and the results are tabulated in **Table 7**. These results will be used to compare the results of the recommended improvements. Ponding depths in the overflow areas range from 0.11 to 2.25 at varying intersections.

Table 7: 1% ACE Intersection Ponding Depths

Intersection	USGS 1% ACE Ponding Depths (ft)	Fully Developed 1% ACE Flows (cfs)	Atlas 14 1% ACE Flows (cfs)
Farm & Haysel	1.79	1.96	1.73
Farm & Railroad	1.15	1.22	1.13
Spring & Haysel	2.3	2.44	2.25
Chestnut & Haysel	1.57	1.67	1.53
Chestnut & Railroad	0.25	0.27	0.24
Pine & Haysel	1.44	1.52	1.42
Pine & Railroad	0.12	0.15	0.11
Pine & MLK	0.79	0.86	0.74
Walnut & Haysel	1.35	1.42	1.32
Walnut & MLK	0.75	0.82	0.71

The source of the extensive ponding throughout the City is twofold. The first source is runoff from drainage basins upstream of SH 95 and the second is lack of channel capacity of Gills Branch. The upstream drainage basins contribute 3,000 cfs to the creek downstream of SH 95. Since Gills Branch only has capacity of 1,200 cfs, most of the upstream flow spills west toward the railroad. Improvements to the creek are needed to contain the higher flow rates and prevent the overflows.

### Flood Mitigation Solutions

Several flood mitigation options were explored to reduce the overflow of Gills Branch. These options included road crossing improvements, detention, diversions, and channel improvements. The Atlas 14 rainfall with fully developed land use conditions was used to evaluate the benefit of the improvement.

Several options were found to show no reduction in flooding risk or were deemed unfeasible due to construction constraints. These options include railroad bridge improvements, detention and storm sewer diversions. Bridge improvements were initially explored for the railroad bridge north of SH 71. Widening the bridge reduced the overall headloss of the structure; however, the improvements did not alter the floodplain extents upstream of the railroad. Therefore, the improvement option was abandoned. Offline detention near Pine St. and SH 95 was also explored and was shown to provide no significant reduction in flooding as the area does not provide enough volume to provide benefit. A diversion outfalling from Gills Branch to the Colorado River along with significant inline detention upstream of Farm St was analyzed and was determined to provide substantial flooding reduction. While flooding was reduced, this option was deemed infeasible due to construction constraints and potential costs.

Channel and crossing culvert improvements were found to be the most effective at reducing ponding. Major head losses were present at several culvert structures within Gills Branch. Replacing the crossings with single span bridge structures reduces the headloss and increases the capacity through the crossings. Channel improvements increase the capacity of the creek containing higher runoff rates. Channel improvements proposed include benching the channel above the ordinary high water mark to minimize environmental permitting needs. A typical cross section of the channel improvements is shown below in **Figure 4**.



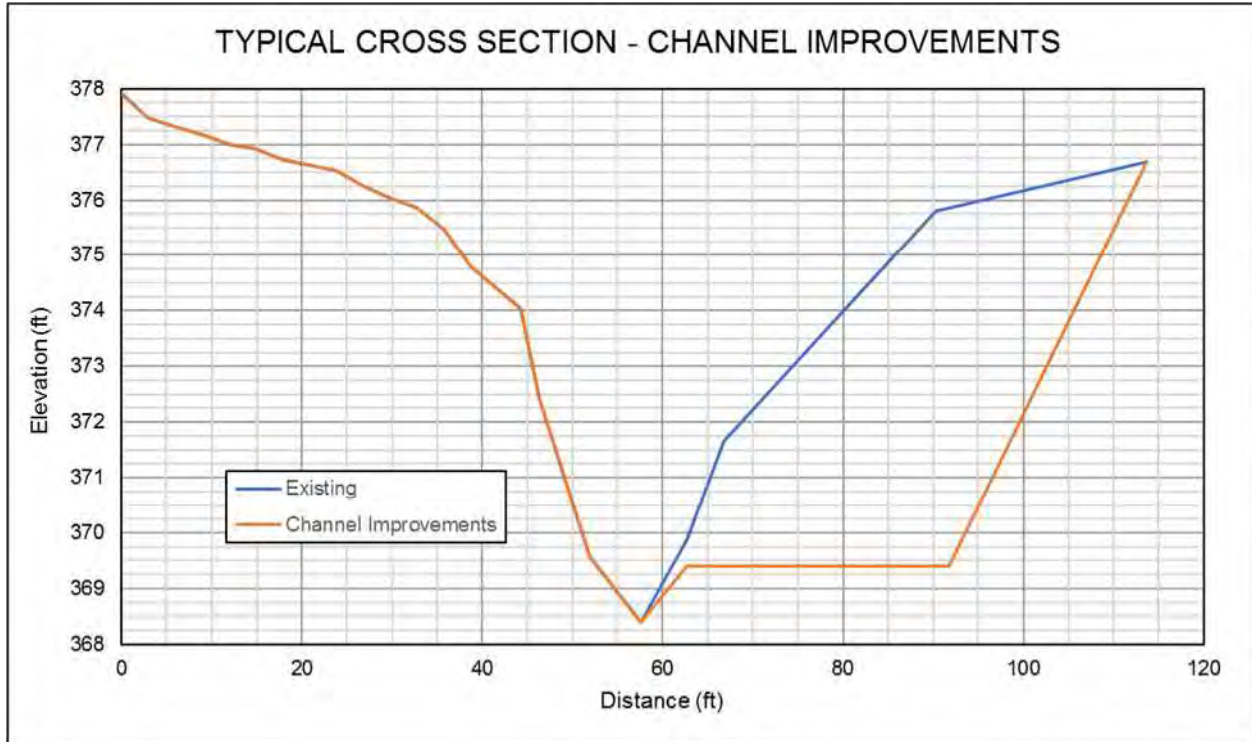


Figure 4: Typical Cross Section

Due to the length of the proposed improvements, the project is divided into three phases for implementation. Each phase consisted of channel improvements and culvert replacements as previously mentioned in the report. Each phase would be built subsequently in that the final phase of Phase 3 would consist of both Phase 1 and Phase 2. The proposed improvements are phased beginning downstream to upstream along Gills Branch to prevent adverse impacts. A figure of the channel improvements phasing is shown below in **Figure 5**.

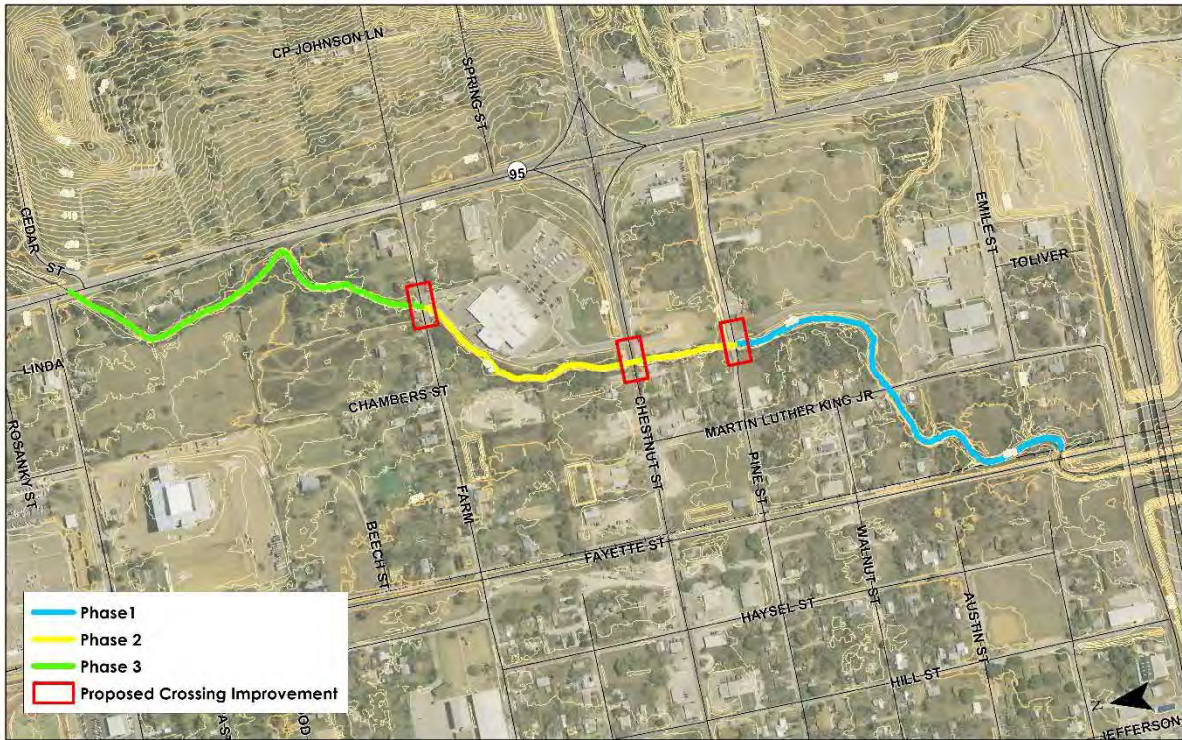


Figure 5: Channel Improvement Phases

### Phase 1 Improvements

The proposed improvements for Phase 1 consisted of channel improvements between Pine St. and the railroad bridge just upstream of Highway 71. The channel improvements consist of grass-lined benched sections on both banks of the channel between Pine St. and MLK Dr. and grass-lined benched section on the left bank of the channel between MLK Dr. and the railroad bridge. Channel improvements were not placed immediately downstream of MLK Dr. due to the presence of historical homes within the area. These improvements were placed to convey the increased discharge from the future phased improvements upstream of Pine St. The cost of the Phase 1 improvements is approximately \$975,000. The Phase 1 improvements and ponding extents are shown on **Exhibit 11**.

### Phase 2 Improvements

The proposed improvements for Phase 2 consisted of channel improvements between Farm St. and Pine St. as well as culvert replacements for both Chestnut St. and Pine St. The channel improvements are comprised of a grass-lined benched channel sections on the right bank of the channel between Farm St and Chestnut St. Between Chestnut St. and Pine St. the channel will consist of benched sections and retaining walls due to the limited right-of-way.

For the culvert replacements, the 3-10'x8' RCBs and 3-9'x8' RCBs at Chestnut St and Pine St respectively are proposed to be replaced with single span bridge improvements to improve conveyance in the channel.

The combined Phase 1 and Phase 2 improvements show a reduction in ponding in the City. The cost of the Phase 2 improvements is approximately \$2.29 million. The Phase 2 improvements and ponding extents are shown on **Exhibit 12**.

*Phase 3 Improvements*

The proposed improvements for Phase 3 consisted of channel improvements between TX-95 and Farm St with a culvert replacement at Farm St. The channel improvements consists of grass-lined benched sections on the right bank of the channel between TX-95 and Farm St. The existing 3-9’x9’ RCBs culvert structure was replaced with a single bridge span improvement to increase conveyance downstream in the channel. This phase of improvements in conjunction with the previous phased improvements reduce the inundation within the City. The cost of the Phase 3 improvements is approximately \$1.04 million. The Phase 3 improvements and ponding extents are shown on **Exhibit 13**.

The cost estimates for each phase and the total improvements is shown below in **Table 8**. Detailed cost estimates for each phase is located in **Appendix B**.

*Table 8: Improvements Cost Estimates*

<b>Improvements</b>	<b>Cost (\$)</b>
Phase 1	\$975,000
Phase 2	\$2,292,000
Phase 3	\$1,041,000
<b>Total</b>	<b>\$4,308,000</b>

*Improvement Results*

Each channel improvement phase was simulated to analyze the impacts of each phase and the reduction of ponding within the City. While improvements were simulated for each phase, results from the Phase 3 improvements are shown since this phase reflects the completed proposed improvements. A comparison of water surface elevations of the existing conditions model and the proposed improvements at each crossing is shown below in **Table 9**.

Table 9: Existing & Mitigated Crossing WSELs

Crossing	Existing		Mitigated		Difference	
	U/S WSEL (ft)	D/S WSEL (ft)	U/S WSEL (ft)	D/S WSEL (ft)	U/S WSEL (ft)	D/S WSEL (ft)
TX-95	389.38	387.67	388.18	386.53	-1.20	-1.14
Farm Street	376.37	374.61	376.65	373.15	0.28	-1.46
Chestnut Street	371.35	370.81	372.29	371.02	0.94	0.21
Pine Street	369.26	368.12	368.52	367.34	-0.74	-0.78
MLK Dr	363.43	363.03	363.86	363.15	0.43	0.12
Railroad Bridge	358.07	357.34	359.30	358.76	1.23	1.42
Highway 71 West	355.43	354.1	357.71	356.72	2.28	2.62
Highway 71 East	354.1	352.48	356.72	355.65	2.62	3.17
Lovers Lane	348.89	347.03	349.70	347.93	0.81	0.90

**Table 9** shows reductions in waters surface elevations within channel on the upstream portion of Gills Branch and higher water surface elevations on the downstream of MLK Dr. These reductions and increases are attributed to the improvements increasing conveyance in Gills Branch. As the flow increases moving downstream, higher water surface elevations are shown downstream of MLK Dr. While higher water surface elevations are present within Gills Branch, no adverse impacts were present outside the creek banks.

Overflow from Gills Branch was also reduced as a result of the proposed improvements. The overflow from the right bank of Gills Branch was indicated as a key contributor to flooding within the City. With implementation of the improvements, overflow from Gills Branch is reduced significantly, diminishing the ponding within the City. A table of comparisons between the existing and mitigated conditions is shown below in **Table 10**.

Table 10: 1% ACE Existing vs Mitigated Overflows

Overflow Area	Existing Flow (cfs)	Mitigated Flow (cfs)	Flow Reduction (cfs)
TX-95 to Farm St	1394	6	-1388
Farm St to Chestnut St	707	43	-664
Chestnut St to Pine St	264	116	-148
Pine St to MLK Dr	59	24	-35
MLK Dr to Railroad	-476	-99	377
Railroad to College St	-803	131	934

**Table 10** shows that flow leaving from Gills Branch between TX-95 and Farm St is lowered considerably, especially in the areas between TX-95 to Chestnut St. Within the areas of the proposed improvements, flow leaving Gills Branch is reduced from a total of approximately 2,400 cfs to 189 cfs. Flow leaving is increase significantly in between the UPRR railroad bridge and College St due to the increased conveyance as a result of the proposed improvements. While an increase is observed as a result of these improvements, no structures are adversely impacted as a result.

In addition to analyzing the impacts within Gills Branch and the overflow conditions, results were compared to the intersection ponding depths from the existing conditions. A table of comparisons between the existing and mitigated conditions for the intersection ponding depths is shown below in **Table 11**. The table shows that ponding depths in the overbanks are eliminated or significantly reduced as the ponding is contained within the creek.

*Table 11: Existing vs Mitigated Ponding Intersection Depths*

Intersection	Existing 1% ACE Ponding Depths (ft)	Mitigated 1% ACE Ponding Depths (ft)	Ponding Reduction (ft)
Farm & Haysel	1.79	0.00	-1.79
Farm & Railroad	1.15	0.00	-1.15
Spring & Haysel	2.3	0.00	-2.30
Chestnut & Haysel	1.57	0.00	-1.57
Chestnut & Railroad	0.25	0.00	-0.25
Pine & Haysel	1.44	0.00	-1.44
Pine & Railroad	0.12	0.00	-0.12
Pine & MLK	0.79	0.40	-0.39
Walnut & Haysel	1.35	0.00	-1.35
Walnut & MLK	0.75	0.28	-0.47
Austin & Haysel	1.98	0.00	-1.98

## Conclusions

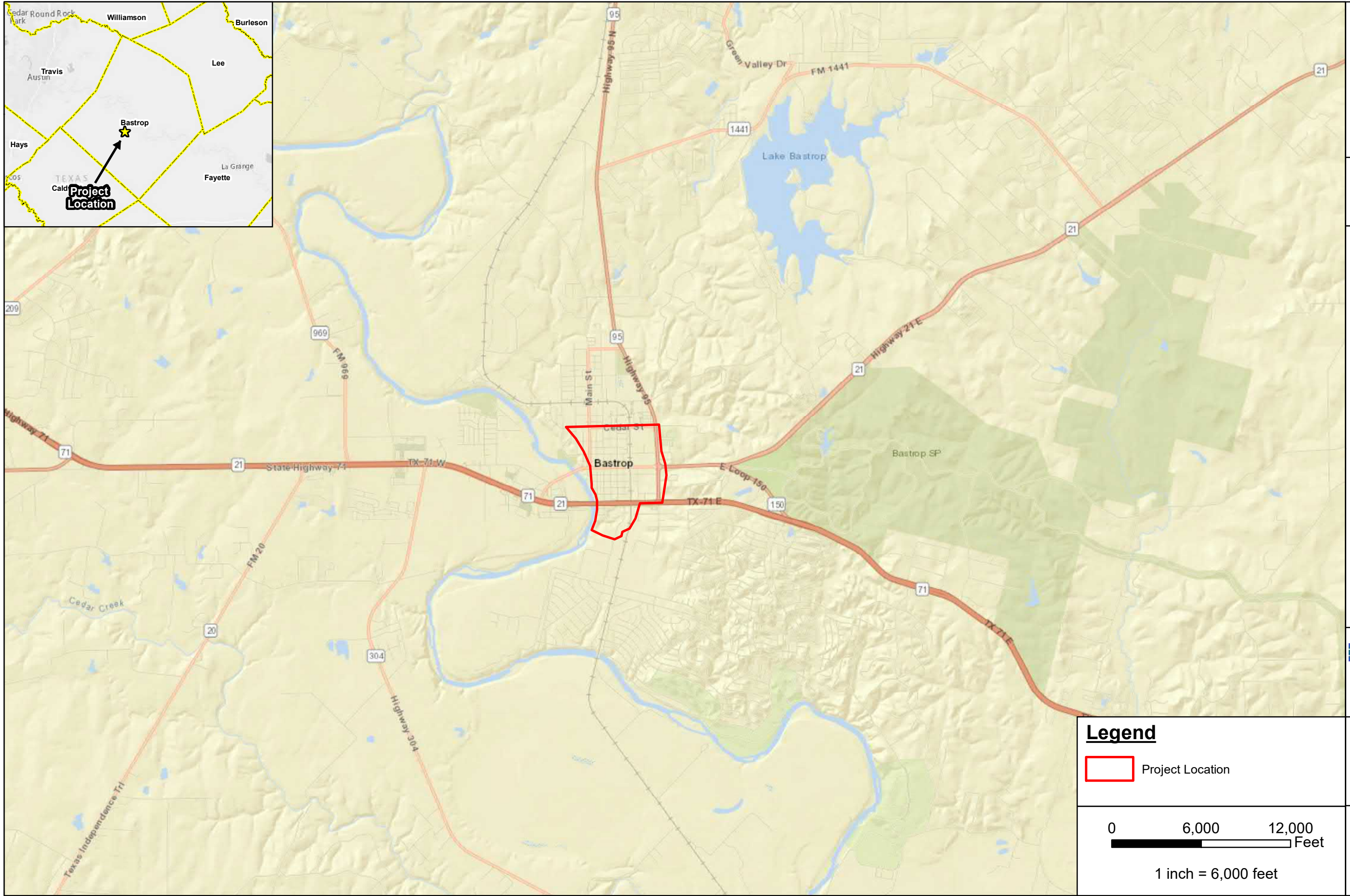
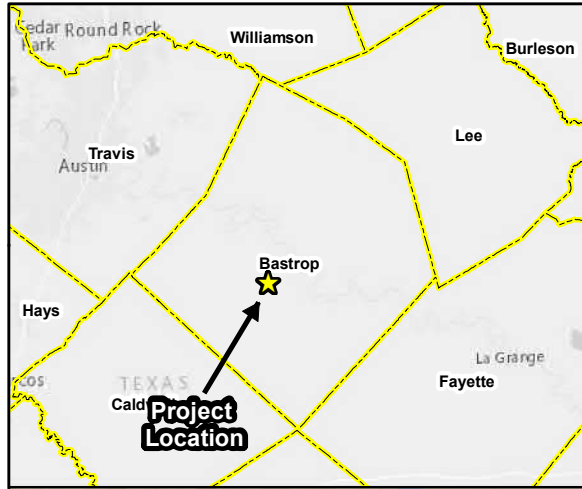
Gills Branch causes significant ponding impacts within the City as a result of the overflow conditions from the creek. Flows from upstream of Bastrop are conveyed in the creek to the outfall at the Colorado River. The existing creek has capacity for approximately 1,200 cfs and when exceeded, flows are conveyed west to the railroad and through the neighborhood streets. Improvements to the creek channel and crossing structures are required to reduce ponding in the City.

Channel and crossing structure improvements from TX-95 to the railroad reduce the ponding. The improvements are recommended to be implemented through three phases.

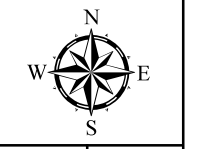
- Phase 1 – Channel benching from Pine St. to the railroad bridge crossing. The total cost to implement this phase of improvements is approximately **\$975,000**
- Phase 2 – Channel benching from Farm St. to Pine St. with vertical walls required between Chestnut St. and Pine St. Replacing existing culverts at Chestnut St. and Pine St. with single span bridges. The total cost to implement this phase of improvements is approximately **\$2,292,000**.
- Phase 3 – Channel benching from TX-95 to Farm St. Replacing existing culverts at Farm St. with single span bridge. The total cost to implement this phase of improvements is approximately **\$1,041,000**.

With the implementation of all phases of the proposed improvements, ponding caused by Gills Branch is reduced throughout the City. The total cost to implement all three phases is approximately **\$4,308,000**.

# APPENDIX A




PROJECT AVO  
35510  
DATUM & COORDINATE SYSTEM  
NAD 1983 StatePlane Texas Central FIPS 4203 Feet



City of Bastrop, Texas  
**Gillis Branch**  
**Vicinity Map**

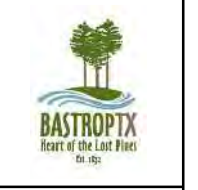
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**Legend**

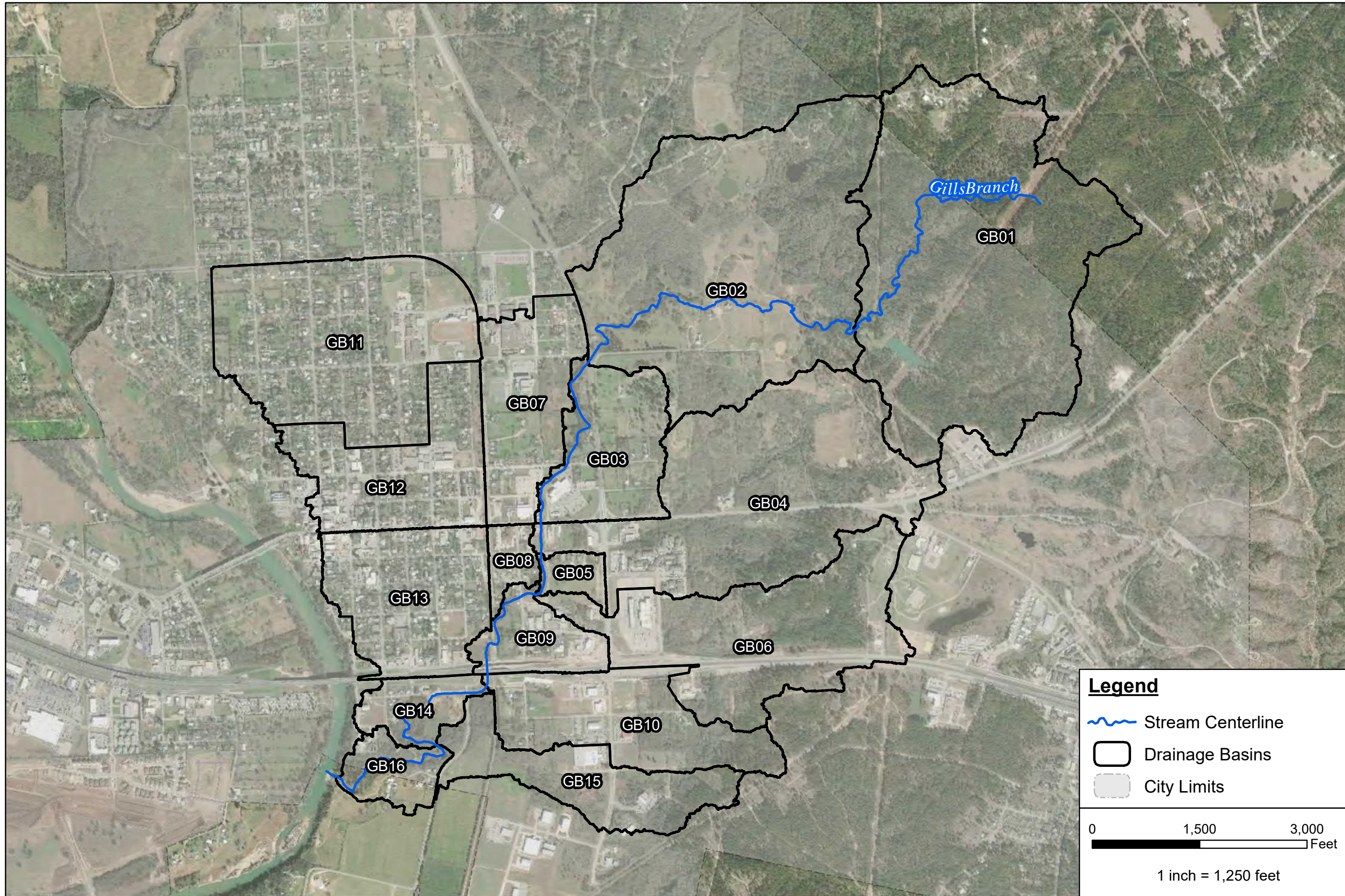
 Project Location

0 6,000 12,000 Feet

1 inch = 6,000 feet



**Exhibit**  
**1**

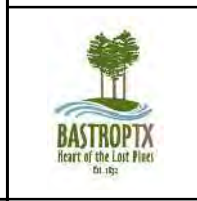


PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet



City of Bastrop, Texas  
 Gills Branch  
 Drainage Basins

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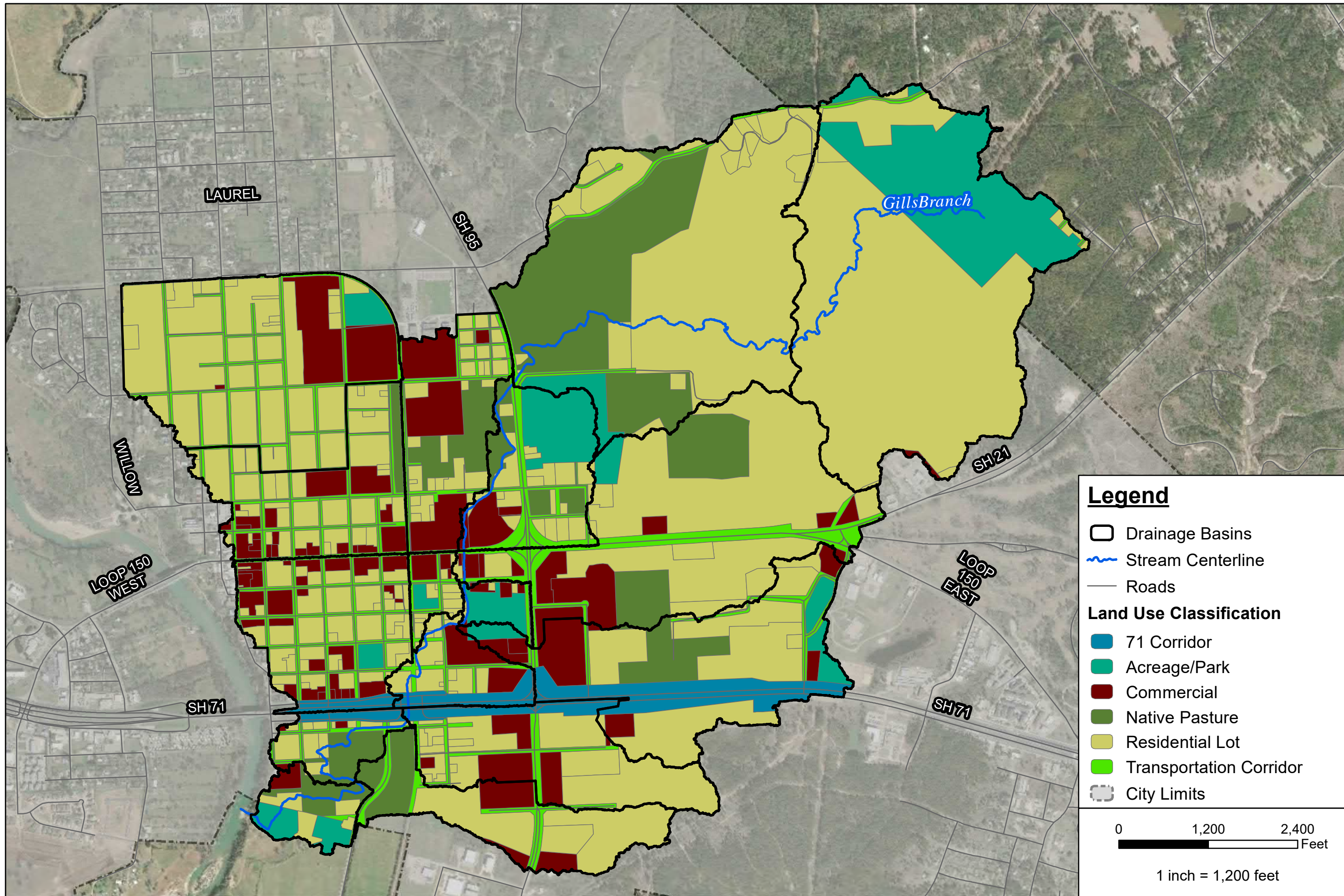
**Legend**

- Stream Centerline
- Drainage Basins
- City Limits

0 1,500 3,000 Feet  
 1 inch = 1,250 feet

**Exhibit 2**





**Legend**

- Drainage Basins
- Stream Centerline
- Roads

**Land Use Classification**

- 71 Corridor
- Acreage/Park
- Commercial
- Native Pasture
- Residential Lot
- Transportation Corridor
- City Limits

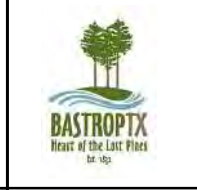
0 1,200 2,400 Feet  
1 inch = 1,200 feet

PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

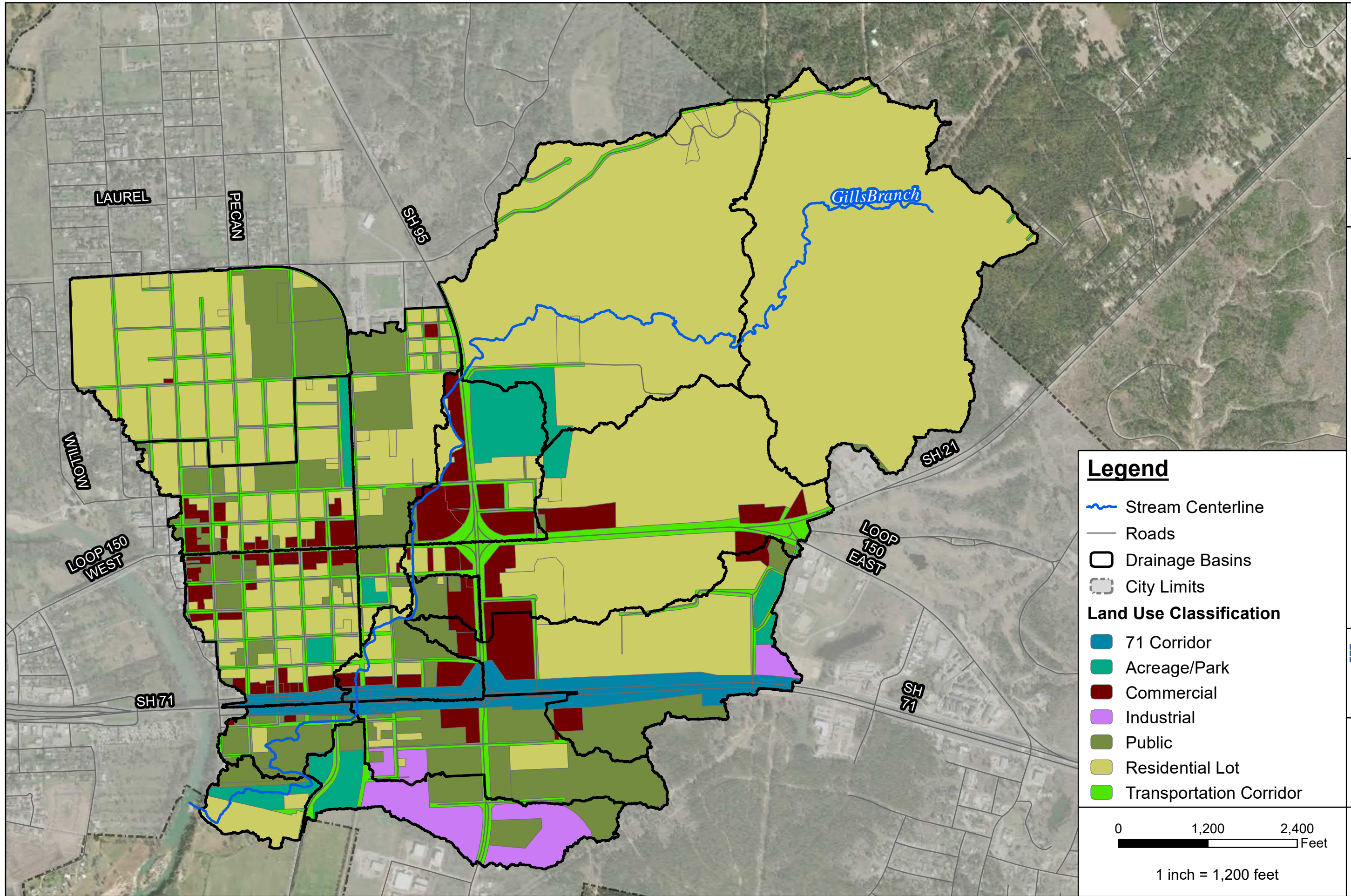
City of Bastrop, Texas  
 Gills Branch

**Existing Landuse Classification**

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**Exhibit 3**

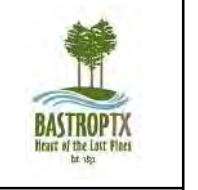


PROJECT AVO  
35510  
DATUM & COORDINATE SYSTEM  
NAD 1983 StatePlane Texas Central FIPS 4203 Feet

City of Bastrop, Texas  
Gills Branch

### Fully Developed Landuse Classification

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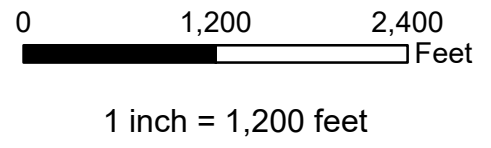


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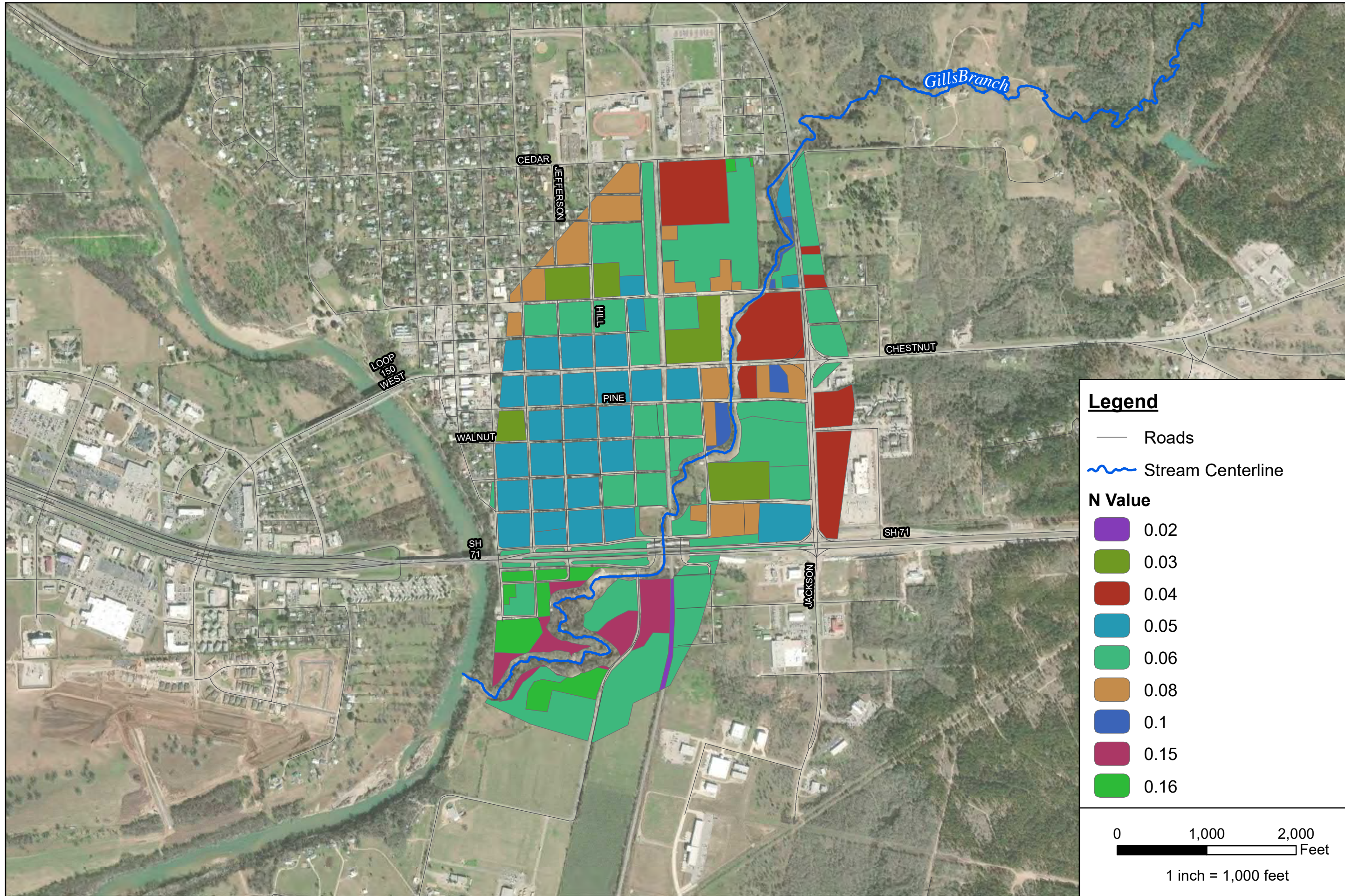
- Stream Centerline
- Roads
- Drainage Basins
- City Limits

**Land Use Classification**

- 71 Corridor
- Acreage/Park
- Commercial
- Industrial
- Public
- Residential Lot
- Transportation Corridor



**Exhibit**  
**4**

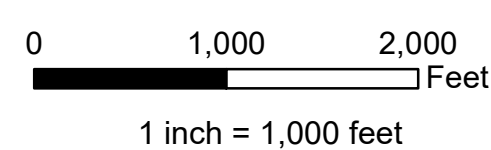


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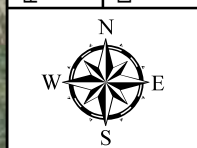
- Roads
- ~ Stream Centerline

**N Value**

- 0.02
- 0.03
- 0.04
- 0.05
- 0.06
- 0.08
- 0.1
- 0.15
- 0.16

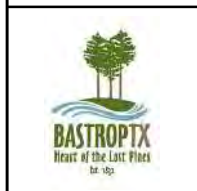


PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

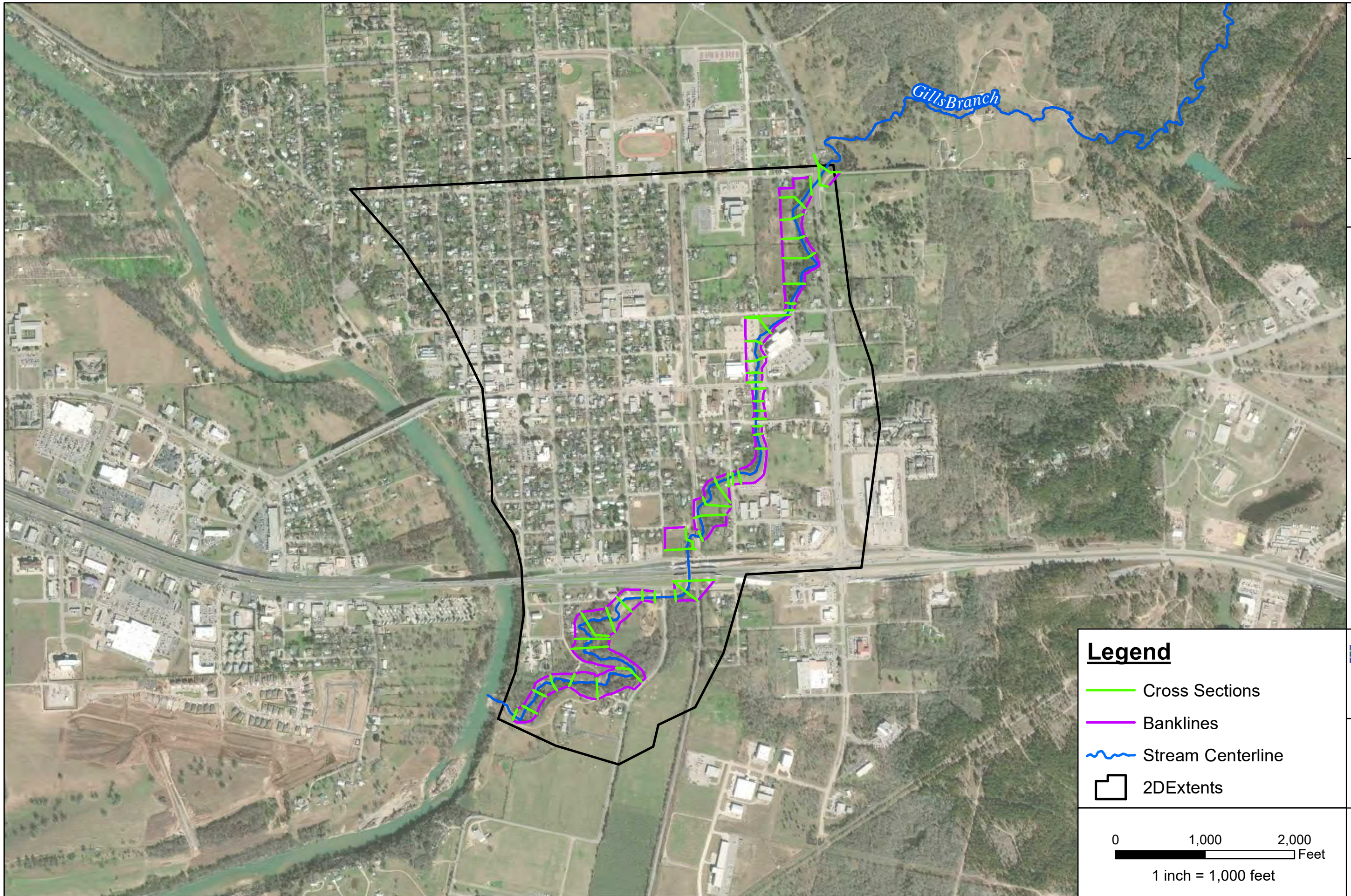


City of Bastrop, Texas  
 Gills Branch  
 Roughness Values

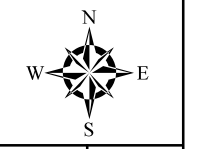
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**Exhibit 5**







PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

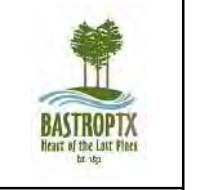


City of Bastrop, Texas  
**Gills Branch**  
**Hydraulic Layout**

**Legend**

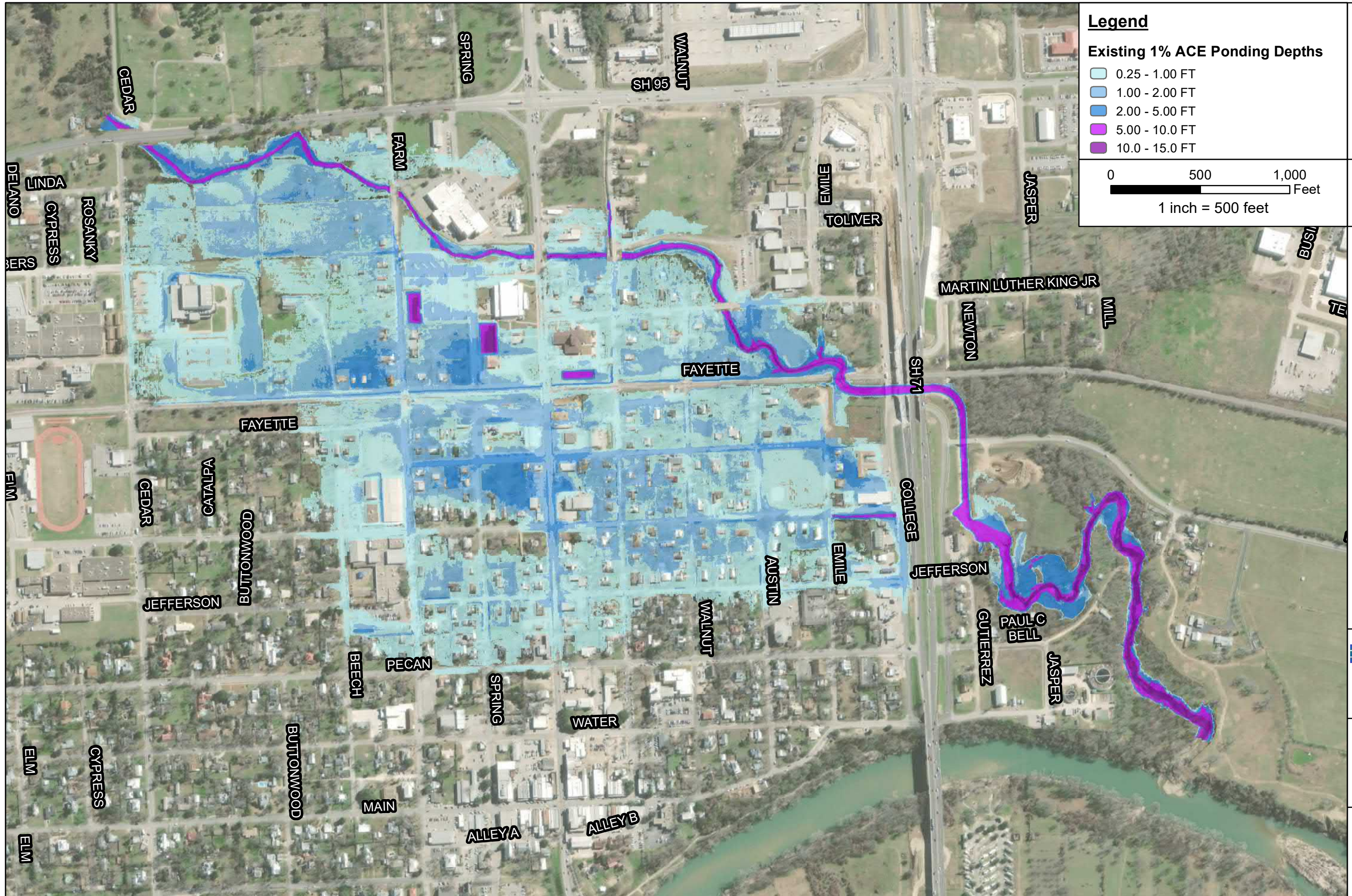
-  Cross Sections
-  Banklines
-  Stream Centerline
-  2D Extents

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0 1,000 2,000 Feet  
 1 inch = 1,000 feet

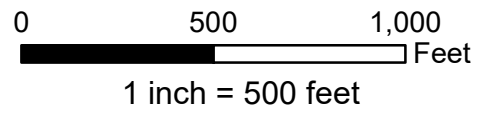
**Exhibit 6**



**Legend**

**Existing 1% ACE Ponding Depths**

- 0.25 - 1.00 FT
- 1.00 - 2.00 FT
- 2.00 - 5.00 FT
- 5.00 - 10.0 FT
- 10.0 - 15.0 FT



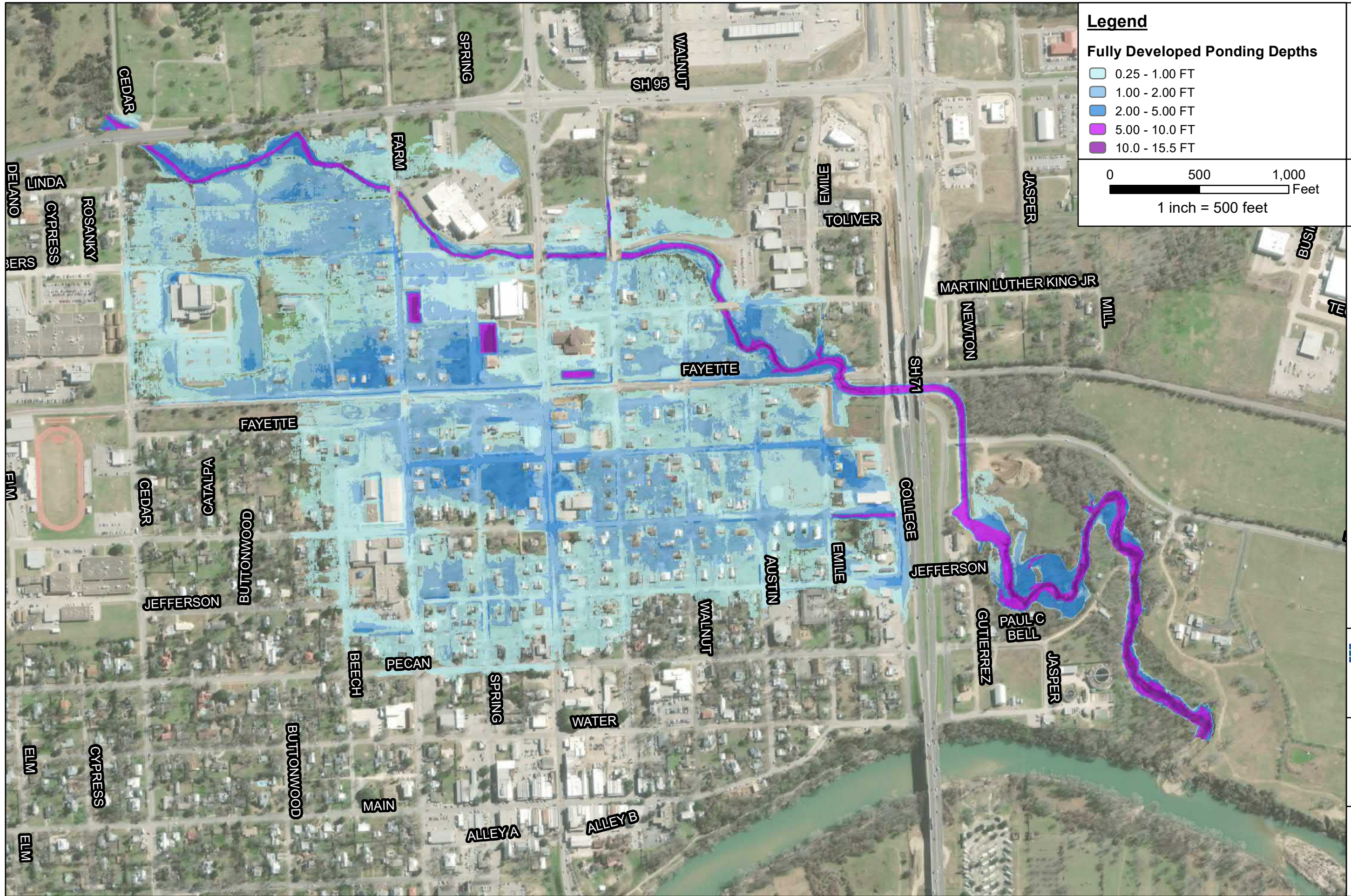
PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

City of Bastrop, Texas  
 Gills Branch

**Existing Condition 1% ACE**

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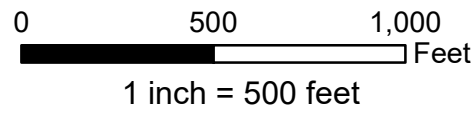
**Exhibit**  
 7



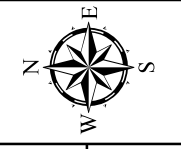
**Legend**

**Fully Developed Ponding Depths**

- 0.25 - 1.00 FT
- 1.00 - 2.00 FT
- 2.00 - 5.00 FT
- 5.00 - 10.0 FT
- 10.0 - 15.5 FT



PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

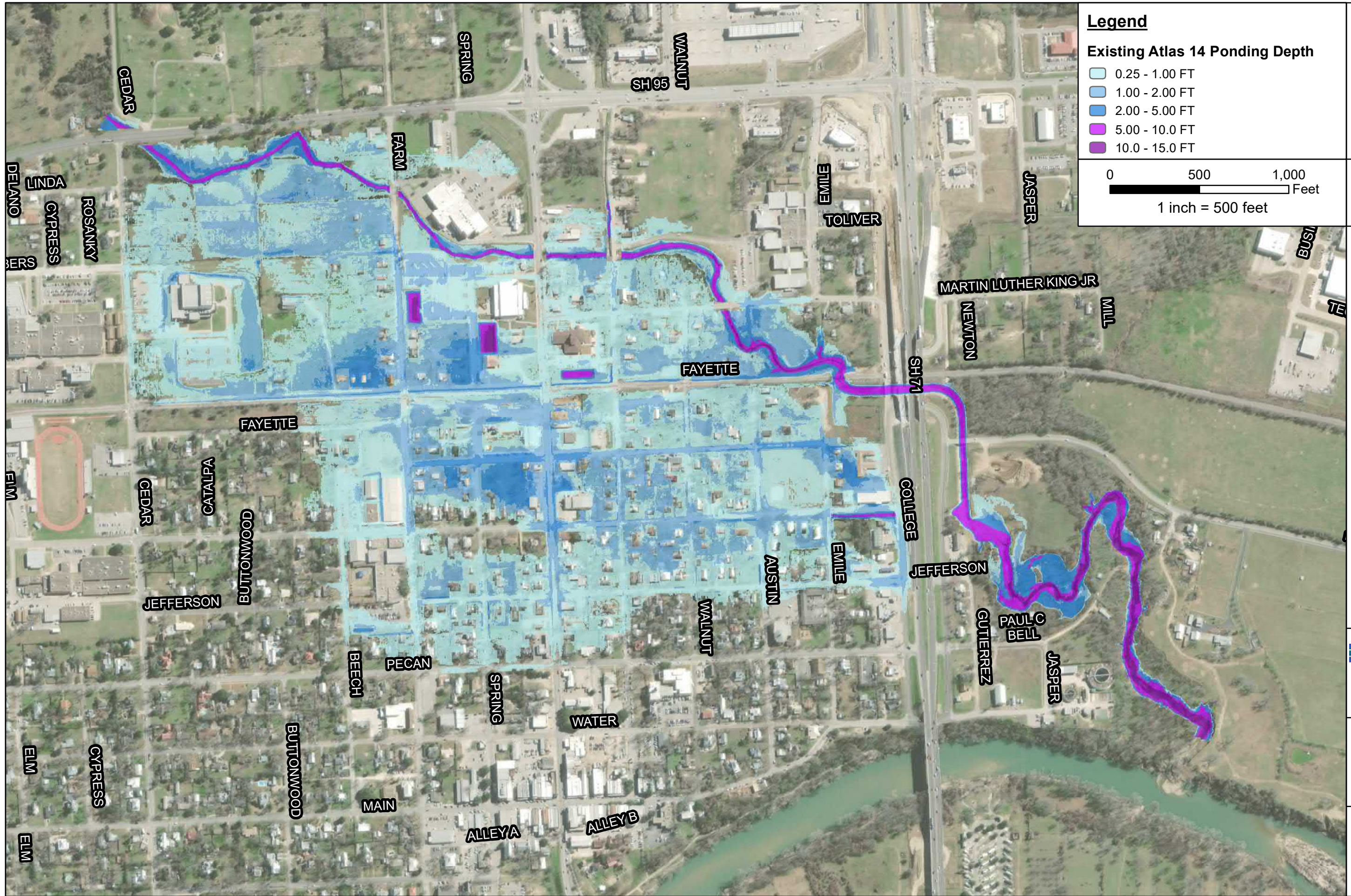


City of Bastrop, Texas  
 Gills Branch  
**Fully Developed Condition 1% ACE**

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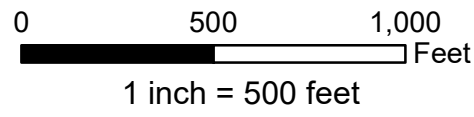
**Exhibit 8**



**Legend**

**Existing Atlas 14 Ponding Depth**

- 0.25 - 1.00 FT
- 1.00 - 2.00 FT
- 2.00 - 5.00 FT
- 5.00 - 10.0 FT
- 10.0 - 15.0 FT

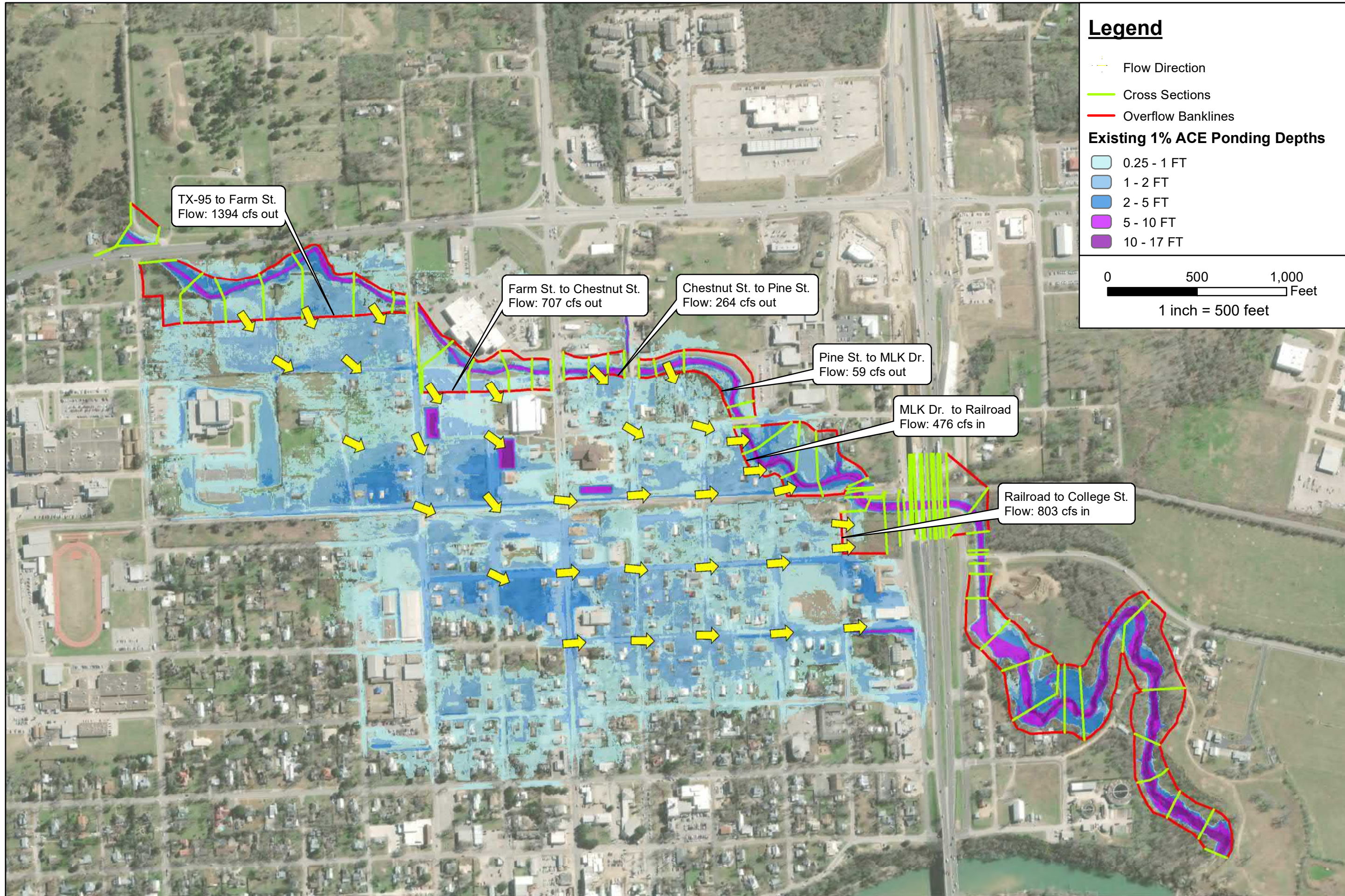


PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

City of Bastrop, Texas  
 Gills Branch  
**NOAA Atlas 14 1% ACE Depths**

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**Exhibit 9**



### Legend

- Flow Direction
- Cross Sections
- Overflow Banklines

#### Existing 1% ACE Ponding Depths

- 0.25 - 1 FT
- 1 - 2 FT
- 2 - 5 FT
- 5 - 10 FT
- 10 - 17 FT

0 500 1,000 Feet  
1 inch = 500 feet

PROJECT AVO 35510  
DATUM & COORDINATE SYSTEM  
NAD 1983 StatePlane Texas Central FIPS 4203 Feet

City of Bastrop, Texas  
Gills Branch

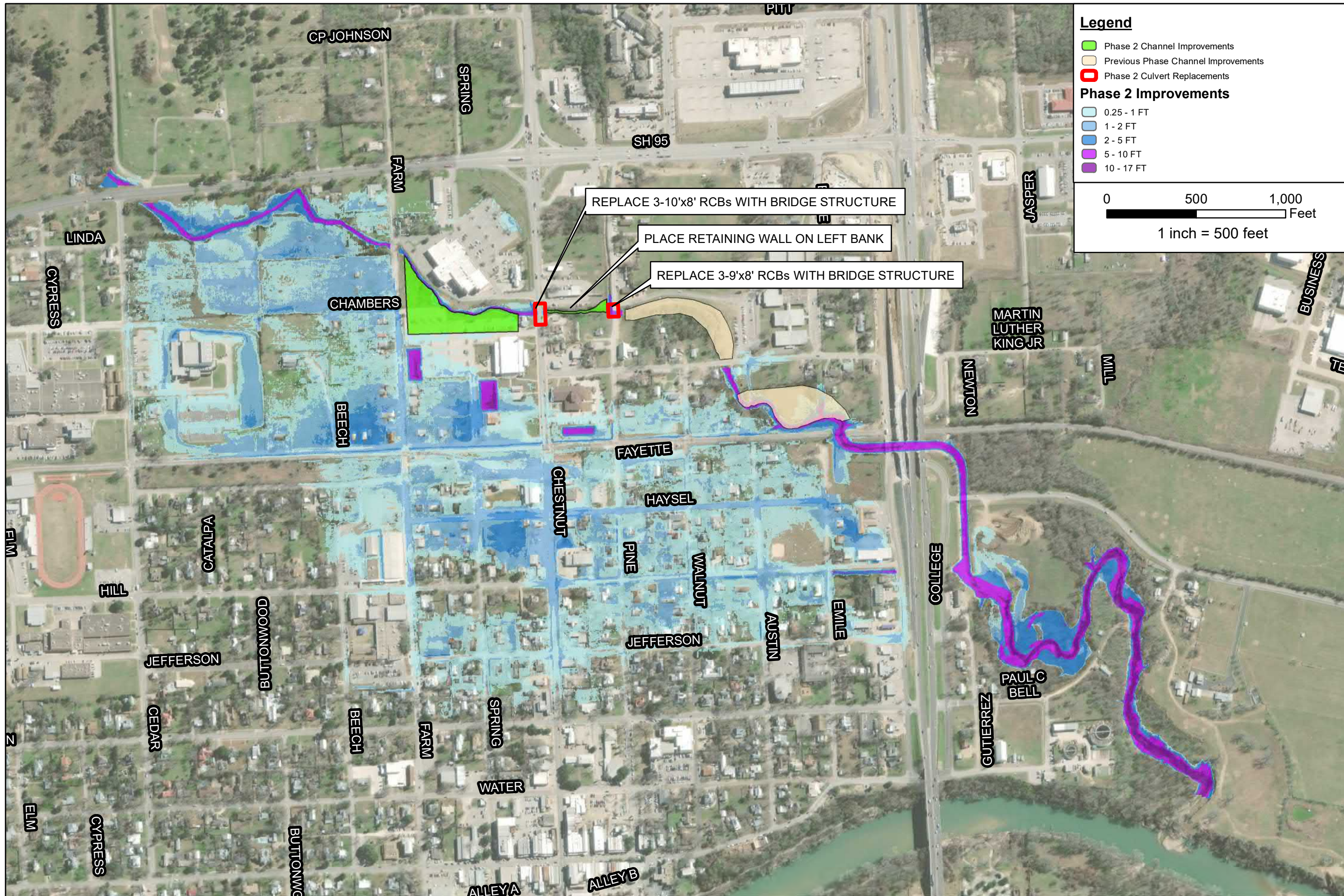
### Existing 1% ACE Storm Overflows

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**BASTROPTX**  
Heart of the Last Place  
EST. 1952

**Exhibit 10**



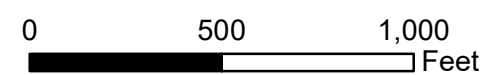


**Legend**

- Phase 2 Channel Improvements
- Previous Phase Channel Improvements
- Phase 2 Culvert Replacements

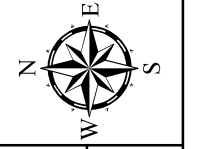
**Phase 2 Improvements**

- 0.25 - 1 FT
- 1 - 2 FT
- 2 - 5 FT
- 5 - 10 FT
- 10 - 17 FT



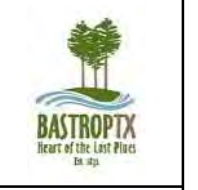
1 inch = 500 feet

PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet

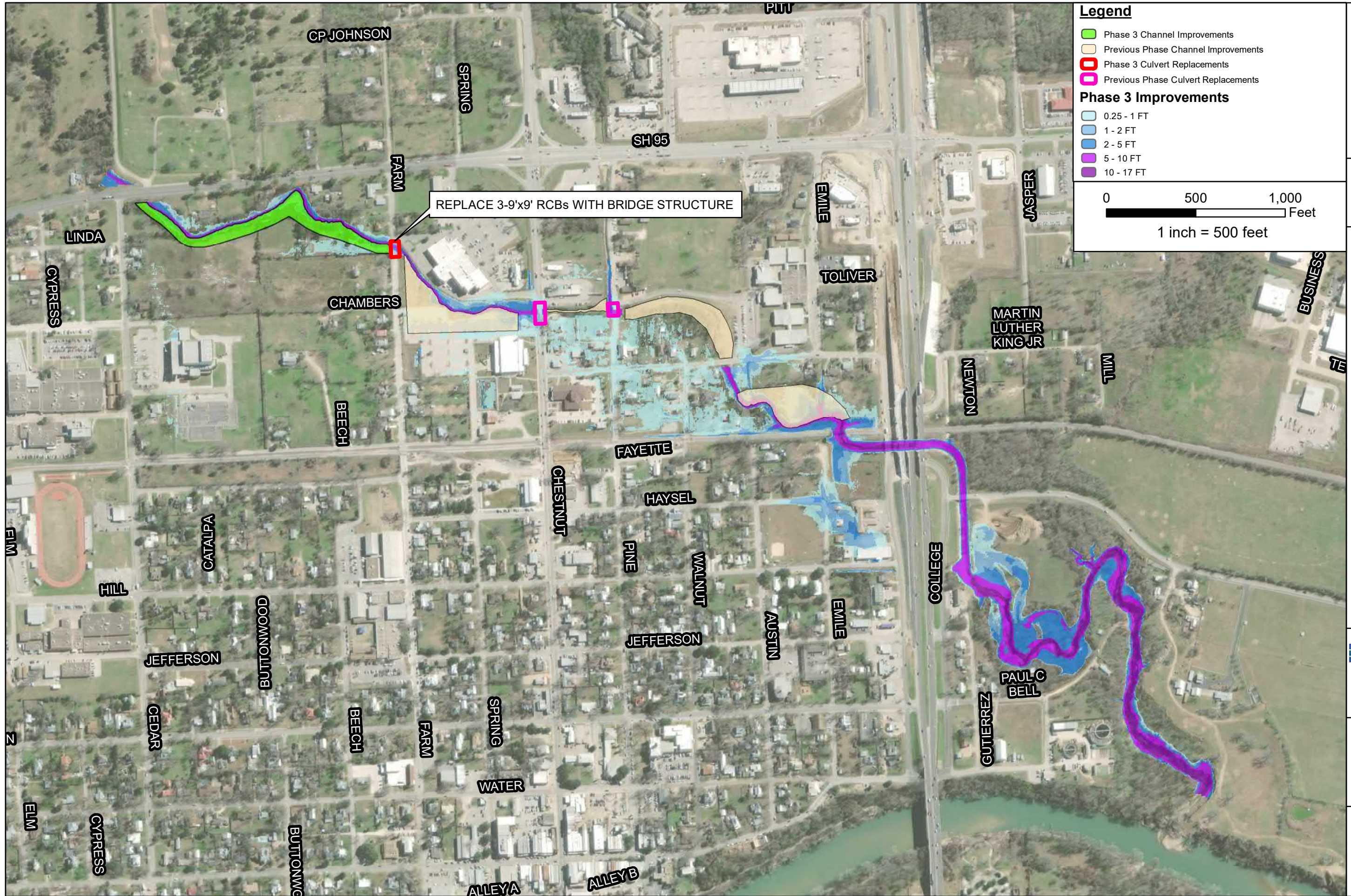


City of Bastrop, Texas  
 Gills Branch  
**Phase 2 Improvements**

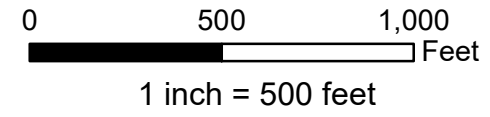
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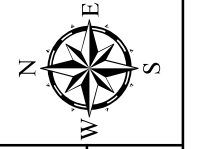
**Exhibit 12**



- Legend**
- Phase 3 Channel Improvements
  - Previous Phase Channel Improvements
  - Phase 3 Culvert Replacements
  - Previous Phase Culvert Replacements
- Phase 3 Improvements**
- 0.25 - 1 FT
  - 1 - 2 FT
  - 2 - 5 FT
  - 5 - 10 FT
  - 10 - 17 FT

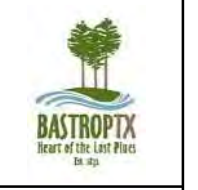


PROJECT AVO 35510  
 DATUM & COORDINATE SYSTEM  
 NAD 1983 StatePlane Texas Central FIPS 4203 Feet



City of Bastrop, Texas  
 Gills Branch  
**Phase 3 Improvements**

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**Exhibit 13**

# APPENDIX B



## ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

DATE: 3/20/2019

AVO: 35510

PROJECT: Gills Branch 2D Modeling Study

Alternative: Gills Branch Road Crossings and Channel Modifications (Phase 1)

PAY ITEM NO	DESCRIPTION	UNITS	UNIT PRICE	QUANTITY	SUB-TOTALS	
1	Clearing and grubbing	AC	\$ 8,000	3.68	\$ 29,440	
2	Channel Excavation	CY	\$ 11	49,150	\$ 540,646	
3	Culvert Removal	LF	\$ 20	0	\$ -	
4	Bridge Construction	SF	\$ 100	0	\$ -	
5	Hydromulch Seeding	SY	\$ 0.40	17,811	\$ 7,124	
6	Soil Retention Blankets	SY	\$ 2	17,811	\$ 35,622	
7	Care of Water	LS	\$ 20,000	1	\$ 20,000	
8	Temporary Erosion and Sediment Control (5%)	LS	\$ 32,000	1	\$ 32,000	
9	Mobilization (10%)	LS	\$ 64,000	1	\$ 64,000	
					<b>SUBTOTAL</b>	<b>\$ 728,833</b>
					<b>CONTINGENCY (20%)</b>	<b>\$ 145,767</b>
					<b>TOTAL PROJECT COST</b>	<b>\$ 874,599</b>
9	Channel Acquisition	AC	\$ 15,000		\$ -	
10	Engineering and Survey Fees (10%)	LS	\$ 90,000	1	\$ 90,000	
11	Regulatory Permitting (1%)	LS	\$ 10,000	1	\$ 10,000	
					<b>PROJECT GRAND TOTAL</b>	<b>\$ 974,599</b>

**Note: Estimate excludes any property acquisition required for the project as well as costs associated to the protection, relocation, & reconstruction of utilities.**

This statement was prepared utilizing standard cost estimate practices. It is understood and agreed that this is an estimate only, and the Engineer shall not be held liable to Owner or third party for any failure to accurately estimate the cost of the project, or any part thereof. Unit Prices are in current dollars and should be adjusted as required when schedule for project is determined.



## ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

DATE: 3/20/2019

AVO: 35510

PROJECT: Gills Branch 2D Modeling Study

Alternative: Gills Branch Road Crossings and Channel Modifications (Phase 2)

PAY ITEM NO	DESCRIPTION	UNITS	UNIT PRICE	QUANTITY	SUB-TOTALS
1	Clearing and grubbing	AC	\$ 8,000	2.65	\$ 21,200
2	Channel Excavation	CY	\$ 11	52,049	\$ 572,542
3	Culvert Removal (2 Road Crossings)	LF	\$ 20	214	\$ 4,280
4	Bridge Construction (2 Road Crossings)	SF	\$ 100	7,256	\$ 725,600
5	Hydromulch Seeding	SY	\$ 0.40	14,520	\$ 5,808
6	Soil Retention Blankets	SY	\$ 2	14,520	\$ 29,040
7	Care of Water	LS	\$ 20,000	1	\$ 20,000
8	Temporary Erosion and Sediment Control (5%)	LS	\$ 69,000	1	\$ 69,000
9	Mobilization (10%)	LS	\$ 138,000	1	\$ 138,000
10	Retaining Wall	SF	\$ 65	1,920	\$ 124,800
					<b>SUBTOTAL</b> \$ <b>1,710,270</b>
					<b>CONTINGENCY (20%)</b> \$ <b>342,054</b>
					<b>TOTAL PROJECT COST</b> \$ <b>2,052,324</b>
9	Channel Acquisition	AC	\$ 15,000		\$ -
10	Engineering and Survey Fees (10%)	LS	\$ 210,000	1	\$ 210,000
11	Regulatory Permitting (1%)	LS	\$ 30,000	1	\$ 30,000
					<b>PROJECT GRAND TOTAL</b> \$ <b>2,292,324</b>

**Note: Estimate excludes any property acquisition required for the project as well as costs associated to the protection, relocation, & reconstruction of utilities.**

This statement was prepared utilizing standard cost estimate practices. It is understood and agreed that this is an estimate only, and the Engineer shall not be held liable to Owner or third party for any failure to accurately estimate the cost of the project, or any part thereof. Unit Prices are in current dollars and should be adjusted as required when schedule for project is determined.



## ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

DATE: 3/20/2019

AVO: 35510

PROJECT: Gills Branch 2D Modeling Study

Alternative: Gills Branch Road Crossings and Channel Modifications (Phase 3)

PAY ITEM NO	DESCRIPTION	UNITS	UNIT PRICE	QUANTITY	SUB-TOTALS
1	Clearing and grubbing	AC	\$ 8,000	2.56	\$ 20,462
2	Channel Excavation	CY	\$ 11	21,416	\$ 235,572
3	Culvert Removal (1 Road Crossings)	LF	\$ 20	146	\$ 2,920
4	Bridge Construction (1 Road Crossings)	SF	\$ 100	3,651	\$ 365,100
5	Hydromulch Seeding	SY	\$ 0.40	12,390	\$ 4,956
6	Soil Retention Blankets	SY	\$ 2	12,390	\$ 24,780
7	Care of Water	LS	\$ 20,000	1	\$ 20,000
8	Temporary Erosion and Sediment Control (5%)	LS	\$ 34,000	1	\$ 34,000
9	Mobilization (10%)	LS	\$ 68,000	1	\$ 68,000
					<b>SUBTOTAL</b> \$ <b>775,791</b>
					<b>CONTINGENCY (20%)</b> \$ <b>155,158</b>
					<b>TOTAL PROJECT COST</b> \$ <b>930,949</b>
9	Channel Acquisition	AC	\$ 15,000		\$ -
10	Engineering and Survey Fees (10%)	LS	\$ 100,000	1	\$ 100,000
11	Regulatory Permitting (1%)	LS	\$ 10,000	1	\$ 10,000
					<b>PROJECT GRAND TOTAL</b> \$ <b>1,040,949</b>

**Note: Estimate excludes any property acquisition required for the project as well as costs associated to the protection, relocation, & reconstruction of utilities.**

This statement was prepared utilizing standard cost estimate practices. It is understood and agreed that this is an estimate only, and the Engineer shall not be held liable to Owner or third party for any failure to accurately estimate the cost of the project, or any part thereof. Unit Prices are in current dollars and should be adjusted as required when schedule for project is determined.



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8C

**TITLE:**

Receive presentation from Specialized Public Finance, the City's Financial Advisors, on utility system revenue bond projects and bond issuance timeline.

**STAFF REPRESENTATIVE:**

Tracy Waldron, Chief Financial Officer

**BACKGROUND/HISTORY:**

The staff has been working on a Utility System Capital Improvement Plan that will fund infrastructure for water and wastewater, including new plants for both utilities. These projects have been included in the budget, documenting the funding source(s) for each. There is existing fund balance in the Capital Projects Fund that has been earmarked to pay for the design of these projects. However, once these projects reach construction, revenue bonds will be necessary.

Because the Utility System is considered an Enterprise Fund, it must be operated by revenue generated by the rate payers to cover expenditures needed to provide services to those same rate payers. Since the City's Wastewater Certificate of Convenience and Necessity (CCN) is much greater than our water CCN, it is essential to track our costs and establish our rates separately for each utility. The rate consultant has been working on establishing the model that will allow us to calculate these rates going out five (5) to ten (10) years. Once completed, Staff will discuss the model with Council this summer during the budget process anticipating a January 1, 2020 effective date for any approved changes to the Ordinance.

It is important to note that impact fees are developers' contribution to the cost of improved infrastructure providing additional capacity in the utility system. All impact fees collected go to the Utility Debt Fund and are applied to future principle and interest debt payments. The City's Impact Fee Consultant and City Staff have been working on the Capital Improvement Plan and establishing appropriate demographic projections for updating Impact Fees. Below is the proposed Impact Fee Adoption Schedule:

- 4/25/19 Advisory Committee Meeting (Planning & Zoning Commission) – Presentation of Land Use assumptions, Capital Improvement Plan, and updated rates.
- 4/27/19 Post Notice of Public Hearing.
- 5/21/19 Comments received from Advisory Committee.
- 5/28/19 Public Hearing/First reading of Ordinance.
- 6/11/19 Second reading of Ordinance.

This revenue bond update and issuance timeline is on schedule as outlined in the FY 2019 Budget and will be supported by the rate payers and impact fees.

**POLICY EXPLANATION:**

Article III of the City Charter gives Council the responsibility of authorizing the issuance of bonds.

**ATTACHMENTS:**

- Presentation from Specialized Public Finance







## **City of Bastrop, Texas** **City Council Presentation on W/WW Revenue Bond Issuance**

### **Water & Wastewater System Revenue Bonds, Series 2019 (“Bonds”)**

- **2019 Issuance Timing**
  - Week of March 25 - Bond Rating Call
  - April 4 – Bond Rating Received
  - April 9 – City Council receives bids on the Bonds and awards the Bonds to Purchaser
  - April 30 – Bond closing: Bond proceeds received by the City
  
- **Bond Rating Agency Conference Call**
  - Revenue Bond Rating focuses on the following:
    - Economy
      - Local and Regional
    - Financial Performance
      - Debt service coverage based on net revenue of the water and wastewater fund
      - Trend performances
    - Debt levels
      - Growing systems/cities have elevated debt levels
    - Management (Council and Administration)
      - #1 issue for management is utility and impact fee rate decisions and ongoing surveillance of rate structures
      - Commitment to necessary rate action and stability allows for steady and strong coverage levels over the long term
  
- **Future Revenue Bond Issuance**
  - Dependent on coverage levels and utility/impact fee rate structure
  - Timing and funding will be a function of the utilization of Reimbursement Resolutions and annual Bond issuance in February of Bond issuance years

## PROJECTED DEBT SERVICE COVERAGE TABLE

FYE 9/30	Total WWW Revenues	Plus: Total Impact Fee Revenue	Less: O&M Expenses	Net Revenues	Projected		Plus: WWW Supported G.O. D/S	Projected Total WWW- Supported D/S	Coverage Ratios	
					\$1,900,000 2019 Rev Bds 4/30 3.58%				WWW Rev Bds Only	All WWW Supp. Bonds
2019	\$ 5,707,190	\$ 567,692	\$ (3,797,820)	\$ 2,477,062	\$ 21,936	\$ 1,253,590	\$ 1,275,526	112.92x	1.94x	
2020	5,876,637	567,374	(3,693,467)	2,750,544	139,500	1,267,524	1,407,024	19.72x	1.95x	
2021	5,761,572	567,374	(3,804,271)	2,524,675	137,550	1,263,409	1,400,959	18.35x	1.80x	
2022	5,865,887	567,374	(3,918,399)	2,514,862	140,600	1,322,618	1,463,218	17.89x	1.72x	
2023	5,865,887	567,374	(3,918,399)	2,514,862	137,800	1,334,185	1,471,985	18.25x	1.71x	
2024	5,865,887	567,374	(3,918,399)	2,514,862	140,000	1,326,858	1,466,858	17.96x	1.71x	
2025	5,865,887	567,374	(3,918,399)	2,514,862	137,000	1,317,896	1,454,896	18.36x	1.73x	
2026	5,865,887	567,374	(3,918,399)	2,514,862	139,000	1,324,782	1,463,782	18.09x	1.72x	
2027	5,865,887	567,374	(3,918,399)	2,514,862	140,800	1,301,831	1,442,631	17.86x	1.74x	
2028	5,865,887	567,374	(3,918,399)	2,514,862	137,400	1,180,163	1,317,563	18.30x	1.91x	
2029	5,865,887	567,374	(3,918,399)	2,514,862	139,000	1,053,806	1,192,806	18.09x	2.11x	
2030	5,865,887	567,374	(3,918,399)	2,514,862	140,400	1,057,597	1,197,997	17.91x	2.10x	
2031	5,865,887	567,374	(3,918,399)	2,514,862	141,600	1,069,688	1,211,288	17.76x	2.08x	
2032	5,865,887	567,374	(3,918,399)	2,514,862	137,600	1,069,594	1,207,194	18.28x	2.08x	
2033	5,865,887	567,374	(3,918,399)	2,514,862	138,600	759,284	897,884	18.14x	2.80x	
2034	5,865,887	567,374	(3,918,399)	2,514,862	139,400	411,490	550,890	18.04x	4.57x	
2035	5,865,887	567,374	(3,918,399)	2,514,862	140,000	-	140,000	17.96x	17.96x	
2036	5,865,887	567,374	(3,918,399)	2,514,862	140,400	-	140,400	17.91x	17.91x	
2037	5,865,887	567,374	(3,918,399)	2,514,862	140,600	-	140,600	17.89x	17.89x	
2038	5,865,887	567,374	(3,918,399)	2,514,862	140,600	-	140,600	17.89x	17.89x	
2039	5,865,887	567,374	(3,918,399)	2,514,862	140,400	-	140,400	17.91x	17.91x	
					\$ 2,810,186	\$18,314,315	\$ 21,124,501			

### Assumptions

(1) All financing assumptions are as of March 19, 2019 for purposes of illustration only. Preliminary, subject to change.

(2) Total WWW Revenues, Impact Fees and O&M Expenses through FY 2022 provided by the City.



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8D

**TITLE:**

Hold discussion regarding Parking Standards for Building Bastrop Codes.

**STAFF REPRESENTATIVE:**

Matt Jones, Director of Planning and Development

**BACKGROUND/HISTORY:**

Building Bastrop launched on August 15, 2018 to create a new set of tools that will support the community in a responsible manner for generations to come. Building Bastrop is all about connecting people to policy. It is about humanizing an otherwise complicated and mundane process of rewriting the City's land-use regulations. The City of Bastrop is taking a journey, weaving together its history and the philosophies that define authentic Bastrop. It is about love, community pride, and defining the City's way of life. It's about Building Bastrop together, honoring our authentic past, and planning for our sustainable future.

City Council adopted a purpose statement and policy statement for Building Bastrop Codes at their February 26, 2019 regularly scheduled meeting. The purpose statement is as follows:

***“Create a fiscally sustainable, timeless community through land-use regulations that are locally made (authentic Bastrop), geographically sensitive, and fiscally sustainable.”***

Building upon the purpose statement, the Council approved a policy statement to offer an explanation on key concepts that must be utilized for all development related codes to ensure clarity and consistency. The Building Bastrop Policy Statement provides clarity and consistency to all code revisions and rulemaking procedures that impact development in the City of Bastrop. The policy statement covers the following:

- What is Building Bastrop.
- Why Building Bastrop is important.
- Building Bastrop Purpose Statement.
- What the Purpose Statement really means.
- What the elements of Fiscally Sustainable are.

Parking requirements are one element that demand a holistic conversation regarding their impact on fiscal sustainability and geographical sensitivity. City Council will need to provide staff with policy direction in order to create new parking requirements that are fiscally sustainable, geographically sensitive, and authentic Bastrop.

**POLICY EXPLANATION:**

The City Council recognizes there will be certain components of the Building Bastrop Codes that are nonnegotiable in order to follow the policy and achieve the purpose of the codes as adopted by Council at their February 26, 2019 regularly scheduled meeting. There are also elements within the code, which include parking, that require additional attention and will require specific policy guidance from City Council in order to develop standards within the Bastrop Building Codes.

**FUNDING SOURCE:**

N/A

**RECOMMENDATION:**

Hold discussion regarding Parking Standards for Building Bastrop Codes.

**ATTACHMENTS:**

- PowerPoint Presentation





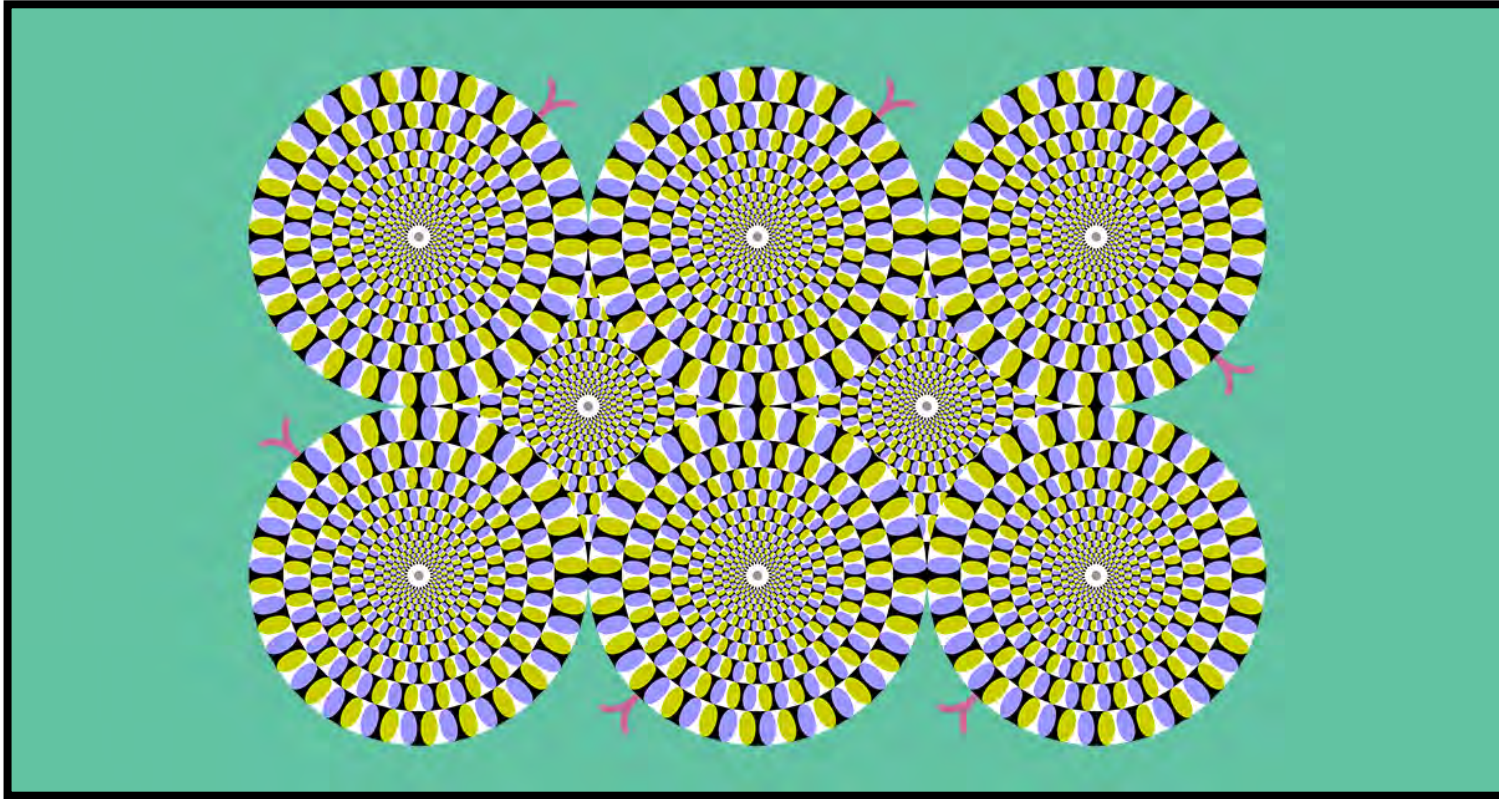
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HONORING OUR AUTHENTIC PAST.  
PLANNING FOR OUR SUSTAINABLE FUTURE.

# Parking... What is the problem?



# We have a perceived parking problem...



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# We have a *perceived* parking problem...



- We have plenty of parking, it just isn't where you want it...
- Statistically there are 3-4 times more parking spaces nationwide than there are cars
- Parking covers more acreage in urban America than any other land use
- 99% of parking in America is free – not how supply and demand works
- Changed how we planned land uses – well intentioned folly



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# How did we get here?





# How did we get here?



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# How did we get here?

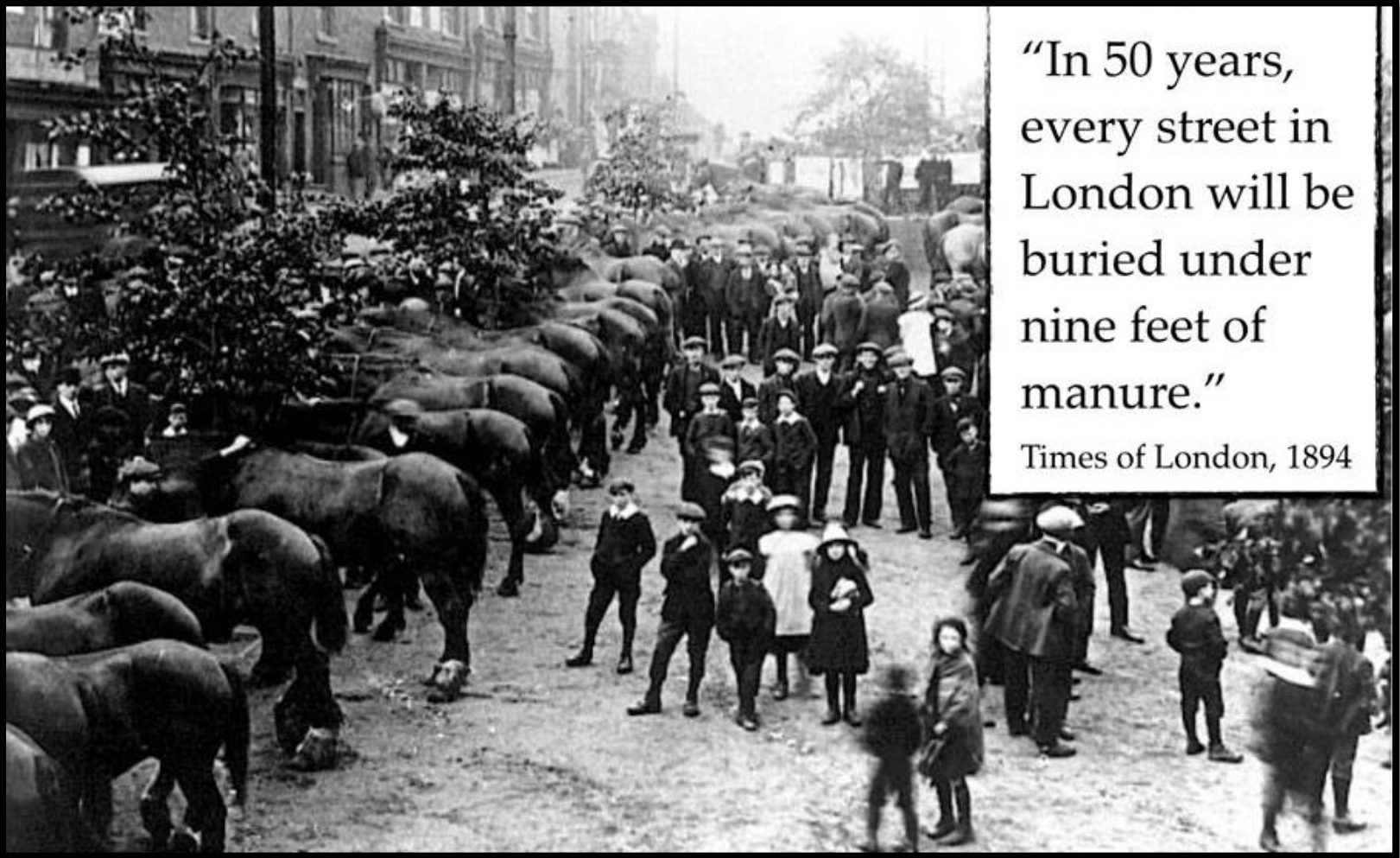


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# How did we get here?



The Great Horse Manure Crisis of 1894

# What was the solution?



## Technology

- Rise of electric and combustible engine vehicles in the early 1900's
- “Necessity is the mother of invention”  
~Plato~



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# How did we get here?



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# The creation of off-street parking



- Cities began requiring off-street parking in the 1930's
- Planners and engineers began regulating based on land use
- Two ways parking standards are set
  - Monkey see, monkey do
  - Circular Parking Logic
    - Peak Demand
    - The Internet



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# Effects of off-street parking

- The well intentioned folly
- Free parking
- Degrades urban design
- Traffic
- Side effects
  - Economic
  - Environmental
  - Geographical



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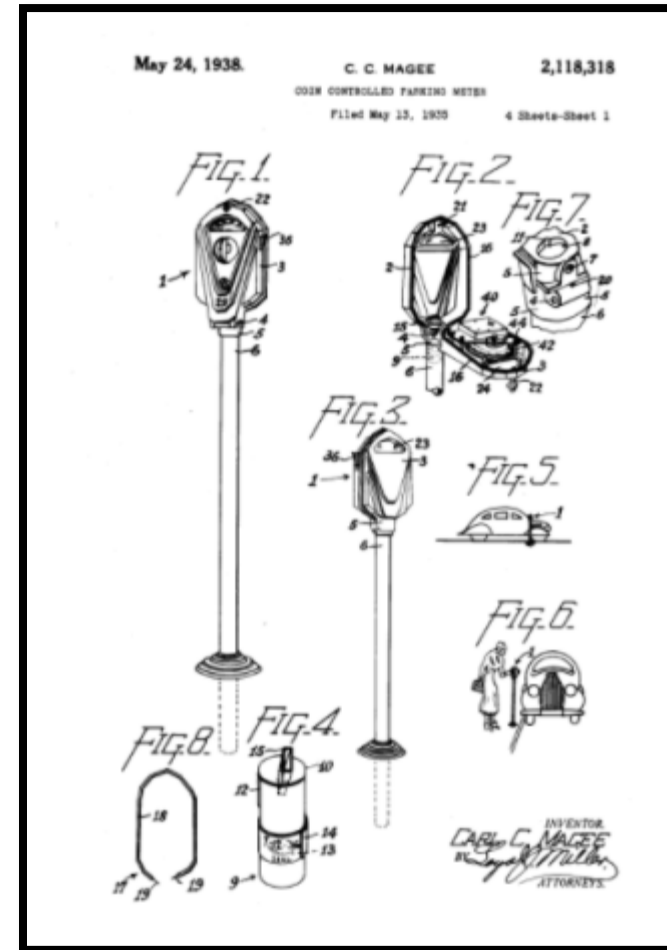
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# The creation of paid parking



- Created in 1935
  - Oklahoma City
- Free parking
- Commons Theory



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# Effects of paid parking



- Incentivizes turn-over at the curb
- Can generate revenue
- No evidence of impact on local business



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



# Let's look at the facts...





**Off-Street Parking**

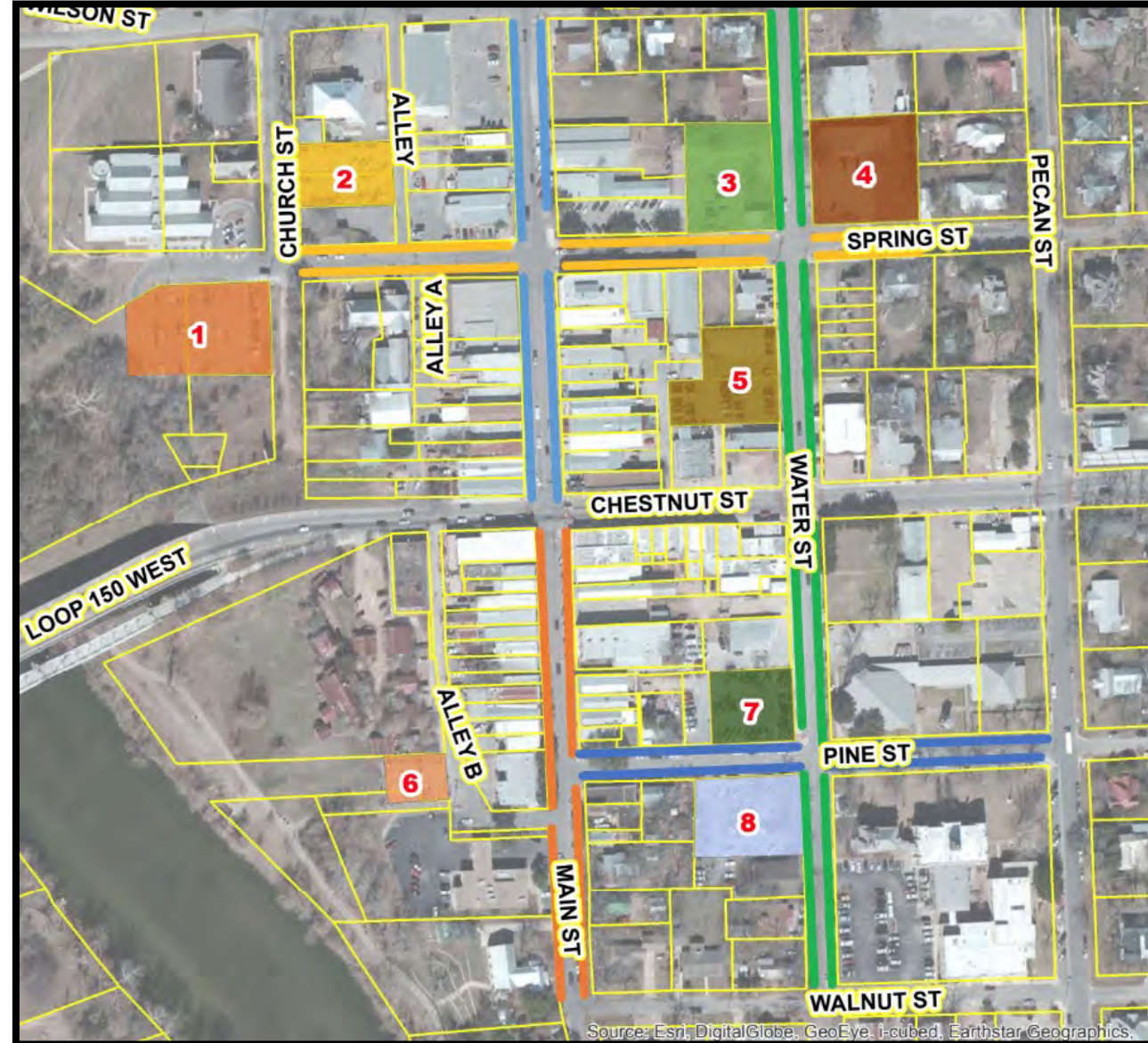
**Parking Lot ID**

-  1 Library
-  2 First National Bank
-  3 NW Corner - Spring St. and Water St.
-  4 NE Corner - Spring St. and Water St.
-  5 Lot 3 (Senior Center)
-  6 Alley 'B' - Behind Old City Hall
-  7 Alley 'D' - Pine St. and Water St.
-  8 Pine St. and Water St. (Kershaw Lot)

**On-Street Parking**

**Street Name**

-  North Main St.
-  Pine St.
-  South Main St.
-  Spring St.
-  Water St.



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar, Geographics.



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# Let's look at the facts...



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# Let's look at the facts...

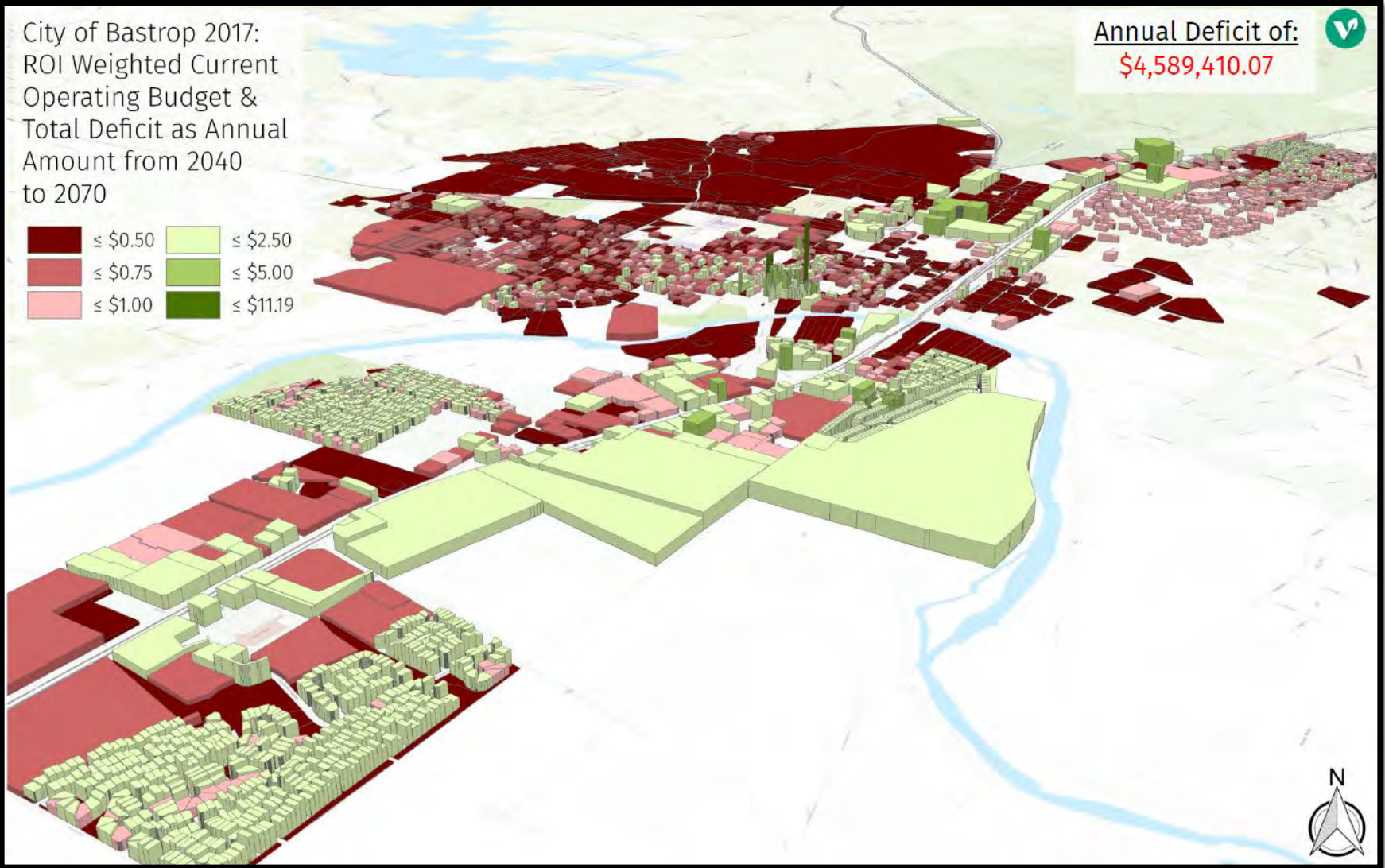


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# Where we are going...



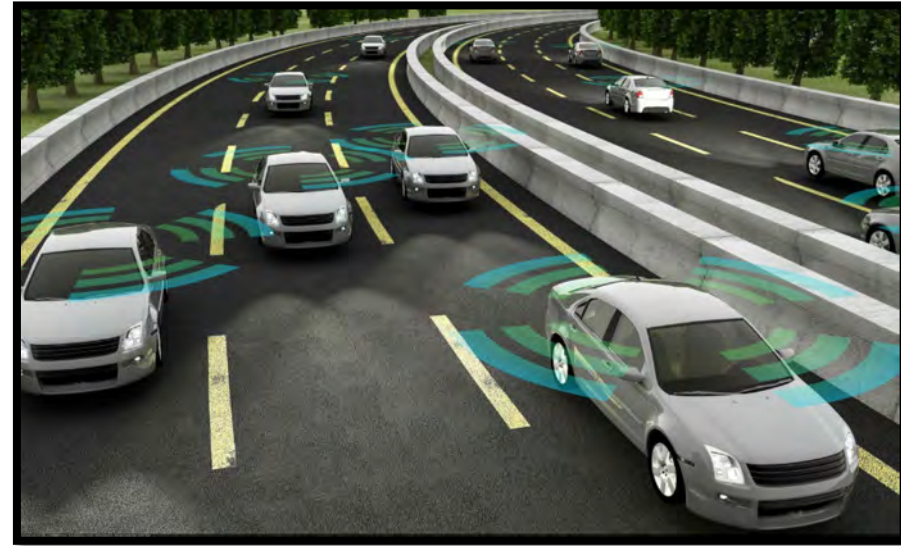
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# Will technology save us again?



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# What are the options?



- Minimums vs Maximums
- Paid Parking
- Shared Parking
- Market driven
- Public Utility
- Parking Districts
- Maximum impervious area
- Do nothing



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# Moving forward...



- Policy Direction
- Stakeholder Input

“Planning of the automobile city focuses on saving time. Planning for the accessible city, on the other hand, focuses on time well spent.” ~Robert Cervero~



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# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8E

**TITLE:**

Discussion regarding Mobile Food Vehicle Pilot Program.

**STAFF REPRESENTATIVE:**

Jennifer C. Bills, AICP, LEED AP, Assistant Planning Director

**BACKGROUND/HISTORY:**

The City of Bastrop currently has regulations for temporary and mobile vendors as part of Chapter 4 “Business Regulation’s, Article 4.04 – “Peddlers, Solicitors and Vendors”. This section regulates and issues permits for temporary and seasonal business. These permits are issued by the City Secretary.

Mobile food vending has been a popular business model and incubator for new restaurant businesses within the Central Texas region. The current regulations do not address mobile food vehicles well and is not clear where the use should be allowed. Despite the large interest, the code does not clearly define and allow mobile food vehicles, so they generally have not been permitted to locate within the city limits.

Staff has researched mobile food vehicle regulations in other parts of Texas and drafted a Mobile Food Vehicle Pilot Program that would be adopted for a period of six months. Applications for the Pilot Program would be processed by the Planning and Development Department. Mobile food vendors, including food trucks, would be allowed in any zoning district that allows a restaurant use or on active construction sites for temporary periods of time.

As part of the application for the Pilot Program, several items would be required to be submitted. For example, a few of the required documents would be a property owner approval verification, health inspection certificate, and a food handler’s permit. These documents would be necessary to ensure that the vendor is operating with permission and that the appropriate health inspections have been completed.

Staff presented some draft language at the March 29, 2018 Planning & Zoning Commission meeting for feedback. With the comments received at the meeting, along with stakeholder meetings with city departments and the Bastrop County Health District, Staff is proposing to adopt a Pilot Program. As the Building Bastrop code development continues, feedback and experience from the Pilot Program will be incorporated into the new codes.

Within the regulations for the Pilot Program, a Mobile Food Vehicle would include Food Trucks (self-propelled), Food/Concession Trailers (non-motorized, pulled by a car or truck), or Food Carts/Concession Carts (moved by non-motorized means).

Staff is proposing to allow the following three categories of mobile food venues:

- Mobile Food Vehicles – Individual
  - Allows a single vendor to locate temporarily on private property that has an occupied primary business.
- Mobile Food Vehicles – Food Court
  - Allows multiple vendors to locate temporarily on a property that is designed and intended for the mobile food use as the primary use of the property. The site must be approved through the Site Development Plan Review Process.
- Mobile Food Vehicles – Construction Sites
  - Allows vendors to locate in an active construction site for a limited amount of time, regardless of the zoning district.

A proposed timeline for the program would be as follows:

- March 26<sup>th</sup> – Work Session with City Council
- April 9<sup>th</sup> – 1<sup>st</sup> reading on Ordinance
- April 23<sup>rd</sup> – 2<sup>nd</sup> reading on Ordinance
- May 1<sup>st</sup> – Beginning of 6-month Pilot Program
- May 1<sup>st</sup> – August 1<sup>st</sup> – Observe Pilot Program and provide feedback to Council
- October 31<sup>st</sup> – End of Pilot Program

During the six-month Pilot Program, Staff will have the opportunity to observe the program and give feedback to Council. Council will need to provide policy direction to Staff on incorporating Mobile Food Vehicles in the Building Bastrop Codes. It is anticipated that the timeline for the Building Bastrop Code adoption will align with the end of the Mobile Food Vehicle Pilot Program. Appropriate language will be added to the new Building Bastrop Codes to reflect the policy direction of Council.

**ATTACHMENTS:**

- PowerPoint Presentation

# Workshop Item

Discussion regarding a Mobile Food Vehicle Pilot Program.



# Definition of a Mobile Food Vehicle

Any business that operates or sells food for human consumption, hot or cold, from a non-stationary location within the City of Bastrop.



# Background

- Popular business model
- Incubator for future permanent restaurants
- Can compete with existing brick and mortar restaurants
- City receives many requests for permits
- No clear requirements or allowance in the existing codes



# Staff Research

- Reviewed with Planning & Zoning Commission on March 29, 2018
- Discussed with government stakeholders
  - County Health District
  - Fire Department
  - Main Street Program



# Types of Vehicles/Units

- Food Truck
  - self-contained motorized unit selling items defined as edible goods



## Food Trailer

- a vending unit, which is pulled by a motorized unit and has no power to move on its own



## Food or Concession Cart

- a mobile vending unit that must be moved by non-motorized means



# Mobile Food Vehicle - Categories

- Individual
  - Allows a single vendor to locate temporarily on private property that has an occupied primary business.
- Food Court
  - Allows multiple vendors to locate temporarily on a property that is designed and intended for the mobile food use as the primary use of the property. The site must be approved through the Site Development Plan Review Process.
- Construction Sites
  - Allows vendors to locate in an active construction site for a limited amount of time, regardless of the zoning district.





# Examples of Food Courts



Fort Worth



Norwich, CT

# Proposed Timeline

- March 26<sup>th</sup> – Work Session with City Council
- April 9<sup>th</sup> – 1<sup>st</sup> reading on Ordinance
- April 23<sup>rd</sup> – 2<sup>nd</sup> reading on Ordinance
- May 1<sup>st</sup> – Beginning of 6-month Pilot Program
- May 1<sup>st</sup> – August 1<sup>st</sup> – Observe Pilot Program and provide feedback to Council
- October 31<sup>st</sup> – End of Pilot Program



# Questions?





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8F

**TITLE:**

Review Established Purpose Statement and Evaluation Criteria to create Policy Statement for Council adoption for International Code Reviews by Construction Standards Board and Staff.

**STAFF REPRESENTATIVE:**

Matt Jones, Director of Planning and Development

**BACKGROUND/HISTORY:**

Building Bastrop launched on August 15, 2018 to create a new set of tools that will support the community in a responsible manner for generations to come. When looking at the Policy Statement adopted by City Council on February 26, 2019, a key component is that the codes be fiscally sustainable. The Building Bastrop Codes focus on the public realm (first 15' of a property), infrastructure, and life safety. The International Code Council (ICC) Building Codes (I-Codes) will regulate life safety. The I-Codes are standards used in the design, build, and compliance process to construct safe, sustainable, affordable, and resilient structures.

It is not uncommon for cities to update their codes every few years. Bastrop last updated these codes in 2012 when the 2009 I-Codes were adopted. There have been several updates to the I-Codes since 2009 and with the release of the 2018 I-Codes, we are now two code updates behind and our building codes are over ten years old.

The Construction Standards Board (CSB) has two main responsibilities. The first is to hear appeals of a decision made by the Building Official, and the second is to review and make recommendations to City Council regarding building codes. The CSB and Staff will review the 2018 I-Codes using the following proposed purpose statement for the basis of the code review:

***“Establish locally amended life safety expectations that protect our public, meet national best practices, and ensure the asset meets or exceeds its useful life.”***

The I-Code review process provides Staff and the community a chance to evaluate the codes for opportunities to make local amendments. Adopting localized amendments will ensure that the I-Codes as amended are fiscally sustainable, authentic Bastrop, and protect life safety.

Staff is committed to improve the development and permitting process. A part of that commitment will involve resolving conflicting language in different sections of the codes as part of this review. To decrease the chance of conflicting language in the future, the I-Codes will be referenced in the Building Bastrop Codes, but will be located in the Technical Manual. The Technical Manual will be a comprehensive manual serving as a single location for all technical criteria required to develop or build in Bastrop. Having the codes located in one location will discourage the possibility of conflicting codes in different sections of the code.

Staff has established a set of review criteria that will serve as a guide when evaluating the codes. The evaluation criteria are listed below:

- Does it meet our purpose statement?
- Remember who the customer is.
- Does it make common sense?
- Can we legally enforce it?
- Does the code need to be inspected annually or another routine basis?

**POLICY EXPLANATION:**

Using Council's Purpose Statement for Building Bastrop as a guide, Staff has developed a Purpose Statement for the I-Code update for use by the Construction Standards Board and Staff related to all code review. In addition, Staff has developed a timeline for the ICC review process, which will be provided during this presentation. Staff is seeking input from Council regarding the Established Purpose Statement and Evaluation Criteria to ensure the code updates follow Council's policy to be fiscally sustainable, geographically sensitive, and authentic Bastrop.

Once Council has provided policy guidance on the purpose statement, Staff will notify the Construction Standards Board of this project and timeline.

**FUNDING SOURCE:**

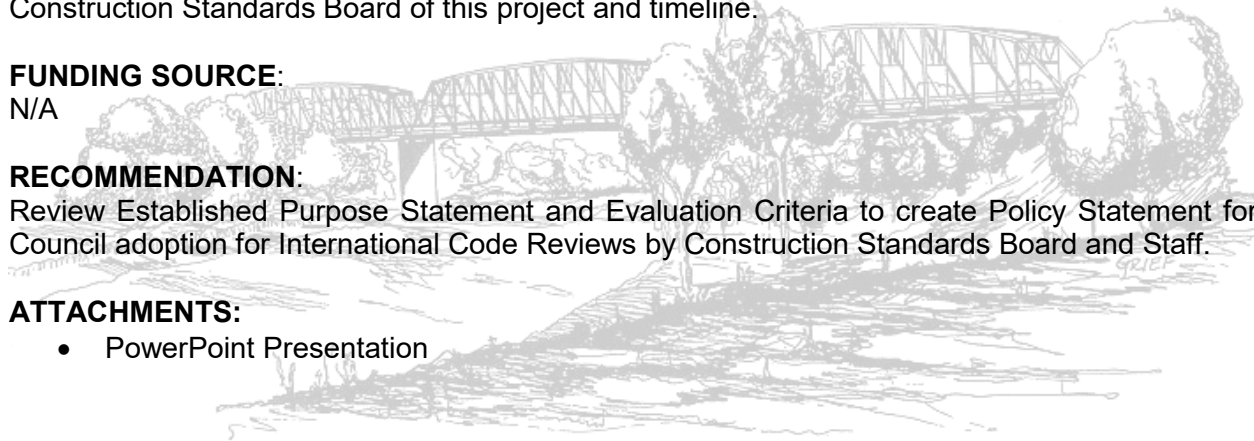
N/A

**RECOMMENDATION:**

Review Established Purpose Statement and Evaluation Criteria to create Policy Statement for Council adoption for International Code Reviews by Construction Standards Board and Staff.

**ATTACHMENTS:**

- PowerPoint Presentation





**BUILDING BASTROP**

HONORING OUR AUTHENTIC PAST.  
PLANNING FOR OUR SUSTAINABLE FUTURE.

# What is the goal?



# Life Safety



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# Adopt building codes that:

- 1. Protect Public Safety**
- 2. Financially Sustainable**
- 3. Geographically Sensitive**
- 4. Authentic Bastrop**



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# Proposed Purpose Statement:

**“Establish locally amended life safety expectations that protect our public, meet national best practices, and ensure the asset meets or exceeds its useful life.”**



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# Process and Timeline:

- **Review purpose and timeline with Council**
- **Send codes to Construction Standards Board (CSB)**
- **Internal Staff and CSB review**
- **Development Community input**
- **Present recommendations to Council**
- **Public Hearings and adoption – Nov. 2019**



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# Questions or Comments?



# International Code Update Schedule



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 <p>February 28, 2019 9:00 – 11:00 a.m.</p>	<p>Kick-Off Staff Meeting for International Code Updates – Determine Goal/Purpose of Codes; Establish Evaluation Criteria; Develop Staff Review Schedule &amp; Order of Code Discussion; Discuss Established Schedule for review and adoption process.</p>
 <p>March 26, 2019 6:30 p.m.</p>	<p>Council Work Session – Review Established Purpose and Evaluation Criteria for International Code Update. Seek input with expectation that Resolution will be approved to serve as Policy Statement for Code Update reviews.</p>
 <p>April 9, 2019 6:30 p.m.</p>	<p>Item for Individual Consideration – Adopt Resolution that will serve as Policy Statement for Code Update reviews.</p>
 <p>May 10, 2019 9:00 a.m. – 12:00 p.m.</p>	<p>City Manager Update – Status of Staff’s Review of International Code Review &amp; Proposals moving forward.</p>
 <p>May 15, 2019</p>	<p>Matt Jones will send final information packet and links to Construction Standards Board for June 4<sup>th</sup> meeting.</p>
 <p>June 4, 2019 6:00 p.m.</p>	<p>Code Update Kick-Off Meeting with Construction Standards Board. Agenda – Review Policy Statement by Council for Code Review; Staff’s Journey to Date; Proposed Plan moving forward; Significant Dates.</p>
 <p>June 18, 2019; July 2, 2019; July 16, 2019 at 6:00 p.m.</p>	<p>Standing Construction Standard Board Meetings to discuss code updates.</p>
 <p>August 6, 2019</p>	<p>Development Community Input Meeting #1 – 2:30 – 4:30 p.m. at City Hall Council Chambers.</p>
 <p>August 19, 2019; September 9, 2019; September 17, 2019</p>	<p>Standing Construction Standard Board Meetings starting at 6:00 p.m. to discuss code updates and establish local amendments.</p>
 <p>October 10, 2019 6:30 p.m.</p>	<p>Development Community Input Meeting #2 – 2:30 – 4:30 p.m. at City Hall Council Chambers</p>
 <p>October 24, 2019 6:00 p.m.</p>	<p>Construction Standards Board Meeting – Take Action to Recommend Approval of Codes and Local Amendments to Council</p>
 <p>November 5, 2019 6:30 p.m.</p>	<p>Joint Work Session with Council/Construction Standards Board – Review Recommended Code Updates &amp; Local Amendments.</p>
 <p>November 12, 2019 6:30 p.m.</p>	<p>1<sup>st</sup> Reading of Ordinance approving adoption of International Codes &amp; Local Amendments.</p>
 <p>November 26, 2019 6:30 p.m.</p>	<p>2<sup>nd</sup> Reading of Ordinance approving adoption of International Codes &amp; Local Amendments.</p>



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8G

**TITLE:**

Continue discussion from the February 26, 2019, work session regarding the creation of rates and standardized contracts for future wholesale water and wastewater customers.

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager

**BACKGROUND/HISTORY:**

Attached are copies of the standardized contracts for future wholesale water and wastewater customers. Information that will be tailored for individual customers has been noted in red and highlighted in yellow. Staff will review the contracts and address any questions Council may have.

***Next Steps:***

- Adopt Wholesale Water & Wastewater Rate Categories by Ordinance.
  - 1<sup>st</sup> Reading – April 9, 2019
  - 2<sup>nd</sup> Reading – April 23, 2019
- Adopt Wholesale Standardized Water & Wastewater Standardized Contract by Resolution on April 9, 2019.
- Approve Wholesale Water & Wastewater Contracts with West Bastrop Village in May, 2019.

**ATTACHMENTS:**

- Standardized Wholesale Wastewater Contract
- Standardized Wholesale Water Contract

**WHOLESALE WASTEWATER AGREEMENT**

**BETWEEN CITY OF BASTROP, NAME OF MUNICIPAL UTILITY DISTRICT AND  
NAME OF DEVELOPER, IF APPLICABLE**

This **WHOLESALE WASTEWATER AGREEMENT** (“**Agreement**”) is made and entered into by and between the **CITY OF BASTROP**, a home rule city located in Bastrop County (“**Bastrop**” or “**City**”) and the \_\_\_\_\_, a \_\_\_\_\_ operating under \_\_\_\_\_ (“\_\_\_\_\_”), and \_\_\_\_\_, a \_\_\_\_\_ (“**Developer**”) (collectively referred to herein as the “**Parties**”). The Parties hereby mutually agree as follows:

**RECITALS**

**\*\*NOTE: WHEREAS STATEMENTS WILL BE TAILORED TO FIT THE AGREEMENT. WHOLESALE CUSTOMERS COULD BE A SINGLE CUSTOMER OR MUNICIPAL UTILITY DISTRICT (MUD). DEVELOPER WILL BE LISTED IF MUD IS NEWLY CREATED WITH NO ASSETS/CUSTOMERS.**

**WHEREAS**, the City and the Developer entered into a Planned Development Agreement, to be known in this Agreement as “the PDA” on \_\_\_\_\_, requiring a wholesale utility agreement; and

**WHEREAS**, by Resolution R-\_\_\_\_\_, on \_\_\_\_\_, 20\_\_\_\_, the City granted consent for creation of \_\_\_\_\_ District; and

**WHEREAS**, by Order signed on \_\_\_\_\_, 20\_\_\_\_, the Texas Commission on Environmental Quality granted the Petition for Creation of \_\_\_\_\_ District; and

**WHEREAS**, by Resolution R-\_\_\_\_\_ the City confirmed its consent for creation of the \_\_\_\_\_ District, on \_\_\_\_\_, 20\_\_\_\_; and

**WHEREAS**, the District encompasses approximately \_\_\_\_\_ acres of land within the extraterritorial jurisdiction (“ETJ”) of the City (the “Tract”). The Tract is more particularly described in Exhibit “A”; and

**WHEREAS**, Developer intends to develop the Tract as a \_\_\_\_\_ community, initially to be referred to as “\_\_\_\_\_” projected to consist primarily of \_\_\_\_\_ uses, expected at the time of execution of this Agreement to include approximately \_\_\_\_\_ homes, and also will include other limited nonresidential uses (the “Development”); and

**WHEREAS**, Bastrop, District and Developer wish to enter into this Agreement, to provide the terms of wholesale wastewater service for the benefit of the present and future residents of City and the District; and

**WHEREAS**, the Tract is within Bastrop’s sewer CCN (20466), from which the City will provide wastewater services to the District; and

**WHEREAS**, Bastrop has the capacity to treat 1.4 million gallons per day of wastewater from the District through City's Existing Wastewater Treatment Plant (Permit No. WQ0011076001). Upon completion of Bastrop's WWTP#3 (Permit No. WQ0011076002), the City will have the capacity to treat 2.0 million gallons per day of wastewater from the District.

**NOW, THEREFORE**, for and in consideration of the agreements set forth below, the City, District and Developer agree as follows:

## **ARTICLE 1. DEFINITIONS**

### **Section 1.01 Definitions of Terms.**

In addition to the terms otherwise defined in the above recitals; in the City's ordinances; or the provisions of this Agreement, the terms used in this Agreement will have the meanings set forth below.

**Active Connection:** means a connection for which there is an open utility account with the District during any portion of a monthly billing period. Each connection is the equivalent of one SUE, provided that the property served by the connection is a single-family residence.

**Agreement:** means this Wholesale Wastewater Agreement by and among the City of Bastrop, Texas, District, and Developer.

**AWWA:** means the American Water Works Association.

**Bastrop Service Area:** means the certificated service area for the City of Bastrop as maintained by the Public Utility Commission.

**Bastrop Wastewater System or City Wastewater System:** means all of the Wastewater equipment, lines, components and facilities of Bastrop that are used for the collection, transportation, treatment, monitoring, regulation and disposal of Wastewater received from the District, including the Existing Wastewater Treatment Plant and WWTP#3.

**CCN:** means a Certificate of Convenience and Necessity or similar permit authorizing a specified entity to be the retail water or sewer service provider in a specified area.

**City:** The City of Bastrop, Texas, a home rule municipality, organized and operating pursuant to the applicable laws of the State of Texas.

**City Manager:** means the City of Bastrop's City Manager.

**Commercial Customers:** means all non-residential retail wastewater customers of District in the Wholesale Wastewater Service Area.

**Commission or TCEQ:** means the Texas Commission on Environmental Quality or its successor agency.

**Connecting Facilities:** means facilities connecting any Internal Facilities to a Point of Entry (excluding any Interceptors).

**Costs of the System:** means all of Bastrop's costs of acquiring, constructing, developing, permitting, implementing, expanding, improving, enlarging, bettering, extending, replacing, repairing, maintaining, and operating the Bastrop System, including, without limiting the generality of the foregoing, the costs of property, interests in property, capitalized interest, land, easements and rights-of-way, damages to land and property, leases, facilities, equipment, machinery, pumps, pipes, tanks, valves, fittings, mechanical devices, office equipment, assets, contract rights, wages and salaries, employee benefits, chemicals, stores, material, supplies, power, supervision, engineering, testing, auditing, franchises, charges, assessments, claims, insurance, engineering, financing, consultants, administrative expenses, auditing expenses, legal expenses and other similar or dissimilar expenses and costs required for the System in accordance with policies of Bastrop's City Council.

**County:** means Bastrop County, Texas.

**Daily BOD loading:** means the daily biochemical oxygen demand loading as measured based on the arithmetic average of all samples, grab or composite, within a calendar month, consisting of at least four separate representative samples taken in accordance with the Permit.

**Developer:** means \_\_\_\_\_, a \_\_\_\_\_, its successors or assigns.

**Development:** means the mixed-use development of the Tract, including residential and non-residential land uses, together with parkland, open space, recreational amenities and related facilities, intended to produce developed lots.

**District:** means the municipal utility district organized and operating in accordance with Section 54.016, Texas Water Code and Section 42.042, Texas Local Government Code, encompassing the Tract, known as **NAME OF MUNICIPAL UTILITY DISTRICT (MUD)**.

**District's Wastewater System:** means the Wastewater facilities of the District for collection and transportation of Wastewater from its retail customers to the Points of Entry into the Bastrop System.

**District Service Area:** means the retail wastewater service territory of **NAME OF MUNICIPAL UTILITY DISTRICT (MUD)**, as amended from time to time.

**Effective Date:** means the last date of execution by all of the Parties.

**ETJ:** means extraterritorial jurisdiction.

**Emergency:** means a sudden unexpected happening; an unforeseen occurrence or condition; exigency; pressing necessity; or a relatively permanent condition or insufficiency of service or of facilities resulting from causes outside of the reasonable control of Bastrop. The term includes Force Majeure and acts of third parties that cause the Bastrop System to be unable to provide the Wholesale Water Services agreed to be provided herein.



**EPA:** means United States Environmental Protection Agency

**Excess Wastewater Treatment Capacity Reservation Fees:** means the product of the Wastewater Treatment Capacity Reservation Fee and: (i) the difference between the number of SUE's shown on a phase of a preliminary plat and the final plat for that phase, if the subdivision is developed in phases; or (ii) the number of SUE's shown on a preliminary plat and the final plat, if the property is not developed in phases.

**Existing Wastewater Treatment Plant:** means the City-owned 1.4 MGD wastewater treatment plant operating pursuant to TPDES Permit No. WQ0011076001, a copy of which is attached as Exhibit "B".

**Force Majeure:** means acts of God, strikes, lockouts, or other industrial disturbances, acts of the public enemy, orders of any kind of any governmental entity other than Bastrop or any civil or military authority, acts, orders or delays of any regulatory authorities with jurisdiction over the parties, insurrections, riots, acts of terrorism, epidemics, landslides, lightning, earthquakes, fires, hurricanes, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or any other conditions which are not within the control of a party.

**Impact Fee:** means a charge imposed on each service unit on new development pursuant to Chapter 395 of the Local Government Code to generate revenue for funding or recouping the costs of capital improvements or facility expansions.

**Infiltration:** means water that enters Bastrop's System through defects such as cracks or breaks in the piping, manholes or other appurtenances.

**Inflow:** means water that enters the Bastrop System through direct sources such as drain spouts, manholes, clean-outs, or other appurtenances.

**Initial Wholesale Wastewater Service:** means the reception, transportation, treatment, and disposal of no less than **(AMOUNT OF WASTEWATER BASTROP AGREES TO TREAT FOR THE MUD)** GPD Wastewater to be provided by Bastrop to District, during the period before WWTP#3 is capable of providing service to the District.

**Interceptors:** any wastewater mains, including, **(COULD BE LIFT STATION, TRUNK LINE OR COMPONENT)**, or other wastewater facilities constructed by or on behalf of Bastrop after the Effective Date of this Agreement that connect the City's Existing Wastewater Treatment Plant or WWTP#3 to a Point of Entry.

**Internal Facilities:** means the internal Wastewater collection and lift station facilities and related equipment, facilities, and appurtenances to be constructed by or on behalf of District for the District System.

**Lift Stations:** The lift stations and force main located in the District, which are more particularly described in Exhibit "C".

**Maximum Wastewater SUE Capacity:** Use of wastewater treatment capacity up to Bastrop Wastewater System's current permitted capacity in GPD.

**Metering Facility:** means the Wastewater flow meter, meter vault, and all metering and telemetering equipment located at a Point of Entry to measure Wholesale Wastewater Service to District. The Bastrop System shall include each Metering Facility.

**Parties:** means the City, the District, and the Developer.

**Peak Hour Flow Rate:** means the highest metered and calculated flow rate delivered from District to Bastrop's System at a Point of Entry under any operational condition, including inflow and infiltration.

**Planned Development Agreement or PDA:** means the agreement was entered into by the City and the Developer on \_\_\_\_\_, 20\_\_\_\_. **(IF AGREEMENT IS WITH MUD AND NO DEVELOPMENT HAS OCCURRED BUT IS OUTLINED IN PDA).**

**Points of Entry:** means the locations, to be approved by Bastrop, District and Developer, in Bastrop's System at which all Wastewater will pass from District's Connecting Facilities to Bastrop's System generally shown on Exhibit "D". The initial Point of Entry shall be located at **(LOCATION OF MASTER METER)** ("Initial Point of Entry"). Future Points of Entry shall be agreed upon by Bastrop and District in connection with the acquisition or construction and commencement of operation of new Connecting Facilities after the Effective Date that connect to Bastrop's System.

**Prohibited Waste:** means those substances and wastes prohibited from being discharged into Bastrop's System as identified in Bastrop's Code of Ordinances.

**Residential Customers:** means retail residential Wastewater customers of District in the Wholesale Wastewater Service Area.

**Single Family Residence:** means the use of a site for only one dwelling unit, where a dwelling unit is a building, or portion thereof, designed or used exclusively for residential occupancy (not including hotels and motels).

**SUE:** means Service unit equivalent which is the basis for establishing equivalency among and within various customer classes, based upon the relationship of the continuous duty flow rate in gallons per minute for a water meter of a given size and type compared to the continuous duty maximum flow rate in gallons per minute for a 3/4 " diameter simple water meter, using American Water Works Association C700-C703 standards. For purposes of this Agreement and as reflected in Bastrop Code of Ordinances Section 10.02.004, 3/4 " water meters are considered to equal one SUE; except that for multifamily development, each living unit is equivalent to 0.5 SUE.

**SUE multiplier:** means the number of SUEs to be multiplied by the Impact Fee for each active connection served that is not a single-family residence in accordance with the SU Equivalency Chart in Bastrop Code of Ordinances Section 10.02.004.

**Tract:** means the approximately 347.9 acres of land within the District's boundaries to be served under the terms of this Agreement.

\_\_\_\_\_ : means the wastewater interceptor that will connect the District to the City's Existing Wastewater Treatment Plant and WWTP#3.

**Waste or Wastewater:** means liquid or water borne waster, including without limitation, sewage

**WWTP #3:** The planned wastewater treatment plant to be built by the City in which the District's ultimate capacity needs will be reserved. Its planned location is shown on Exhibit "D".

### **Section 1.02 Captions.**

The captions appearing at the first of each numbered section or paragraph in this Agreement are inserted and included solely for convenience and shall never be considered or given any effect in construing this Agreement.

## **ARTICLE II. PROVISION OF WHOLESALE WASTEWATER SERVICE**

### **Section 2.01 Wholesale Wastewater Service Commitment.**

- a. Subject to the terms and conditions of this Agreement and the requirements of applicable law, Bastrop agrees to provide Wholesale Wastewater Service to District for the Wholesale Wastewater Service Area in a quantity not to exceed the Wholesale Service Commitment.
- b. District or Developer may request that Bastrop increase the Wholesale Wastewater Service Area and/or the Wastewater Service Commitment. In such event, Bastrop District and Developer will enter into good faith negotiations to amend this Agreement to increase the Wholesale Service Commitment and/or the Wholesale Wastewater Service Area, as appropriate.

### **Section 2.02 Phasing of Wholesale Wastewater Service.**

Subject to the provisions of the foregoing paragraph 2.01, Bastrop shall make Wholesale Wastewater Service available within the Wholesale Wastewater Service Area on a phased basis as follows:

- a. Phase 1: **AGREED UPON AMOUNT TO TREAT** GPD of Wholesale Wastewater Service shall be made available from the City's Wastewater Treatment & Collection System to the Wholesale Wastewater Service Area upon acceptance of Connecting Facilities to a Point of Entry.
- b. **City will provide District new data on available capacity in Existing Wastewater Treatment Plant within thirty (30) days of the date the District is consuming \_\_\_\_\_ GPD.**
- c. **City Commits to have WWTP#3 online before District utilizes \_\_\_\_\_ GPD.**

- d. Subsequent Phases: District shall give Bastrop written notice at such time that District determines that additional Wholesale Wastewater Service is needed in the Wholesale Wastewater Service Area. Such notice will include the number of SUE's that will require Wholesale Wastewater Service. Such notice shall be given at the time of preliminary plat approval in accordance with Section 5.07, provided that District may give written notice that additional Wholesale Wastewater Service is needed at other times as determined appropriate in District's discretion.
- e. Bastrop shall make Wholesale Wastewater Service available for the number of SUE's requested within eighteen (18) months of the date of the request, up to the Wholesale Wastewater Commitment, and payment of the Wastewater Treatment Capacity Reservation Fee for the number of SUE's stated in the notice. Payment of the Wastewater Treatment Capacity Reservation Fee shall guarantee capacity within the WWTP#3 and other parts of the Bastrop System, as applicable, for the number of SUEs for which the Wastewater Treatment Capacity Reservation Fee is paid.

### **Section 2.03 Peak Hour Flow Rate Limitations.**

- a. The Peak Hour Flow Rate at a Point of Entry shall not exceed an average of 0.65 gallons per minute (gpm) for each SUE allocated to all Phases served by such Point of Entry.
- b. **The Peak Hour Flow Rate for Phase 1 shall not exceed \_\_\_\_\_.**
- c. The Peak Hour Flow Rate for all subsequent phases shall be calculated in accordance with this subsection.  
  
$$\text{Peak Hour Flow Rate (gpm)} = (0.65 \text{ gpm}) \times (\text{number of SUEs requested per phase})$$
- d. The Parties agree that any increase in the agreed Peak Hour Flow Rate or the daily BOD of Wholesale Wastewater Service that Bastrop provides to District under this Agreement will require a written amendment of this Agreement duly authorized by the governing bodies of the Parties.

### **Section 2.04 Wastewater Strength Limitations.**

The Wholesale Service Commitment shall be subject to the following additional limitations:

The daily BOD Loading, as measured based on the arithmetic average of all samples, grab or composite, within a calendar month, consisting of at least four (4) separate representative samples taken in accordance with the Permit -- shall not exceed an average of 0.425 pounds (BOD-5) per SUE allocated to a Phase. The daily BOD Loading for Phase 1 shall not exceed 76.5 pounds (BOD-5). The daily BOD loading for all subsequent phases shall be calculated in accordance with this subsection.

Daily BOD Loading (BOD-5) = (0.425 pounds) x (number of SUEs requested per phase).

**Section 2.05 Sole Provider; Waste Disposal Permit Application.**

- a. For so long as Bastrop meets its obligations under this Agreement, Bastrop will be the sole source of Wholesale Wastewater Service to District for the Wholesale Wastewater Service Area unless: i) Bastrop consents in writing to District's conversion to another wholesale provider; or, ii) Bastrop refuses or fails to provide Wholesale Wastewater Service in accordance with the terms of this Agreement, in which event District shall be free to find an alternative Wholesale Wastewater Service provider.
- b. Under the terms and conditions set forth herein, Bastrop shall be entitled to provide Wholesale Wastewater Service to District for the Wholesale Wastewater Service Area from any source of treatment capacity available to Bastrop.

**Section 2.06 Wholesale Service Commitment Not Transferable.**

- a. Bastrop's commitment to provide Wholesale Wastewater Service under this Agreement is solely to District and solely for the Wholesale Wastewater Service Area. District may not assign or transfer in whole or in part Bastrop's service commitment to any person or entity without Bastrop's approval, and any assignment will be subject to the terms and conditions of this Agreement.
- b. Bastrop may not assign or transfer in whole or in part its obligations under this Agreement to any other person or entity, with District's prior written consent, which consent shall not be unreasonably withheld.

**Section 2.07 District Responsible for Retail Connections.**

District will be solely responsible for ensuring compliance by its retail customers with the applicable terms of this Agreement and for the proper and lawful application of District's policies and regulations governing connection to the District System.

**Section 2.08 Retail Billing and Collection.**

District agrees that it will be solely responsible for retail billings to and collections from its customers within the Wholesale Wastewater Service Area.

**Section 2.09 Curtailment of Service.**

The Parties agree that, if Wastewater Service is curtailed by Bastrop to other customers of the Bastrop System due to the need to conduct maintenance operations or due to an emergency, Bastrop may impose a like curtailment, with notice to District, on Wholesale Wastewater Service delivered to District under this Agreement. Bastrop will impose such curtailments in a nondiscriminatory fashion. The Parties agree that they will not construe this Agreement to prohibit Bastrop from curtailing service completely in the event of a maintenance operation or emergency for a reasonable period necessary to complete such maintenance operations or repairs or respond to an emergency circumstance.

**Section 2.10 Cooperation during Maintenance or Emergency.**

District will reasonably cooperate with Bastrop during periods of emergency or required maintenance. If necessary, upon prior notice, District will operate and maintain its system at its expense in a manner reasonably necessary for the safe and efficient completion of repairs or the replacement of facilities, the restoration of service, and the protection of the public health, safety, and welfare.

**Section 2.11 Retail Service and CCN.**

The Parties acknowledge and agree that District shall be the retail provider of sewer service to lands within the Wholesale Wastewater Service Area. Bastrop agrees that it will not oppose or protest an application by District to obtain a sewer CCN for the Wholesale Wastewater Service Area within the District boundaries. Bastrop will not provide retail sewer service within the Wholesale Wastewater Service Area and shall amend any agreements providing for Bastrop to provide retail wastewater service within the Wholesale Wastewater Service Area to be consistent with the retail sewer service area boundaries and the agreements regarding inspection of Internal Facilities set forth in this Agreement.

**ARTICLE III. DESIGN AND CONSTRUCTION OF FACILITIES****Section 3.01 Design and Construction of the Internal Facilities.**

- a. District will be responsible for design and construction of, or for causing one or more third parties to design and construct, the Internal Facilities within the District System.
- b. District agrees to be responsible for and pay for all costs of rights-of- way, easements, design, engineering, contracting, construction and inspection of the Internal Facilities; provided that District may require Developer to be responsible and pay for all or a portion of the costs of right-of- way, easements, design, engineering, contracting, construction, and inspection of the Internal Facilities.
- c. The Internal Facilities will be designed and constructed in accordance with applicable regulations and specifications of Bastrop, the State of Texas and United States, and with the terms and conditions of this Agreement.

**Section 3.02 Design and Construction of the Connecting Facilities.**

- a. District shall be responsible for design and construction of, or for causing one or more third parties to design and construct, any Connecting Facilities, or modification to the existing Connecting Facilities, required for the transmission of Wastewater to the Bastrop System.
- b. Subject to the terms and conditions of this Agreement, District agrees to engage or cause to be engaged the services of a professional engineer registered in Texas to produce the engineering design, including detailed plans and specifications for Connecting Facilities in conformance with Bastrop's design criteria and construction standards in effect at the time the plans and specifications are submitted to Bastrop for approval, or in accordance with

District's design criteria and construction standards if such are more stringent; provided that the parties shall reasonably cooperate to determine the design standards that will control. The plans and specifications will address the sizing, routing, material selection, service method, cost estimates, proposed construction schedule, easements, and such other and further information as Bastrop deems necessary or advisable for proper review and assessment of the plans and specifications. The design for the Connecting Facilities shall be procured at District's sole expense; provided that District may cause Developer to be responsible for designing the Connecting Facilities, and the cost thereof. The plans and specifications for the Connecting Facilities will be submitted to Bastrop for review and comment before District approves said plans and specifications. Bastrop shall provide written comments within thirty (30) days of the date of the receipt of the plans unless a longer period is specified by City Staff. District shall cause any comments provided by Bastrop to be addressed. If Bastrop does not provide comments within the greater of thirty (30) days or the time specified by City Staff, District may approve the plan and specifications, subject to compliance with District's regulations.

- c. The Parties agree that the Connecting Facilities shall be designed and constructed so that they will not deliver Wastewater to the Bastrop System at a Peak Hour Flow Rate in excess of the Peak Flow Rate limitations set forth in this Agreement. District agrees to design and construct, or cause the design and construction of, the Connecting Facilities so that any wastewater flows to a Metering Facility can be accurately measured, in the event the Wholesale Wastewater Rate is calculated based on volumetric charges.
- d. District solely shall be responsible for the construction of the Connecting Facilities, or for causing Developer to be responsible for the construction of the Connecting Facilities. District solely shall be responsible for funding construction, and all costs related thereto, of the Connecting Facilities, or for causing one or more third party developers or owners of land within the Wholesale Wastewater Service Area to be responsible for funding construction, and all costs related thereto, of the Connecting Facilities.
- e. District agrees to be responsible for, and pay for all costs of rights-of-way, easements, design, engineering, contracting, construction and inspection of the Connecting Facilities required to be constructed for the connection to the Bastrop System, or for causing Developer to be responsible for and to pay all costs of rights-of-way, easements, design, engineering, contracting, construction and inspection of the Connecting Facilities required to be constructed for the connection to the Bastrop System.
- f. The parties will cooperate in good faith to determine the location of Connecting Facilities that are located in Bastrop's city limits or ETJ. Bastrop agrees to make good faith efforts to cause the dedication of easements or right-of-way that may be necessary for the location and installation of Connecting Facilities within the city limits and ETJ of Bastrop. Pursuant to separate written instruments, Bastrop will further allow District to access and use rights-of-way and easements owned or controlled by City for the purpose of installing, constructing, repairing, replacing, maintaining, and operating or causing to be installed, constructed, repaired, replaced, maintained and operated, Connecting Facilities.

**Section 3.03 Notification of Commencement of Construction on Connecting Facilities.**

After all required approvals for construction of the Connecting Facilities are obtained but prior to commencement of construction, District will provide, or cause to be provided, written notice to Bastrop of the date on which construction of the Connecting Facilities is scheduled to commence. Bastrop must receive this written notice at least five (5) days before the scheduled construction date.

**Section 3.04 Inspection and Acceptance of a Portion or All of the Connecting Facilities.**

The Parties agree that Bastrop has the right to make inspections during the construction phase of the Connecting Facilities. Acceptance of the Connecting Facilities by District is subject to final inspection by Bastrop.

**Section 3.05 Agreement to Submit As-Built or Record Drawings and Final Plats.**

District agrees to provide, or cause to be provided, to Bastrop: a) as-built or record drawings of all Internal Facilities and Connecting Facilities that contribute directly to the Bastrop System; and b) final plats for property located within the Wholesale Wastewater Service Area; within thirty (30) days of District receiving them, not to exceed sixty (60) days following completion and acceptance of the construction of such facilities or recording of the final plat, as appropriate.

**Section 3.06 Ownership and Operation of Connecting Facilities.**

Except as set forth below or otherwise agreed, District shall own and operate all Connecting Facilities located on its side of a Point of Entry after completion of construction by District or the Developer, and acceptance of the Connecting Facilities by Bastrop.

**Section 3.07 Design and Construction of Interceptors.**

- a. The District will pay the full design and construction costs of Metering components. The City will own, operate and maintain the metering components upon its completion, acceptance and conveyance by the District to the City. The District shall have the right to the percentage of the line's capacity necessary to transport sewage at a flow rate of [REDACTED] GPD to serve the District at full buildout.
- b. Except as described in Subsection 3.07(a) or as otherwise agreed by the Parties, Bastrop shall be responsible for design and construction of the Interceptors, including the acquisition of all easements required for the construction, ownership and operation of the Interceptors.
- c. Bastrop agrees that the Interceptors shall be designed and constructed with sufficient capacity to make wholesale service available to District in an amount not less than required for Bastrop to fulfill its obligations under this Agreement.
- d. Under no circumstances shall District construct any Interceptors that would connect to, or contribute Wastewater into the Bastrop System without Bastrop's prior written approval.



**Section 3.08 Design and Construction of Improvements to the Bastrop System and WWTP#3**

- a. Bastrop shall be responsible for the design and construction of WWTP#3 (Permit No. WQ0011076002) and the portions of the Bastrop System that serve the Wholesale Wastewater Service Area.
- b. For the term of this Agreement, Bastrop agrees that it will provide Wholesale Wastewater Service to District up to the Wholesale Wastewater Commitment under the terms and conditions of this Agreement and payment of the Wastewater Treatment Capacity Reservation Fee shall guarantee capacity in the WWTP#3 and the Bastrop System for the number of SUE's for which the Wastewater Treatment Capacity Reservation Fee is paid.

**ARTICLE IV. DESIGN AND CONSTRUCTION OF WASTEWATER FACILITIES****Section 4.01 Wastewater Flow Meters.**

All Wastewater Flows from the Wholesale Wastewater Service Area must be metered through Metering Facilities that are designed and constructed by District and are subject to Bastrop's review and approval. Upon completion of installation, the Metering Facilities shall be dedicated to Bastrop. The parties acknowledge and agree that the initial Wholesale Wastewater Rate is a flat rate charge as set forth in Article V. This Article shall also govern metering of Wastewater flows for the purpose of calculating the Volumetric Rate in the event that the Wholesale Wastewater Rate is a volume-based rate. The Metering Facilities shall be tested and calibrated to ensure said facilities are operative and measuring accurately prior to instituting and charging District a volume-based Wholesale Wastewater Rate.

**Section 4.02 Wastewater Flow Meter Calibration and Testing.**

- a. Bastrop agrees to calibrate and routinely service the Wastewater flow meter no less than once during each twelve (12) month period as a Cost of the System. Calibration will be accomplished according to Bastrop's standard methods.
- b. Bastrop will notify District in writing of proposed calibrations in advance of such occurrences so that District may observe if desired.
- c. It will be the duty of the Parties to this Agreement to notify the other Party in the event any Party becomes aware that a Wastewater flow meter is registering inaccurately or malfunctioning. Any Party will have the right to test a flow meter at any time. Notification of a proposed test will be provided at least forty (48) hours before conducting the test except in the case of emergencies. Any Party will have the right to witness Wastewater flow meter tests. Payment for meter calibration and testing under this Section will be the responsibility of the Party requesting the meter calibration and testing.

**Section 4.03 Ownership, Operating and Maintenance of the Wastewater Flow Meters.**

Following completion and final acceptance of the Metering Facilities by District, Bastrop will own, operate and maintain the Metering Facilities.

**Section 4.04 Billing Adjustments.**

If, for any reason, a Wastewater flow meter is out of service or inoperative, or if, upon any test, any meter is found to be inaccurate (variance of five percent (5%) or more), Bastrop will calibrate the meter to measure within five percent (5%) accuracy. In addition, Bastrop will adjust billings by an amount that corresponds to the percentage that the meter varies from accurate measurement for one-half of the months since the most recent calibration of the same meter but not to exceed six (6) months. If adjustment results in credit to District, Bastrop may provide such credit against future billings to District. If adjustment results in additional amounts due to Bastrop, District will pay such amounts to Bastrop in accordance with the billing terms provided in this Agreement.

**Section 4.05 Wastewater Flow Monitoring.**

If Bastrop discovers a wastewater flow problem, as determined in its reasonable discretion, associated with a Point of Entry, Bastrop may, at any time, with notice to District, conduct smoke testing, television of lines, or other methods to determine the cause of the problem. The Parties agree to fully cooperate in this investigation. If the cause of the problem is determined to be solely in Bastrop's System, then Bastrop will solely pay for all investigation costs. If the cause of the problem is determined to be solely in District's System, then District will solely pay for all investigation costs. If the cause of the problem is determined to be in both District and Bastrop Systems, then investigation costs will be proportionally distributed based upon the number of connections investigated for each Party. District agrees to reimburse Bastrop for District's portion of this investigation costs within thirty (30) days of receipt of invoice, which invoice shall include supporting data in reasonable detail. District agrees to correct any problems identified in the investigation with reasonable promptness, depending on the nature of the problem.

**ARTICLE V. WASTEWATER RATES AND CHARGES****Section 5.01 Wholesale Wastewater Rate Fees and Charges.**

- a. In accordance with the terms and conditions of this Agreement, District, through its Board of Directors, will establish and District (as set forth below) will pay Bastrop rates, charges and fees for the Wholesale Wastewater Service provided under this Agreement. The rates, charges and fees for Wholesale Wastewater Service shall consist of:
  - (1) the Wholesale Wastewater Rate, which shall consist of either: (i) a Flat Rate as set forth in Section 5.02; or (ii) a Volume Charge and Monthly Minimum Charges as set forth in Section 5.04; and
  - (2) Impact Fees.

- b. Bastrop may charge either a metered Volume Charge and Monthly Minimum Charges or a Flat Rate Charge for Wholesale Wastewater Service at the discretion of its governing body and after thirty (30) days prior notice to District. Bastrop specifically agrees that the Volume Charge and Minimum Monthly Charges or Flat Rate Charges will be calculated so that all Costs of the System on which the charges are based are properly allocated between District, any other wholesale customers of the System, and Bastrop's retail customers in a just, reasonable and nondiscriminatory manner and in accordance with this Agreement.
- c. Any subsequent changes in rates shall be set in accordance with the following principles:
- d. Bastrop agrees that it will review the Costs of the System that form the basis for the Wholesale Wastewater Rate not less than once every three (3) years; provided, however, that Bastrop shall not be required to employ persons other than Bastrop employees for purposes of doing so unless Bastrop wishes to increase the Wholesale Wastewater Rate, or unless the Bastrop employee is qualified to conduct a wastewater rate study.

### **Section 5.02 Flat Rate.**

Bastrop agrees that the initial Wholesale Wastewater Rate will be a Flat Rate in the amount of \$\_\_\_\_\_ per month, per Active Connection multiplied by the SUE Multiplier, if applicable, billed monthly. The Flat Rate is calculated by subtracting an amount that represents the portion of Bastrop's cost of retail customer service, billing, and line maintenance (the "Retail-Only Service Costs") from Bastrop's retail flat rate. The current flat rate is based on the following calculation: \_\_\_\_\_ (Bastrop's retail flat rate) - \_\_\_\_\_ (the "Retail-Only Service Costs").

### **Section 5.03 Notice to and Review by District.**

- a. Bastrop will provide District with at least thirty (30) days prior written notice of any changes to the Wholesale Wastewater Rate or Impact Fees. Written notice shall include the proposed new rates and/or fees, and an updated cost of service study with reasonable detail that allows District to identify the methodology used to revise the rates (including enough detail to allow District to evaluate the exclusion of retail-only service costs from the Wholesale Wastewater Rate), the Costs of the System that necessitate the change, along with the allocation of Costs of the System between District, and all other customers of the Bastrop System (wholesale and retail). Bastrop will not be required to provide notice related to setting of Impact Fees beyond those notices required by the Texas Impact Fee Law (Texas Local Government Code, Chapter 395, as amended), other than the notice described in this Section 5.03(a).
- b. District will have the right to inspect and copy, at its expense, Bastrop's books and records to verify any statement, billing, charge, computation or demand made to District by Bastrop. Bastrop agrees to make all such information available to District for inspection and copying with reasonable promptness during normal business hours.

**Section 5.04 Volume Charges and Monthly Minimum Charges.**

- a. This Section shall govern and be in effect in the event that Bastrop establishes a Wholesale Wastewater Rate based on volume charges.
- b. Bastrop will measure Wastewater flows at the Meter(s) monthly and will bill District as provided in Article VI this Agreement for the Volume Charges based on the Wastewater flows measured.
- c. In addition to the Volume Charges, Bastrop's City Council may establish Minimum Monthly Charges to recover that portion of the capital-related Costs of the System incurred by Bastrop related to that portion of the Bastrop System that is used or useful for the provision of Wholesale Wastewater Service hereunder and that are not otherwise financed through the collection of Impact Fees or Wastewater Treatment Capacity Reservation Fee. Bastrop specifically agrees that the Minimum Monthly Charge will be calculated so that all capital-related Costs of the System are allocated between District, any other wholesale customers of the System, and Bastrop's retail customers in a fair, equitable, nondiscriminatory and impartial manner and in accordance with this Agreement. Without limitation to the generality of the foregoing, the Monthly Minimum Charge will be calculated such that the Minimum Monthly Charges shall not pay any capital-related costs associated with capacity in the System that is being constructed to provide Wastewater treatment and disposal service in excess of the Wholesale Service Commitment.
- d. Prior to revision of the Monthly Minimum Charge, Bastrop shall provide written notice thereof to District, and provide a reasonable period for review and comment. A period of thirty (30) days shall be deemed a reasonable period for review and comment. The notice shall specify the lands within the Wholesale Wastewater Service Area for which Bastrop has received or credited payment of Impact Fees.
- e. Each updated cost of service study shall identify the capital related costs previously paid by payment of the Monthly Minimum Charge and Impact Fees to Bastrop.
- f. Bastrop agrees that any subsequent agreements that it enters into with any other person or entity for Wholesale Wastewater Treatment and Disposal Services from the System will also require such person or entity to pay a minimum monthly fee to be calculated in a just, reasonable, and nondiscriminatory manner based on the wholesale service commitments made to such other customers and the most recent rate study conducted by Bastrop.
- g. District agrees to provide payment to Bastrop for the Minimum Monthly Charges associated with the provision of Wholesale Wastewater Service.

**Section 5.05 Bastrop Wastewater Impact Fees.**

- a. The provision of Wholesale Wastewater Service to District under this Agreement is subject to payment to Bastrop of Impact Fees as adopted by Bastrop's City Council for customers in the same service area under Chapter 395, Texas Local Government Code. The Impact Fee as of the Effective Date of this Agreement for the Wholesale Wastewater

Service Area is \$ \_\_\_\_\_ per SUE. For those properties served that are not a single-family residence, the SUE Multiplier that corresponds to the type of property as described in Exhibit "E". The Parties acknowledge that the Impact Fees may be subject to the procedures and requirements of the Texas Impact Fee Law.

- b. The Impact Fee less the Wastewater Treatment Capacity Reservation Fee (if a Wastewater Treatment Capacity Reservation Fee was paid and remitted to Bastrop as provided in Section 5.07) (the "Impact Fee Balance") or the Impact Fee (if a Wastewater Treatment Capacity Reservation Fee was not paid and remitted to Bastrop as provided in Section 5.07) shall be collected by District at the time of application for a building permit or, if no building permit is required, at the time of a request to connect to District's System for each lot within the Wholesale Wastewater Service Area. District shall pay the Impact Fee Balance or Impact Fee, as appropriate, to Bastrop within thirty (30) days of receipt. District agrees that it will not approve a request for connection to District's System, as appropriate, for a lot until the Impact Fee or Impact Fee Balance, as appropriate, is paid. In the event Bastrop amends the Impact Fee, the amended Impact Fee will apply for purposes of this Agreement only to lands within the Wholesale Wastewater Service Area that receive final plat approval after the amendment of the Impact Fees, or for properties that develop without platting, at the time of an application for building permit or plumbing permit as applicable, or for properties which have not otherwise been given Impact Fee credits; provided that in the case of such properties for which a Wastewater Treatment Capacity Reservation Fee was paid prior to amendment of the Impact Fee, the Impact Fee will be fixed at the Impact Fee in effect at the time the Wastewater Treatment Capacity Reservation Fee was paid and will not be subject to adjustment if the Impact Fee is increased, but will be subject to adjustment if the Impact Fee is decreased. The Impact Fees or Impact Fee Balance, as appropriate, shall be calculated for each subdivision plat based on the number of lots and the uses within that plat, as required by Bastrop's ordinance establishing Impact Fees. Bastrop shall maintain a current copy of Bastrop's Impact Fee Ordinance with the City Secretary. If Impact Fees are paid prior to the time of connection, Bastrop will provide District with certificates for the number of wastewater connections, i.e., SUEs, for which District paid Impact Fees. Said certificates shall be based on credits available and credited at time of platting, limited to specific platted lots within the Wholesale Wastewater Service Area. Certificates shall be issued for one SUE per lot, unless Bastrop receives payment for a larger number of SUEs per lot. Assuming that Bastrop has received Impact Fees for one SUE per lot within a platted subdivision, in the event service to a platted lot requires service at a level in excess of one SUE, District shall, within forty-five (45) days of provision of retail wastewater service to the platted lot, pay or cause to be paid to Bastrop Impact Fees for the remaining SUEs of service.
- c. The Bastrop City Council may amend the Impact Fee applicable to the Wholesale Wastewater Service Area from time to time in accordance with the process set forth in Chapter 395, Texas Local Government Code, provided that Bastrop shall give District at least thirty (30) days prior written notice before amending the Impact Fee.

**Section 5.06 Wholesale Wastewater Rates.**

The City shall invoice the District for wholesale wastewater delivery and treatment service at the same rate that the City charges its other wholesale customers per GPD of use. The District shall pay the City monthly, one month in arrears, as more fully described in Section 6 of this Agreement.

**Section 5.07 Wastewater Treatment Capacity Reservation Fees.**

- a. *Initial Wastewater Treatment Capacity Reservation Fee.* The District, or the Developer if the District does not have sufficient funds, will pay to the City the Initial Wastewater Treatment Capacity Reservation Fee. The payment to be made to the City within ninety (90) days of the Effective Date to reserve wastewater treatment capacity equivalent to \_\_\_\_\_ Wastewater SUEs for the District, in the amount of 10% of the City Wastewater Impact Fees at the City's then current rates per Wastewater SUE.
- b. *Incremental Wastewater Treatment Capacity Reservation Fee.* The District, or the Developer if the District does not have sufficient funds, will pay to the City Incremental Wastewater Treatment Capacity Reservation Fees in increments of not less than **100** Wastewater SUEs as needed by the Development. The payment to be made to the City at the point in time that is three (3) years in advance of absorption or need to reserve successive tranches of wastewater treatment capacity for the District, in the amount of 25% of the City Wastewater Impact Fees at the City's then current rates per Wastewater SUE, multiplied by no fewer than **100** Wastewater SUEs. The District and Developer intend to continue making incremental Wastewater Treatment Capacity Reservation Fee payments until the District is built out, in incremental payments for capacity of no fewer than **100** Wastewater SUEs of capacity per increment, unless otherwise agreed by City staff, the District and the Developer.
- c. District shall pay, or cause to be paid, a portion of the Impact Fee to Bastrop to guarantee capacity in the Bastrop System, which portion shall be \$ (Established by Ordinance upon adoption of Wholesale Rate Schedule) \_\_\_\_\_ per SUE (the "Wastewater Treatment Capacity Reservation Fee") for land that is platted in the Wholesale Wastewater Service Area. Owners of property that develop without platting shall not be charged a Wastewater Treatment Capacity Reservation Fee; provided that such Owners will be required to pay an Impact Fee as provided in Section 5.05. Owners of property in the Wholesale Wastewater Service Area that do not pay a Wastewater Treatment Capacity Reservation Fee shall not have capacity reserved in the Bastrop System, until such time that the Impact Fee is paid. Payment of the Wastewater Treatment Capacity Reservation Fee will secure the right to capacity in the Bastrop System for the number of SUEs for which fees are paid. Upon payment of the Wastewater Treatment Capacity Reservation Fee, a credit shall be applied to the Impact Fee for each SUE for which the Wastewater Treatment Capacity Reservation Fee was paid. District will pay, or cause to be paid, to Bastrop a Wastewater Treatment Capacity Reservation Fee for each SUE shown in a preliminary plat approved by City within thirty (30) days after approval of the preliminary plat. The payment of the Wastewater Treatment Capacity Reservation Fee shall be accompanied by a copy of the preliminary plat, and, if not clearly apparent on the preliminary plat, written notice of the number of SUE's on the property subject to the preliminary plat. If District has paid the

Wastewater Treatment Capacity Reservation Fee at a time other than in connection with a preliminary plat, then District may apply all or a portion of said fees towards the Wastewater Treatment Capacity Reservation Fee owed for a preliminary plat and shall notify Bastrop of such application at the time that a Wastewater Treatment Capacity Reservation Fee is owed.

- d. The District and Developer shall to continue making incremental reservation fee payments until the District is built out, in incremental payments for capacity of no Wastewater Treatment Capacity Reservation Fee fewer than 100 Wastewater SUEs of capacity per increment, unless otherwise agreed by City, the District, and the Developer.
- e. Upon the Effective Date of this Agreement, an initial Wastewater Treatment Capacity Reservation Fee of \$ \_\_\_\_\_ is owed from District to Bastrop for the reservation of Phase I SUEs of the Wholesale Wastewater Service Commitment (the "Initial Wastewater Treatment Capacity Reservation Fee "). The Initial Wastewater Treatment Capacity Reservation Fee shall be a payment in the amount of \$ \_\_\_\_\_, which District shall pay to Bastrop on or before the ninetieth (90<sup>th</sup>) day from the Effective Date. District may require Developer to pay for or to reimburse District for the Initial Wastewater Treatment Capacity Reservation Fee and the Wastewater Treatment Capacity Reservation Fee.
- f. If a preliminary plat is amended to reduce the number of SUE's, or if a final plat is approved that contains fewer SUE's than shown in a preliminary plan or a phase thereof, Bastrop shall refund to District the Excess Wastewater Treatment Capacity Reservation Fees within thirty (30) days of request by District, unless District requests in writing that Bastrop apply the Excess Wastewater Treatment Capacity Reservation Fee to another preliminary plat, another phase of the preliminary plat, or another property. Such request shall identify the preliminary plat, preliminary plat phase, or property to which the Excess Wastewater Treatment Capacity Reservation Fees will be applied. A refund for an Excess Wastewater Treatment Capacity Reservation Fee is not applicable for the payment of the Initial Wastewater Treatment Capacity Reservation Fee as required in Section 5.07(a).
- g. In the event that a preliminary plat expires, District may apply the Wastewater Treatment Capacity Reservation Fees paid in related to said preliminary plat to another preliminary plat or property. District shall notify Bastrop in writing if a preliminary plat has expired and the preliminary plat, preliminary plat phase, or property to which the Wastewater Treatment Capacity Reservation Fees will be applied.
- h. In the event that a building permit is not issued or an application for connection to District's System is not approved within three (3) years of payment of a Wastewater Treatment Capacity Reservation Fee for an SUE, District shall pay, or cause to be paid, an additional \$ \_\_\_\_\_ for said SUE. The additional payment shall be credited against the Impact Fee for said SUE.
- i. Bastrop and District shall each keep accurate records of the Wastewater Treatment Capacity Reservation Fees paid. For each payment of Wastewater Treatment Capacity Reservation Fees made by District, Bastrop shall give District a certificate stating the total

Wastewater Treatment Capacity Reservation Fees paid and the number of SUE's guaranteed by such payment. The parties may inspect each other's records during normal business hours.

#### **Section 5.08 Reasonableness of Rates and Right of Appeal.**

District agrees that the Rates initially charged by City and the policies defined in this Agreement are just and reasonable, and do not adversely affect the public interest. The Rates charged by City are subject to modification as provided herein. District agrees that it is reasonable for City to adjust the Rates periodically as provided herein and understands that any adjustments made in accordance with this Agreement are part of the consideration for this Agreement. Notwithstanding any provision to the contrary, District does not waive the right to file and pursue an appeal of any increase in Rates proposed or adopted by City that is not in conformance with the terms of this Agreement.

#### **Section 5.09 Other Service Fees.**

District acknowledges and agrees that Bastrop, through its City Council, may adopt charges and fees for Wholesale Wastewater Service in addition to the Impact Fees, Monthly Minimum Charge, and Volume Charge. These additional charges and fees are limited to review fees and inspection fees related to review and inspection of plans for the Connecting Facilities, and these charges or fees shall be just and reasonable, and nondiscriminatory and are not to exceed the lower of the actual costs of review and inspection fees or \$ **(Price established by Ordinance upon adoption of Wholesale Rate Category)** per Connecting Facility. Plan review, inspection, and similar fees or charges relating to the design and/or construction of the Connecting Facilities shall be charged to and paid by the constructing party.

#### **Section 5.10 District Wastewater Rates and Charges.**

District will determine and charge its retail Wastewater customers such rates as are determined by its governing body. During the term of this Agreement, District will fix and collect rates and charges for retail Wastewater service that are, in the opinion of its governing body, sufficient, together with any other revenues available to District, to produce the amount necessary to operate, repair, and maintain the District System, and to pay the cost of Wholesale Wastewater Service from Bastrop. District will establish retail rates consistent with industry standards. District will be solely responsible for ensuring that its retail rates and charges are determined and collected in accordance with applicable law.

#### **Section 5.11 District Wastewater Fees.**

The Parties acknowledge that District has the right to the extent allowed under applicable law to assess, charge, and collect such impact fees, capital recovery fees, connection fees, meter fees, or other service fees, rates, truces, or other charges as its governing body will deem appropriate in excess of the Bastrop Impact Fee. This Agreement will not be construed to require, limit, or restrict the governmental power of District to implement the same. District will be solely responsible for the proper exercise of its governmental power to assess and collect such fees and charges and for



ensuring that all fees, rates, and charges District elects to charge are in compliance with applicable law.

### **Section 5.12 Verification of District Wastewater Connections.**

For verification of the Wholesale Wastewater Rate and Impact Fees paid to Bastrop and for any other purpose, District will make available for inspection and copying during regular business hours, all records for retail connections to the District System. In addition, Bastrop will have the right to inspect the District System at any reasonable time, at Bastrop's sole expense, after giving District written notice of its intention to inspect and allowing the opportunity for District to be present, to verify the type and amount of retail connections made or the condition of the District System (related to contractual compliance issues) and District will provide lawful access to Bastrop for this purpose.

## **ARTICLE VI. WASTEWATER WHOLESALE BILLING METHODOLOGY**

### **Section 6.01 Monthly Statement.**

- a. For each monthly billing period, Bastrop will forward to District a bill providing a statement of the total Wholesale Wastewater Rate owed by District for Wholesale Wastewater Service provided to District during the previous monthly billing period. The invoice shall contain sufficient detail to allow District to verify the charges. District shall not be charged for Wholesale Wastewater Services until such services commence. District will pay Bastrop for each bill submitted by Bastrop to District by check or bank-wire on or before thirty (30) days from the date of the invoice.
- b. Payments by District shall be mailed to the address indicated on the invoice or can be hand-delivered to Bastrop's City Hall in Bastrop, Bastrop County, Texas, upon prior arrangement. If payments will be made by bank-wire, District shall verify wiring instructions with Bastrop's Finance Department. Payment must be received at Bastrop's bank by the due date in order not to be considered past due or late, unless District timely contests a bill, or a portion thereof, in accordance with Section 6.05. In the event District fails to make payment of an uncontested bill within said thirty (30) day period, District shall pay a one-time late payment charge of five percent (5%) of the unpaid balance of the invoice. In addition, District shall pay interest on the unpaid uncontested balance at a rate equal to one and one-half percent (1.5%) per month.

### **Section 6.02 Monthly Billing Calculations.**

- a. This subsection 6.02(a) shall govern and be in effect in the event that Bastrop establishes a Wholesale Wastewater Rate based on volume charges. Bastrop will compute the Volume Charge included in the monthly billing for Wholesale Wastewater Service on the basis of monthly readings of metered Wastewater flows of the Metering Facilities. The total of these amounts multiplied by the Wholesale Wastewater rate, set from time to time by the Bastrop City Council, will be used to compute the monthly bill for the Volume Charge.

- b. This subsection 6.02(b) shall govern and be in effect when the Wholesale Wastewater Rate is a Flat Rate. Bastrop will calculate the Wholesale Wastewater Rate by multiplying the Flat Rate set forth in this Agreement, as amended by the Bastrop City Council, by the number of SUEs per Active Connection set forth in the monthly report provided by District under Section 6.02(c).
- c. Each calendar month, District shall deliver to Bastrop the number of Active Connections within the Wholesale Wastewater Service Area, and the number of SUEs associated with each Active Connection. Bastrop shall use the number of Active Connections and the associated SUEs stated in the report to calculate the Wholesale Wastewater Rate for the billing period in which the report was filed.

### **Section 6.03 Infiltration and Inflow.**

District acknowledges that water entering the Bastrop System from the District System emanating from any source whatsoever must be given treatment and handling whether or not its source is revenue producing for District. Therefore, District agrees to pay, as part of the Volume Charge, if the Wastewater Rate includes a Volume Charge, for infiltration and inflow originating within the District system without abatement in the same manner and cost as other Wastewater entering Bastrop's System from the District System.

### **Section 6.04 Effect of Nonpayment.**

With respect to monthly billings, including billings for the Wholesale Wastewater Rate and any other fees or charges applicable under this Agreement, if Bastrop has not received payment from District by the due date, the bill will be considered delinquent, unless contested in good faith. In such event, Bastrop will notify District in accordance with this Agreement, of such delinquency in writing. If District fails to make payment of the delinquent billing within thirty (30) calendar days from the date of transmittal of such written notice of delinquency from Bastrop, then Bastrop may, at its discretion, suspend or reduce the level of Wastewater service to District until payment is made. District may exercise its right to dispute its obligation to pay all or a portion of a bill during the cure period following the procedure set forth in Section 6.05.

### **Section 6.05 Billing Disputes.**

Should District dispute its obligation to pay all or any part of the amount stated in any statement or notice, District may pay such amount along with a written notice of protest, in which event such amount shall be deposited by Bastrop in a separate interest-bearing account mutually acceptable to both Bastrop and District pending final resolution of such dispute in accordance with this Agreement. Bastrop may not terminate this contract or deny Wastewater service that is otherwise in accordance with this Agreement for failure to pay the amount stated in any statement or notice if District pays such amount under protest.

## **ARTICLE VII. WASTEWATER QUALITY**

### **Section 7.01 Condition of Wastewater Delivered.**

- a. District shall have the right to discharge Wastewater into the Bastrop System meeting the requirements of quality as set forth in this Section and not containing wastes identified in Bastrop's Code of Ordinances.
- b. Discharges into the Bastrop System shall consist only of domestic Wastewater and Wastewater that the Bastrop System is capable of handling:
  - (1) So that the effluent and sludge from the Bastrop System meets the current legal standards of the EPA, the TCEQ, or any governmental body having legal authority to set standards for such effluent;
  - (2) Without causing damage or corrosion to the Bastrop System that would result in increased maintenance costs;
  - (3) Without causing excessive treatment costs; and
  - (4) That meets any applicable requirements of the EPA Pretreatment Regulations, 40 CFR Part 403.
- c. EPA and TCEQ periodically modify standards on prohibited discharges. It is the intention of the Parties, therefore, that the Prohibited Wastes be reviewed periodically by Bastrop and that they revised by Bastrop in accordance with the latest standards of EPA, TCEQ or any federal or state agency having regulatory authority over discharges made to the Bastrop System. Any required revisions shall be made by Bastrop and upon the effective date, District shall be responsible for integrating such changes into its regulations and notifying all affected users of the change.

### **Section 7.02 Remedies for Delivery of Prohibited Wastes.**

- a. In the event Wastewater delivered from the District System to the Bastrop System fails to meet the standards specified in this Agreement, and Bastrop reasonably determines that the addition of oxidizing chemicals or another acceptable method of pretreatment of Wastewater or operation of the District System is necessary in order for Wastewater delivered to the Bastrop System to be non-corrosive and non-injurious to the Bastrop System, District agrees to install such facilities within twenty-four (24) hours of receiving notice from Bastrop or immediately implement such methods of operation and maintenance, at its sole expense, as are reasonably deemed by Bastrop to be necessary for the Wastewater delivered by District to meet the requirements of this Article .
- b. In the event Wastewater delivered from the District System to the Bastrop System fails to meet the standards specified in this Agreement, District shall pay to Bastrop, in the same manner provided in this Agreement for the payment of the Volume Charges, a surcharge calculated in accordance with and subject to the requirements of this section (the "Treatment Surcharge").

- (1) The Treatment Surcharge shall be based on the following formula:  
$$S = V \times 8.34 (A [\text{BOD} -200] + B [\text{TSS} -200]),$$
 where
    - A. "S" means the surcharge that will appear on District's monthly bill;
    - B. "V" means Wastewater actually billed in millions of gallons during the billing period; "8.34" means pounds per gallon of water;
    - C. "A" means the unit charge in dollars per pound of BOD which unit charge shall be based on the unit charge adopted by the Bastrop City Council for wastewater service from the Bastrop System. as amended from time to time, which unit charge is \$0.49 per pound as of the Effective Date; provided that increases in such charge shall not be effective as to District until notice of the increase has been given to Leander;
    - D. "BOD" means biological oxygen demand measured in milligrams per liter by weight; "200" means 200 mg/l;
    - E. "B" means the unit charge in dollars per pound of total suspended solids. which unit charge shall be based on the unit charge adopted by the Bastrop City Council for wastewater service from the District System, as amended from time to time, which unit charge is \$0. \_\_\_\_ per pound as of the Effective Date; provided that increases in such charge shall not be effective as to District until notice of the increase has been given to District; and,
    - F. "TSS" means total suspended solids measured in milligrams per liter by weight.
  - (2) The Treatment Surcharge shall be charged for each month following sampling completed in accordance with this Agreement that measures BOD in excess of 200 mg/I or TSS in excess of 200 mg/I until subsequent sampling measures both BOD and TSS below those levels. In the event any Treatment Surcharge is based on sampling performed by Bastrop, Bastrop will provide written notice of the sampling results prior to charging the Treatment Surcharge to District and shall give District an opportunity to be present during the testing.
- c. In the event District delivers to Bastrop Wastewater that fails to meet the standards specified in this Agreement, District agrees to pay Bastrop for all damages and costs of repair to the Bastrop System and/or regulatory fines reasonably incurred by Bastrop that were caused by District's delivery of Wastewater that fails to meet the standards specified in this Agreement. Bastrop may require payment of the cost of repair of damaged facilities and/or regulatory fines as a condition to the further provision of Wholesale Wastewater Service, restrict District's flows to the extent necessary to protect Bastrop's System, file suit to recover for any and all damages to the Bastrop System caused by such failure on the part of District, or seek such other and further relief, at law or in equity, as Bastrop will deem advisable.

**Section 7.03 Sampling and Testing.**

- a. District will perform sampling of Wastewater at the Point(s) of Entry and provide an analysis to Bastrop due on a quarterly basis from January 1, 20XX and every quarter or four times a year after the Connecting Facilities are completed.
  - (1) AU samples will be Composite Samples, that is, a series of at least twelve (12) samples taken from a waste stream without regard to the flow in the waste stream and over a period of time not less than twenty- four (24) hours at intervals of not less than one (1) hour, which samples shall be averaged in accordance with standard industry practice.
  - (2) The analysis of the sample shall be performed by a National Environmental Laboratory Accreditation Conference (NELAC) approved laboratory. District will require a copy of the report to include at a minimum, levels of pH, BOD-5, COD TSS and oil and grease. The report also must contain the chain of custody for the sample and the Quality Assurance/Quality Control (QA-QC) report.
  - (3) District will be responsible for the cost of sampling and analysis.
  - (4) District will provide written notice to Bastrop or Bastrop's current plant operator at least five (5) business days prior to conducting Wastewater sampling and shall allow Bastrop or Bastrop's current plant operator representatives to observe the sampling.
  - (5) In the event District fails to perform sampling by the deadlines provided in this section, after notice and an opportunity to cure within thirty (30) days, District shall pay to Bastrop a sampling surcharge in the amount of \_\_\_\_\_ (\$\_\_\_\_\_) per event. In addition, District will pay Bastrop for Bastrop's actual costs to perform the sampling if Bastrop does so during the next thirty (30) days after the expiration of the cure period if District does not perform the sampling within the cure period.
- b. District agrees that Bastrop or Bastrop's current operator will have the right, at its option and expense, to sample Wastewater discharges within the District System at:
  - (1) the site of discharge;
  - (2) Points of Entry to the Bastrop System; and
  - (3) other locations as required for the purpose of determining the source, type, and strength of discharge.
- c. District will use reasonable efforts to make necessary arrangements for and provide assistance to Bastrop in obtaining lawful access to sampling points within areas served by District. Bastrop will provide written notice to District at least five (5) business days prior to conducting Wastewater sampling and shall allow one or more District representatives to observe the sampling.

- d. District agrees that to the extent authorized by applicable laws, any of its individual customers found in violation of allowable discharges or any of its individual customers who refuse access for the purpose of sampling may be disconnected from District and Bastrop's Wastewater System in accordance with applicable regulations of District or Bastrop and federal law.
- e. Notwithstanding any other provision in this Agreement to the contrary, the Parties agree as follows:
  - (1) no Party shall be obligated to perform any sampling of Wastewater except at Points of Entry constructed with sampling ports; and
  - (2) all future sampling ports at Points of Entry shall be identified on plans and specifications for Connecting Facilities to be approved by Bastrop.

## **ARTICLE VIII. STANDARDS FOR WASTEWATER CONNECTIONS TO DISTRICT SYSTEM**

### **Section 8.01 District Prevention of Infiltration and Inflow.**

It will be District's responsibility to undertake such measures as are reasonably necessary or prudent to minimize infiltration and inflow to District's System. District will prohibit the discharge of drainage water and storm water run-off into the District System.

### **Section 8.02 Construction and Testing Criteria for District Sewer Connections.**

- a. All tests required by the design criteria and specifications of the State of Texas for connections to the District System within the Wholesale Wastewater Area will be at District's or its customer's expense.
- b. District agrees that the physical connection of each service line to the local Wastewater facility within the Wholesale Wastewater Area will be the responsibility of District and will not be left to the discretion of the plumber or contractor unless said plumber or contractor is under the direct supervision of or whose work is inspected by District's authorized representative.
- c. Connections made to the District System after the date of execution of this Agreement will be made using only materials permitted by applicable codes and development criteria manuals of the State of Texas. District will inspect all connections to its System in accordance with its own rules and regulations in order to insure compliance with it.
- d. A failure on the part of District to provide and enforce such regulations governing connections to the District System will, at the option of Bastrop after: (i) notice to District in writing of the specific violation, and (ii) failure within thirty (30) days to correct said violation or, if the violation is of a nature that it cannot be corrected within thirty (30) days, to begin to correct such violation and to diligently pursue such curative action, constitutes sufficient grounds for Bastrop to restrict or limit Wastewater flows, or immediately

terminate this Agreement, to such extent Bastrop deems reasonably necessary in order to protect the Bastrop System from damage or excessive flows.

## **ARTICLE IX. LIABILITY FOR DAMAGES AND RESPONSIBILITY FOR TREATMENT AND DISPOSAL OF WASTEWATER**

### **Section 9.01 Liability of District.**

As between the Parties and except as otherwise provided herein, District shall bear responsibility for damages, if any, claimed by third persons arising from the reception, transportation, delivery, and disposal of all Wastewater discharged while it remains within the District System, and District, to the extent authorized by law, holds Bastrop harmless therefrom. Notwithstanding the foregoing, Bastrop shall bear responsibility for damages, if any, claimed by third persons because Bastrop does not accept Wastewater at a Point of Entry in a quantity that it is contractually obligated to accept under this Agreement, and Bastrop, to the extent authorized by law, agrees to hold District harmless therefrom.

### **Section 9.02 Liability of Bastrop.**

Bastrop will bear the responsibility as between the Parties for the proper reception, transportation, treatment, and disposal of Wastewater received by it at Points of Entry in accordance with the Agreement. However, the Parties agree that they will not construe this Agreement to cause Bastrop to bear responsibility for damages to the Bastrop System or to third persons arising from: i) the delivery by District of Prohibited Wastes or Wastewater that is in violation of this Agreement and corrosive or otherwise damaging to the Bastrop System or to persons or property; or, ii) the delivery of Wastewater at a Point of Entry in excess of the Peak Hour Flow Rate.

## **ARTICLE X. REGULATORY COMPLIANCE**

### **Section 10.01 Agreement Subject to Applicable Law.**

The Agreement will be subject to all valid rules, regulations, and applicable laws of the United States of America, the State of Texas and/or any other governmental body or agency having lawful jurisdiction or any authorized representative or agency of any of them.

### **Section 10.02 Cooperation to Assure Regulatory Compliance.**

Since the Parties must comply with all federal, state, and local requirements to obtain permits, grants, and assistance for system construction, studies, etc., each Party will cooperate in good faith with the other Party at all times to assure compliance with any such governmental requirements where noncompliance or non-cooperation may subject the Parties to penalties, loss of grants or other funds, or other adverse regulatory action in the performance of this Agreement.

## **ARTICLE XI. TERM, TERMINATION, DEFAULT, REMEDIES**

### **Section 11.01 Term and Termination.**

- a. This Agreement shall become effective upon the Effective Date and shall extend until                     , 20 unless terminated earlier as provided herein.
- b. District may terminate this Agreement by providing not less than sixty (60) days written notice of termination to Bastrop.
- c. In the event that any agreement provided for in the definition of Bastrop System Agreements are terminated or expires, this Agreement shall be terminated and be of no further force or effect. Either party shall give thirty (30) days prior written notice of an anticipated termination or expiration of any agreement provided for in the definition of Bastrop System Agreements.

### **Section 11.02 Default.**

- a. In the event District shall default in the payment of any amounts due to Bastrop under this Agreement, or in the performance of any material obligation to be performed by District under this Agreement, then Bastrop shall give District at least thirty (30) days' written notice of such default and the opportunity to cure same. Thereafter, Bastrop shall have the right to pursue any remedy available at law or in equity, pending cure of such default by District.
- b. In the event Bastrop shall default in the performance of any material obligation to be performed by Bastrop under this Agreement, then District shall give Bastrop at least thirty (30) days' written notice of such default and the opportunity to cure same. Thereafter, in the event such default remains uncured, the District shall have the right to pursue any remedy available at law or in equity, pending cure of such default by Bastrop.

### **Section 11.03 Additional Remedies upon Default.**

It is not intended hereby to specify (and this Agreement shall not be considered as specifying) an exclusive remedy for any default, but all such other remedies existing at law or in equity may be availed of by any party and shall be cumulative of the remedies provided. Recognizing however, that Bastrop's undertaking to provide Wholesale Wastewater Service to the District System is an obligation, failure in the performance of which cannot be adequately compensated in money damages alone, Bastrop agrees, in the event of any default on its part, that District shall have available to it the equitable remedies of mandamus and specific performance in addition to any other legal or equitable remedies (other than termination of this Agreement) that may also be available. In recognition that failure in the performance of District's obligations could not be adequately compensated in money damages alone, District agrees in the event of any default on its part that Bastrop shall have available to it the equitable remedies of mandamus and specific performance in addition to any other legal or equitable remedies that may also be available to Bastrop including the right to obtain a writ of mandamus or an injunction against District requiring the District to collect rates and charges sufficient to pay the amounts owed to Bastrop by District



under this Agreement. If either party institutes legal proceedings to seek adjudication of an alleged default under this Agreement, the prevailing party in the adjudication shall be entitled to its reasonable and necessary attorneys' fees. THE PARTIES ACKNOWLEDGE AND AGREE THAT THIS AGREEMENT IS SUBJECT TO SUBCHAPTER I, CHAPTER 271, TEXAS LOCAL GOVERNMENT CODE.

## **ARTICLE XII. GENERAL PROVISIONS**

### **Section 12.01 Assignability.**

Assignment of this Agreement by either party is prohibited without the prior written consent of the other party, which consent shall not be unreasonably withheld, delayed or conditioned.

### **Section 12.02 Amendment.**

This Agreement may be amended or modified only by written agreement duly authorized by the respective governing bodies of District and Bastrop and executed by duly authorized representatives of each.

### **Section 12.03 Necessary Documents and Actions.**

Each Party agrees to execute and deliver all such other and further instruments and undertake such actions as are or may become necessary or convenient to effectuate the purposes and intent of this Agreement.

### **Section 12.04 Entire Agreement.**

This Agreement constitutes the entire agreement of the Parties and this Agreement supersedes any prior or contemporaneous oral or written understandings or representations of the Parties regarding Wholesale Water Service by Bastrop to District for the District Service Area.

### **Section 12.05 Applicable Law.**

This Agreement will be construed under and in accordance with the laws of the State of Texas.

### **Section 12.06 Venue.**

All obligations of the Parties created in the Agreement are performable in Bastrop County, Texas, and venue for any action arising under this Agreement will be in Bastrop County, Texas.

### **Section 12.07 Third Party Beneficiaries.**

Nothing in this Agreement, express or implied, is intended to confer upon any person or entity, other than to the Parties, any rights, benefits, or remedies under or by reason of this Agreement.

**Section 12.08 Duplicate Originals.**

This Agreement may be executed in duplicate originals each of equal dignity.

**Section 12.09 Notices.**

Any notice required under this Agreement may be given to the respective Parties by deposit in regular first-class mail or by hand-delivery to the address of the other party shown below:

**DISTRICT:**

**Name of Municipal Utility District or Customer  
Address  
City, State Zip  
Attn: Position**

**DEVELOPER:**

**Name  
Address  
City, State, Zip  
Attn: Position**

**CITY OF BASTROP:**

City of Bastrop  
1311 Chestnut Street  
Bastrop, Texas 78602  
Attn: City Manager

**WITH REQUIRED COPY TO:**

Alan Bojorquez  
Bojorquez Law Firm, PC  
12325 Hymeadow Drive, Suite 2-100  
Austin, Texas 78750

Notices shall be deemed received on the date of hand delivery or within three (3) days of deposit in first-class mail.

**Section 12.10 Consents and Approvals.**

Wherever this Agreement requires any Party, or its agents or employees to provide a consent, approval or similar action, the parties agree that such consent, approval or similar action will not be unreasonably withheld or delayed.

**Section 12.11 Severability.**

Should any court declare or determine that any provisions of this Agreement is invalid or unenforceable under present or future laws, that provision shall be fully severable; this Agreement shall be construed and enforced as if the illegal, invalid, or unenforceable provision had never comprised a part of this Agreement and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision

or by its severance from this Agreement. Furthermore, in place of each such illegal, invalid, or unenforceable provision, there shall be added automatically as a part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable. Texas law shall govern the validity and interpretation of this Agreement.

#### **Section 12.12 Records.**

Bastrop and District each agree to preserve, for a period of at least two (2) years from their respective dates of origin, all books, records, test data, charts and other records pertaining to this Agreement. Bastrop and District shall each, respectively, have the right during reasonable business hours to inspect such records to the extent necessary to verify the accuracy of any statement, charge or computation made pursuant to any provisions of this Agreement.

#### **Section 12.13 State Approval; Compliance with TCEQ Rules.**

Anything herein to the contrary notwithstanding, it is the intention of the parties that this Agreement fully comply with the requirements of the TCEQ applicable to public drinking water systems which receive water through a sole-source water supply contract, including the requirements of 30 Texas Administrative Code, Section 290.45(f). The parties each agree to provide any information which may be requested by the other in order to respond to any inquiries or reports required by the TCEQ. If, at any time, it is determined that this Agreement does not comply with all applicable TCEQ requirements, the parties agree to cooperate to modify this Agreement in order to effect such compliance.

#### **Section 12.14 Force Majeure.**

If any party is rendered unable, wholly or in part, by Force Majeure to carry out any of its obligations under this Agreement, other than an obligation to pay or provide money, then such obligations of that party to the extent affected by such Force Majeure and to the extent that due diligence is being used to resume performance at the earliest practicable time shall be suspended during the continuance of any inability so caused to the extent provided but for no longer period. Such cause, as far as possible, shall be remedied with all reasonable diligence. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the affected party, and that the above requirements that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demand of the opposing party or parties when such settlement is unfavorable to it in the judgment of the affected party.

#### **Section 12.15 Good Faith.**

Each party agrees that, notwithstanding any provision herein to the contrary (i) it will not unreasonably withhold or condition or unduly delay any consent, approval, decision, determination or other action which is required or permitted under the terms of this Agreement, and (ii) it will act in good faith and shall at all times deal fairly with the other party.

**Section 12.16 Authority of Parties Executing Agreement, Validity.**

By their execution, each of the individuals executing this Agreement on behalf of a Party represents and warrants to the other Party that he or she has the authority to execute the document in the capacity shown on this document. Each of the Parties further represent and warrant that this Agreement constitutes a valid and binding contract, enforceable against it in accordance with its terms.

**Section 12.17 Exhibits.**

The following exhibits are attached to and incorporated into this Agreement for all purposes:

- Exhibit A: Metes and Bounds Description of the Land
- Exhibit B: Bastrop TPDES Permit No. WQ0011076001
- Exhibit C: Map Showing Locations of Lift Stations and Force Main
- Exhibit D: Map Showing Locations of Wastewater Delivery Points,
- Exhibit E: Bastrop Impact Fee Calculation Sheet

**Section 12.18 Effective Date.**

This Agreement will be effective from and after the last date of due execution by all Parties.

*(Reminder of page left blank intentionally)*

**CITY OF BASTROP, TEXAS**

By: \_\_\_\_\_  
Name: Lynda Humble  
Title: City Manager  
Date: \_\_\_\_\_

**ATTEST:** \_\_\_\_\_  
City Secretary

\_\_\_\_\_ **DISTRICT**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attest:

\_\_\_\_\_

STATE OF TEXAS           §

§

COUNTY OF BASTROP   §

This instrument was acknowledged before me the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
by \_\_\_\_\_, \_\_\_\_\_ City of Bastrop, Texas, on behalf of City.

\_\_\_\_\_

Notary Public Signature

\_\_\_\_\_ **DEVELOPER**

A Texas \_\_\_\_\_

By: \_\_\_\_\_

A \_\_\_\_\_ company, \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_ §

\_\_\_\_\_ §

COUNTY OF \_\_\_\_\_ §

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
by \_\_\_\_\_, \_\_\_\_\_ of \_\_\_\_\_, a Texas \_\_\_\_\_ company,  
\_\_\_\_\_ of \_\_\_\_\_, a Texas \_\_\_\_\_, on behalf of said  
\_\_\_\_\_ as \_\_\_\_\_ of the \_\_\_\_\_.

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_

EXHIBIT A EXAMPLE FOR WHOLESALE WASTEWATER CONTRACT 3/19

STATE OF TEXAS COUNTY OF BASTROP

CITY OF BASTROP MUD 100.937 ACRE

All that certain tract or parcel of land containing 0.937 acre situated in the Stephen F. Austin Survey, A-3, in Bastrop County, Texas, being part of that tract described as 5,566.770 acres ("Exhibit A-4") in a deed from Steiner and Sons, Ltd. to XS Ranch Fund VI, L.P. dated December 19, 2006 and recorded in Volume 1701, Page 145 of the Official Records of Bastrop County, said 100.937-acre tract being more particularly described by metes and bounds as follows:

Commencing at a 1/2" iron rod found at the intersection of the fenced North margin of "Sayers Road" (County maintained public roadway - no record right-of-way width) with the Northwest right-of-way line of the Union Pacific Railroad (100' wide right-of-way) for a Southeast corner of said (called) 5,566.770 acre XS Ranch tract and the Southeast corner of a 30 foot wide easement tract also surveyed this date, said point having a coordinate value of North= 10,032,315.97 feet and East= 3,245,449.38 feet according to the Texas State Plane Coordinate System - Central Zone - NAD 83(CORS 96);

Thence North 28 degree 47 minutes 43 seconds East, 1,731.45 feet along the common line between said Union Pacific Railroad and said 5,566.770 acre XS Ranch tract to a 1/2" iron rod set for an angle point in the East line of said 30 foot wide easement tract also surveyed this date;

Thence North 06 degrees 58 minutes 04 seconds West, departing said common line, 562.23 feet to a 1/2" iron rod set within said XS Ranch tract for the most Northerly corner of said thirty foot wide easement tract also surveyed this date, the East corner of the tract herein described and the PLACE OF BEGINNING;

Thence South 28 degrees 47 minutes 51 seconds West, 240.00 feet to a 1/2" iron rod set for the South corner of the tract herein described;

Thence North 61 degrees 12 minutes 09 seconds West, 170.00 feet to a 1/2" iron rod set for the West corner of the tract herein described;

Thence North 28 degrees 47 minutes 51 seconds East, 240.00 feet to a 1/2" iron rod set for the North corner of the tract herein described;

Thence South 61 degrees 12 minutes 09 seconds East, 170.00 feet to the PLACE OF BEGINNING and containing 0.937 acre.



EXHIBIT A EXAMPLE FOR WHOLESALE WASTEWATER CONTRACT 3/19

CITY OF BASTROP

100.937 ACRE

PAGE 2 OF 3

Bearings, distances and coordinates used herein are "GRIDH based on the Texas State Plane Coordinate System - Central Zone - NAO 83(CORS 96). Convergence= +01 degree 32 minutes 47 seconds. Combined factor= 0.99997299.

STATE OF TEXAS

COUNTY OF BASTROP

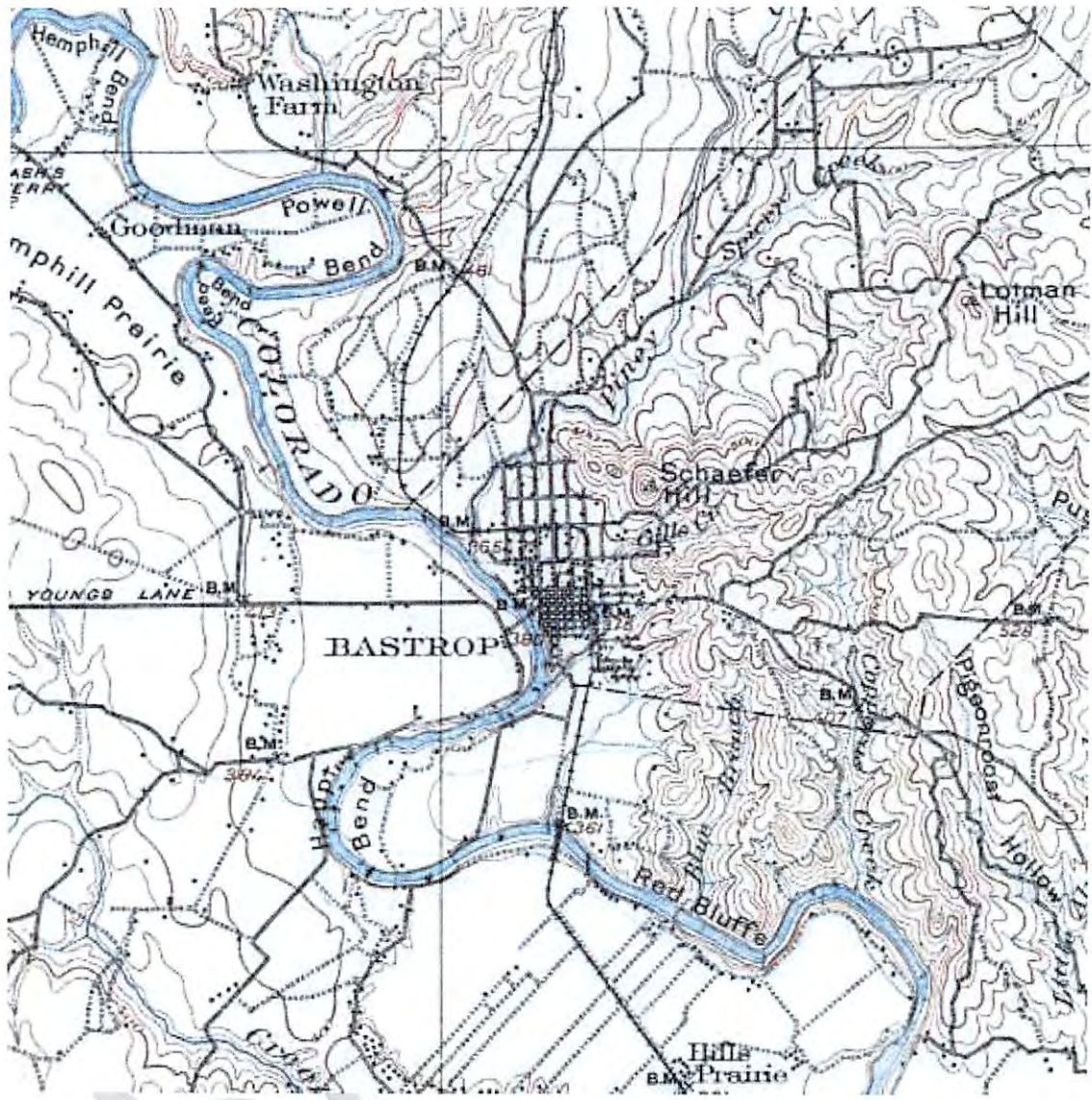
I, \_\_\_\_\_, a Registered Professional Land Surveyor, do hereby certify the foregoing field notes to be true and correct to the best of my knowledge and belief.



Signature *Baron de Bastrop*

Baron de Bastrop , R.P.L.S. Registration No. 1832 December 6 1832

EXHIBIT A EXAMPLE FOR WHOLESALE WASTEWATER CONTRACT 3/19



# COPY

## Texas Commission on Environmental Quality



### NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR MUNICIPAL WASTEWATER RENEWAL

PERMIT NO. WQ0011076001

EXHIBIT B Example doc WW wholesale agreement

**APPLICATION AND PRELIMINARY DECISION.** City of Bastrop, P. O. Box 427, Bastrop, Texas 78602-0427, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TPDES Permit No. WQ0011076001, which authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 1,400,000 gallons per day. TCEQ received this application on February 19, 2009.

The facility is located at 300 Water Street, approximately 0.2 mile south of State Highway 71 and immediately east of the Colorado River in the City of Bastrop in Bastrop County, Texas 78602. The treated effluent is discharged to the Colorado River Above La Grange in Segment No. 1434 of the Colorado River Basin. The designated uses for Segment No. 1434 are exceptional aquatic life uses, public water supply and contact recreation.

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Bastrop City Hall, 904 Main Street, Bastrop, Texas.

**PUBLIC COMMENT / PUBLIC MEETING.** You may submit public comments or request a public meeting about this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ holds a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

**OPPORTUNITY FOR A CONTESTED CASE HEARING.** After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. Unless the application is directly referred for a contested case hearing, the response to comments will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the Executive Director's decision. A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

**TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST:** your name; address, phone; applicant's name and permit number; the location and distance of your property/activities relative to the facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; and the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify an individual member of the group who would be adversely affected by the proposed facility or

**activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are germane to the group's purpose.**

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission will only grant a contested case hearing on disputed issues of fact that are relevant and material to the Commission's decision on the application. Further, the Commission will only grant a hearing on issues that were raised in timely filed comments that were not subsequently withdrawn. **TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

**EXECUTIVE DIRECTOR ACTION.** The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

**MAILING LIST.** If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

**All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 or electronically at [www.tceq.state.tx.us/about/comments.html](http://www.tceq.state.tx.us/about/comments.html) within 30 days from the date of newspaper publication of this notice.**

**AGENCY CONTACTS AND INFORMATION.** If you need more information about this permit application or the permitting process, please call the TCEQ Office of Public Assistance, Toll Free, at 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040. General information about the TCEQ can be found at our web site at [www.TCEQ.state.tx.us](http://www.TCEQ.state.tx.us).

Further information may also be obtained from City of Bastrop at the address stated above or by calling Mr. James Miller at (512) 321-2124.

Issuance Date \_\_\_\_\_

## FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For proposed Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0011076001, TX0032671 to discharge to waters in the State.

Issuing Office: Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

Applicant: City of Bastrop  
P. O. Box 427  
Bastrop, Texas 78602-0427

Prepared By: David Akoma  
Municipal Permits Team  
Wastewater Permitting Section (MC 148)  
Water Quality Division  
(512) 239-1444

Date: June 24, 2009

Permit Action: Renewal

### 1. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The proposed permit includes an expiration date of September 1, 2014 according to 30 TAC § 305.71, Basin Permitting.

### 2. APPLICANT ACTIVITY

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of the existing permit that authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 1.40 million gallons per day. The existing wastewater treatment facility serves the City of Bastrop.

### 3. FACILITY AND DISCHARGE LOCATION

The plant site is located at 300 Water Street, approximately 0.2 mile south of State Highway 71 and immediately east of the Colorado River in the City of Bastrop in Bastrop County, Texas 78602.

The treated effluent is discharged to the Colorado River Above La Grange in Segment No. 1434 of the Colorado River Basin. The designated uses for Segment No. 1434 are exceptional aquatic life uses, public water supply and contact recreation.

### 4. TREATMENT PROCESS DESCRIPTION AND SEWAGE SLUDGE DISPOSAL

The East Bastrop Wastewater Treatment Facility is an activated sludge process plant operated in the extended aeration mode. Treatment units include a bar screen, aeration basin, final clarifier, aerobic sludge digester, belt press, sludge drying beds, chlorine contact chamber and dechlorination facilities. The facility is in operation.

Sludge generated from the treatment facility is hauled by a registered transporter and disposed of at a TCEQ permitted landfill, Sunset Farm, Municipal Solid Waste (MSW) Permit No. 40035, in Travis County. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

**5. INDUSTRIAL WASTE CONTRIBUTION**

The draft permit includes pretreatment requirements that are appropriate for a facility of this size and complexity. The facility does not appear to receive significant industrial wastewater contributions.

**6. SUMMARY OF SELF-REPORTED EFFLUENT ANALYSES**

The following is a summary of the applicant's Monthly Effluent Report data for the period from February 2003 through March 2009. The average of Daily Avg value is computed by averaging of all 30-day average values for the reporting period for each parameter.

<u>Parameter</u>	<u>Average of Daily Avg</u>
Flow, MGD	0.68
CBOD <sub>5</sub> , mg/l	3.0
TSS, mg/l	4.5
NH <sub>3</sub> -N, mg/l	0.11
DO, mg/l	5.1

**7. PROPOSED PERMIT CONDITIONS AND MONITORING REQUIREMENTS**

The proposed effluent limitations and monitoring requirements for those parameters that are limited in the draft permit are as follows:

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The annual average flow of effluent shall not exceed 1.40 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,722 gallons per minute (gpm).

<u>Parameter</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>
CBOD <sub>5</sub>	10	117	25
TSS	15	175	40
NH <sub>3</sub> -N	2	23	10
DO (minimum)	5.0	N/A	N/A

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow, MGD	Continuous
CBOD <sub>5</sub>	Two/week
TSS	Two/week
NH <sub>3</sub> -N	Two/week
DO	Two/week

**B. SEWAGE SLUDGE REQUIREMENTS**

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ authorized land application site or co-disposal landfill.

**C. PRETREATMENT REQUIREMENTS**

Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 315 which references 40 CFR Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution." [rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798] The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

**D. WHOLE EFFLUENT TOXICITY (BIOMONITORING) REQUIREMENTS**

(1) The draft permit includes 48-hour acute freshwater biomonitoring requirements as follows. The permit requires five dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 6%, 8%, 11%, 14%, and 19%. The low-flow effluent concentration (critical dilution) is defined as 14% effluent.

(a) Acute static renewal 48-hour definitive toxicity tests using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). The frequency of the testing is once per three months at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(b) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). The frequency of the testing is once per three months at least the first year of testing, after which the permittee may apply for a testing frequency reduction.

(2) The draft permit includes the following minimum 24-hour acute freshwater biomonitoring requirements at a frequency of once per six months:

(a) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*).

(b) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*).

**E. SUMMARY OF CHANGES FROM APPLICATION**

There are no changes from application.

F. SUMMARY OF CHANGES FROM EXISTING PERMIT

Effluent limitations and monitoring requirements in the draft permit remain the same as the existing permit requirements. The dilution series have changed from 4%, 6%, 8%, 10%, and 13% with a critical dilution of 10% in the existing permit, to 6%, 8%, 11%, 14%, and 19% with a critical dilution of 14% in the draft permit.

The Standard Permit Conditions, Sludge Provisions, Pretreatment Requirements, Other Requirements, and Biomonitoring sections of the draft permit have been updated.

8. DRAFT PERMIT RATIONALE

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated in Title 40 of the Code of Federal Regulations (CFR) require technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, and/or on best professional judgment (BPJ) in the absence of guidelines.

Effluent limitations for maximum and minimum pH are in accordance with 40 CFR Part 133.102(c) and 30 TAC § 309.1(b).

B. WATER QUALITY SUMMARY AND COASTAL MANAGEMENT PLAN

(1) WATER QUALITY SUMMARY

The treated effluent is discharged to the Colorado River Above La Grange in Segment No. 1434 of the Colorado River Basin. The designated uses for Segment No. 1434 are exceptional aquatic life uses, public water supply and contact recreation.

A priority watershed of critical concern has been identified in Segment No. 1434 in Bastrop County. The Houston toad [*Bufo houstonensis*], an endangered aquatic dependent species, has been documented in several water bodies within the Segment No. 1434 watershed. However, the main stem of the Colorado River, which directly receives the discharge, is not one of the water bodies where the toad is known to occur. Therefore, the Houston toad is not expected to be impacted by this permit action. This determination is based on Appendix A of the United States Fish and Wildlife Service's biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System dated September 14, 1998 and the October 21, 1998 update. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 1434 is not currently listed on the State's inventory of impaired and threatened waters (the CWA §303(d) list).

The effluent limitations and/or conditions in the draft permit comply with the Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10, effective August 17, 2000. The effluent limitations and/or conditions in the draft permit comply with the requirements in Watershed Protection, 30 TAC Chapter 311, Subchapter E: Colorado River Watershed.



(2) CONVENTIONAL PARAMETERS

Effluent limitations for the conventional effluent parameters (i.e., Biochemical Oxygen Demand or Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water quality limited streams as established in the Texas Water Quality Standards and the water quality management plan.

The effluent limitations in the draft permit have been reviewed for consistency with the State of Texas Water Quality Management Plan (WQMP). The existing limits are consistent with the approved WQMP. A Waste Load Evaluation has not been prepared for Segment No. 1434.

The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Domestic Wastewater Effluent Limitations.

(3) COASTAL MANAGEMENT PLAN

The facility is not located in the Coastal Management Program boundary.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

(1) GENERAL COMMENTS

The Texas Surface Water Quality Standards (30 TAC Chapter 307) state that "surface waters will not be toxic to man, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards, January 2003" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

(2) AQUATIC LIFE CRITERIA

(a) SCREENING

Water quality-based effluent limitations are calculated from freshwater aquatic life criteria found in Table 1 of the Texas Surface Water Quality Standards (30 TAC Chapter 307).

Acute freshwater criteria are applied at the edge of the zone of initial dilution (ZID) and chronic freshwater criteria are applied at the edge of the aquatic life mixing zone. The ZID for this discharge is defined as 20 feet upstream and 60 feet downstream from the point where the discharge enters Colorado River. The aquatic life mixing zone for this discharge is defined as 100 feet upstream and 300 feet downstream from the point where the discharge enters Colorado River.

TCEQ uses the mass balance equation to estimate dilutions at the edges of the ZID and aquatic life mixing zone during critical conditions. The estimated dilution at the edge of

the aquatic life mixing zone is calculated using the final permitted flow of 1.40 MGD and the 7-day, 2-year (7Q2) flow of 304.57 cfs for Colorado River. The estimated dilution at the edge of the ZID is calculated using the final permitted flow of 1.40 MGD and 25% of the 7Q2 flow. The following critical effluent percentages are being used:

Acute Effluent %: 2.77 %                      Chronic Effluent %: 0.71%

Wasteload allocations (WLAs) are calculated using the above estimated effluent percentages, criteria outlined in the Texas Surface Water Quality Standards, and partitioning coefficients for metals (when appropriate and designated in the implementation procedures). The WLA is the end-of-pipe effluent concentration that can be discharged, when after mixing in the receiving stream, instream numerical criteria will not be exceeded. From the WLA, a long term average (LTA) is calculated using a log normal probability distribution, a given coefficient of variation (0.6), and a 90<sup>th</sup> percentile confidence level. The LTA is the long term average effluent concentration for which the WLA will never be exceeded using a selected percentile confidence level. The lower of the two LTAs (acute and chronic) is used to calculate a daily average and daily maximum effluent limitation for the protection of aquatic life using the same statistical considerations with the 99<sup>th</sup> percentile confidence level and a standard number of monthly effluent samples collected (12).

Assumptions used in deriving the effluent limitations include segment values for hardness, chlorides, pH and Total Suspended Solids (TSS) according to the segment-specific values contained in the TCEQ guidance document, "Procedures to Implement the Texas Surface Water Quality Standards, January 2003." The segment values are 190 mg/l CaCO<sub>3</sub> for hardness, 59 mg/l Chlorides, 7.8 standard units for pH, and 5 mg/l for TSS. For additional details on the calculation of water quality-based effluent limitations, refer to the TCEQ guidance document.

TCEQ practice for determining significant potential is to compare the reported analytical data against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85% of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Analytical data reported in the application was screened against calculated water quality-based effluent limitations for the protection of aquatic life. Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for aquatic life protection.

(3) AQUATIC ORGANISM BIOACCUMULATION CRITERIA

(a) SCREENING

Water quality-based effluent limitations for the protection of human health are calculated using criteria for the consumption of freshwater fish tissue and drinking water found in Table 3 of the Texas Surface Water Quality Standards (30 TAC Chapter 307). Freshwater fish tissue bioaccumulation and drinking water criteria are applied at the edge of the human health mixing zone. The human health mixing zone for this discharge is identical

to the aquatic life mixing zone. TCEQ uses the mass balance equation to estimate dilution at the edge of the human health mixing zone during average flow conditions. The estimated dilution at the edge of the human health mixing zone is calculated using the final permitted flow of 1.40 MGD and the harmonic mean flow of 781.25 cfs for Colorado River. The following critical effluent percentage is being used:

Human Health Effluent %: 0.28%

Water quality-based effluent limitations for human health protection against the consumption of fish tissue are calculated using the same procedure as outlined for calculation of water quality-based effluent limitations for aquatic life protection. A 99<sup>th</sup> percentile confidence level in the long term average calculation is used with only one long term average value being calculated.

Significant potential is again determined by comparing reported analytical data against 70% and 85% of the calculated daily average water quality-based effluent limitation.

(b) PERMIT ACTION

Reported analytical data does not exceed 70% of the calculated daily average water quality-based effluent limitation for human health protection.

(4) DRINKING WATER SUPPLY PROTECTION

(a) SCREENING

Water Quality Segment No. 1434, which receives the discharge from this facility, is designated as a public water supply. The screening procedure used to calculate water quality-based effluent limitations and determine the need for effluent limitations or monitoring requirements is identical to the procedure outlined in the aquatic organism bioaccumulation section of this fact sheet. Criteria used in the calculation of water quality-based effluent limitations for the protection of a drinking water supply are outlined in Table 3 (Water and Fish) of the Texas Surface Water Quality Standards (30 TAC Chapter 307). These criteria are developed from either drinking water maximum contaminant level (MCL) criteria outlined in 30 TAC Chapter 290 or from the combined human health effects of exposure to consumption of fish tissue and ingestion of drinking water.

(b) PERMIT ACTION

Criteria in the "Water and Fish" section of Table 3 do not distinguish if the criteria is based on a drinking water standard or the combined effects of ingestion of drinking water and fish tissue. Effluent limitations or monitoring requirements to protect the drinking water supply (and other human health effects) were previously calculated and outlined in the aquatic organism bioaccumulation criteria section of this fact sheet.

(5) WHOLE EFFLUENT TOXICITY (BIOMONITORING) CRITERIA

(a) SCREENING

TCEQ has determined that there may be pollutants present in the effluent that may have the potential to cause toxic conditions in the receiving stream. Whole effluent

biomonitoring is the most direct measure of potential toxicity that incorporates the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The existing permit includes 48-hour acute freshwater biomonitoring requirements. A summary of the biomonitoring testing for the facility indicates that in the past five years, the permittee has performed twenty-two 48-hour acute tests, with no demonstrations of statistically significant lethality.

**(b) PERMIT ACTION**

The test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body.

Analytical data submitted with the application does not indicate violation of any numerical water quality-based effluent limitation for aquatic life protection; therefore, minimum biomonitoring conditions required for EPA classified major facilities are proposed in the draft permit.

**(6) WHOLE EFFLUENT TOXICITY CRITERIA (24 - HOUR ACUTE)**

**(a) SCREENING**

The existing permit includes 24-hour acute freshwater biomonitoring language. A summary of the biomonitoring testing for the facility indicates that in the past five years, the permittee has performed twenty 24-hour acute tests, with no demonstrations of significant mortality.

**(b) PERMIT ACTION**

The draft permit includes 24-hour 100% acute biomonitoring tests for the life of the permit.

**9. WATER QUALITY VARIANCE REQUESTS**

No variance requests have been received.

**10. PROCEDURES FOR FINAL DECISION**

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the

application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application. This notice sets a deadline for public comment.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application contact David Akoma at (512) 239-1444.

## 11. ADMINISTRATIVE RECORD

The following items were considered in developing the proposed permit draft:

A. PERMIT(S)

TPDES Permit No. WQ0011076001 issued November 15, 2004.

B. APPLICATION

Application received February 18, 2009 and additional information received March 27, 2009.

C. MEMORANDA

Interoffice memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice memorandum from the Storm Water & Pretreatment Team of the TCEQ

City of Bastrop TPDES Permit No. WQ0011076001  
Fact Sheet and Executive Director's Preliminary Decision

Water Quality Division.

D. MISCELLANEOUS

Federal Clean Water Act, § 402; Texas Water Code § 26.027; 30 TAC Chapters 305, 309, 312, 319, 30; Commission policies; and EPA guidelines.

Texas Surface Water Quality Standards, 30 TAC §§ 307.1 - 307.10.

"Procedures to Implement the Texas Surface Water Quality Standards," Texas Commission on Environmental Quality, January 2003.

Texas 2008 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, April 1, 2008; approved by the EPA July 9, 2008.

"TNRCC Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits," Document No. 98-001.000-OWR-WQ, May 1998.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
P.O. Box 13087  
Austin, Texas 78711-3087

TPDES PERMIT NO. WQ0011076001  
*[For TCEQ office use only -  
EPA I.D. No. TX0032671]*

This is a renewal that replaces TPDES  
Permit No. WQ0011076001 issued  
November 15, 2004.

PERMIT TO DISCHARGE WASTES  
under provisions of  
Section 402 of the Clean Water Act  
and Chapter 26 of the Texas Water Code

City of Bastrop

whose mailing address is

P. O. Box 427  
Bastrop, Texas 78602-0427

is authorized to treat and discharge wastes from the East Bastrop Wastewater Treatment Facility, SIC Code 4952

located at 300 Water Street, approximately 0.2 mile south of State Highway 71 and immediately east of the Colorado River in the City of Bastrop in Bastrop County, Texas 78602

to the Colorado River Above La Grange in Segment No. 1434 of the Colorado River Basin

only according with effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, September 1, 2014.

ISSUED DATE:

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For the Commission

**EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**Outfall Number 001**

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

The annual average flow of effluent shall not exceed 1.40 million gallons per day (MGD); nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,722 gallons per minute (gpm).

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Minimum Self-Monitoring Requirements</u>	
	Daily Avg mg/l(lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (117)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (175)	25	40	60	Two/week	Composite
Ammonia Nitrogen	2 (23)	4	10	15	Two/week	Composite

2. The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes (based on peak flow) and shall be monitored daily by grab sample. The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l chlorine residual and shall monitor chlorine residual daily by grab sample after the dechlorination process. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 5.0 mg/l and shall be monitored twice per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.



**DEFINITIONS AND STANDARD PERMIT CONDITIONS**

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

**1. Flow Measurements**

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

**2. Concentration Measurements**

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
  - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period, consisting of at least four measurements shall be utilized as the daily average concentration.
  - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) - the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the  $n$ th root of the product of all measurements made in a calendar month, where  $n$  equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
  - f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
  - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
    - a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).
    - b. Grab sample - an individual sample collected in less than 15 minutes.
  4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
  5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
  6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

## MONITORING AND REPORTING REQUIREMENTS

### 1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20<sup>th</sup> day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

### 2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

### 3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
  - i. date, time and place of sample or measurement;
  - ii. identity of individual who collected the sample or made the measurement.
  - iii. date and time of analysis;
  - iv. identity of the individual and laboratory who performed the analysis;
  - v. the technique or method of analysis; and
  - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

### 4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

### 5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

### 6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

### 7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
  - i. Unauthorized discharges as defined in Permit Condition 2(g).
  - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
  - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
  - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. One hundred micrograms per liter (100 µg/L);
  - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. Five hundred micrograms per liter (500 µg/L);
  - ii. One milligram per liter (1 mg/L) for antimony;
  - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
  - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:
- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;
  - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
  - c. For the purpose of this paragraph, adequate notice shall include information on:
    - i. The quality and quantity of effluent introduced into the POTW; and
    - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

**PERMIT CONDITIONS****1. General**

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
  - i. Violation of any terms or conditions of this permit;
  - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

**2. Compliance**

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405; or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

### 3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

### 4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

- a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
  - i. the permittee;
  - ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
  - iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.
- b. This notification must indicate:
  - i. the name of the permittee and the permit number(s);
  - ii. the bankruptcy court in which the petition for bankruptcy was filed; and
  - iii. the date of filing of the petition.

**OPERATIONAL REQUIREMENTS**

- 1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
  - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.



- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:
- Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
  - Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
  - The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Environmental Cleanup Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
  - Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Registration, Review, and Reporting Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.
  - The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
  - The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:
    - Volume of waste and date(s) generated from treatment process;
    - Volume of waste disposed of on-site or shipped off-site;
    - Date(s) of disposal;
    - Identity of hauler or transporter;
    - Location of disposal site; and
    - Method of final disposal.
- The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.
12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

**SLUDGE PROVISIONS**

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. The disposal of sludge by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize land application of Class A Sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.

**SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION****A. General Requirements**

1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.
2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.
3. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

**B. Testing Requirements**

1. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentration</u> (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

\* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

- a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. Below are the additional requirements necessary to meet the definition of a Class A sludge.

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information.

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information.

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of shall be treated in one of the processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

Alternative 1

- i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.
- ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;
- iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and
- v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U. S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

- i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;
- ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U. S. Environmental Protection Agency final guidance;
- iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;
- iv. The Executive Director will accept from the U. S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

- v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.
- iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

#### 4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

- Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.
- Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.
- Alternative 9 -
  - i. Sewage sludge shall be injected below the surface of the land.
  - ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
  - iii. When sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- Alternative 10-
  - i. Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.
  - ii. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

**C. Monitoring Requirements**

- Toxicity Characteristic Leaching Procedure (TCLP) Test - annually
- PCBs - annually

All metal constituents and fecal coliform or Salmonella sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

<u>Amount of sewage sludge (*) metric tons per 365-day period</u>	<u>Monitoring Frequency</u>
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(\*) *The amount of bulk sewage sludge applied to the land (dry weight basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

**SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3**

For those permittees meeting Class A or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

**A. Pollutant Limits**

Table 2

<u>Pollutant</u>	<u>Cumulative Pollutant Loading Rate (pounds per acre)*</u>
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

<u>Pollutant</u>	<u>Monthly Average Concentration (milligrams per kilogram)*</u>
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

\*Dry weight basis

**B. Pathogen Control**

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A or Class B pathogen reduction requirements as defined above in Section I.B.3.

**C. Management Practices**

1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC § 312.44.
3. Bulk sewage sludge shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk sewage sludge sold or given away. The information sheet shall contain the following information:
  - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
  - b. A statement that application of the sewage sludge to the land is prohibited except in accordance with the instruction on the label or information sheet.
  - c. The annual whole sludge application rate for the sewage sludge application rate for the sewage sludge that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

#### D. Notification Requirements

1. If bulk sewage sludge is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:
  - a. The location, by street address, and specific latitude and longitude, of each land application site.
  - b. The approximate time period bulk sewage sludge will be applied to the site.
  - c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.
2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.

#### E. Record keeping Requirements

The sludge documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.
2. A description of how the pathogen reduction requirements are met (including site restrictions for Class B sludge, if applicable).
3. A description of how the vector attraction reduction requirements are met.
4. A description of how the management practices listed above in Section II.C are being met.
5. The following certification statement:

"I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."
6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk sewage sludge or a sewage sludge material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:



- a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
- b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
- c. The number of acres in each site on which bulk sludge is applied.
- d. The date and time sludge is applied to each site.
- e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

#### F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 1 of each year the following information:

1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
2. The frequency of monitoring listed in Section I.C. that applies to the permittee.
3. Toxicity Characteristic Leaching Procedure (TCLP) results.
4. Identity of hauler(s) and TCEQ transporter number.
5. PCB concentration in sludge in mg/kg.
6. Date(s) of disposal.
7. Owner of disposal site(s).
8. Texas Commission on Environmental Quality registration number, if applicable.
9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
10. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.
11. Level of pathogen reduction achieved (Class A or Class B).
12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
13. Vector attraction reduction alternative used as listed in Section I.B.4.
14. Annual sludge production in dry tons/year.

15. Amount of sludge land applied in dry tons/year.
16. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
17. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.
  - a. The location, by street address, and specific latitude and longitude.
  - b. The number of acres in each site on which bulk sewage sludge is applied.
  - c. The date and time bulk sewage sludge is applied to each site.
  - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
  - e. The amount of sewage sludge (i.e., dry tons) applied to each site.

The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL**

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.
- C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge disposal practice.
- D. Sewage sludge shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table I of 40 CFR § 261.24. Sewage sludge failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Registration, Review, and Reporting Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

- E. Sewage sludge shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.
- F. Record keeping Requirements

The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.
2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**G. Reporting Requirements**

The permittee shall report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year the following information:

1. Toxicity Characteristic Leaching Procedure (TCLP) results.
2. Annual sludge production in dry tons/year.
3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
4. Amount of sludge transported interstate in dry tons/year.
5. A certification that the sewage sludge meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
6. Identity of hauler(s) and transporter registration number.
7. Owner of disposal site(s).
8. Location of disposal site(s).
9. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**OTHER REQUIREMENTS**

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

This Category B facility must be operated by a chief operator or an operator holding a Category B license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.
3. Chronic toxic criteria apply at the edge of the mixing zone. The mixing zone is defined as 300 feet downstream and 100 feet upstream from the point of discharge.
4. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 1434 of the Colorado River Basin and any subsequent updating of the water quality model for Segment No. 1434, in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC §305.62, as a result of such review. The permittee is also hereby placed on notice that effluent limits may be made more stringent at renewal based on, for example, any change to modeling protocol approved in the TCEQ Continuing Planning Process.
5. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.
6. The permittee is hereby placed on notice that the Executive Director of the TCEQ will be initiating rulemaking and/or changes to procedural documents that may result in bacteria effluent limits and monitoring requirements for this facility.

**CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS**

1. The following pollutants may not be introduced into the treatment facility:
  - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Celsius) using the test methods specified in 40 CFR § 261.21;
  - b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;
  - d. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
  - e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104 degrees Fahrenheit (40 degrees Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;
  - f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
  - g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
  - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403[*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*].
3. The permittee shall provide adequate notification to the Executive Director care of the Wastewater Permitting Section (MC 148) of the Water Quality Division within 30 days subsequent to the permittee's knowledge of either of the following:
  - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
  - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works, and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

48-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this Section apply to Outfall 001 for whole effluent toxicity testing (biomonitoring).

I. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival of the test organisms.
- b. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof:
  - 1) Acute static renewal 48-hour definitive toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.
  - 2) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and submit a valid test for each test species during the required reporting period for that species. A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution. A repeat test shall include the control and all effluent dilutions and use the appropriate number of organisms and replicates, as specified above. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These additional effluent concentrations are 6%, 8%, 11%, 14%, and 19% effluent. The critical dilution, defined as 14% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.
- d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, a Chemical-Specific (CS) limit, a Best Management Practice (BMP), additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.
- e. Testing Frequency Reduction
  - 1) If none of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.
  - 2) If one or more of the first four consecutive quarterly tests demonstrates significant lethal effects, the permittee shall continue quarterly testing for that species until the permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant lethal effects, the permittee will resume a quarterly testing frequency for that species

until the permit is reissued.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:
  - 1) a control mean survival of 90% or greater;
  - 2) a Coefficient of Variation percent (CV%) of 40 or less for both the control and critical dilution. However, if significant lethality is demonstrated, a CV% greater than 40 shall not invalidate the test. The CV% requirement does not apply when significant lethality occurs.
- b. Statistical Interpretation
  - 1) For the water flea and fathead minnow tests, the statistical analyses used to determine if there is a significant difference between the control and an effluent dilution shall be in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof.
  - 2) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported correctly. The EPA manual, "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.
  - 3) If significant lethality is demonstrated (that is, there is a statistically significant difference in survival at the critical dilution when compared to the control), the conditions of test acceptability are met, and the survival of the test organisms are equal to or greater than 90% in the critical dilution and all dilutions below that, then the permittee shall report a survival No Observed Effect Concentration (NOEC) of not less than the critical dilution for the reporting requirements.
  - 4) The NOEC is defined as the greatest effluent dilution at which no significant lethality is demonstrated. The Lowest Observed Effect Concentration (LOEC) is defined as the lowest effluent dilution at which significant lethality is demonstrated. Significant lethality is herein defined as a statistically significant difference at the 95% confidence level between the survival of the test organism(s) in a specified effluent dilution compared to the survival of the test organism(s) in the control (0% effluent).
  - 5) The use of NOECs and LOECs assumes either a monotonic (continuous) concentration-response relationship or a threshold model of the concentration-response relationship. For any test result that demonstrates a non-monotonic (non-continuous) response, the NOEC should be determined based on the guidance manual referenced in Item 2 above.
  - 6) Pursuant to the responsibility assigned to the permittee in Part 2.b.2), test results that demonstrate a non-monotonic (non-continuous) concentration-response relationship may be submitted, prior to the due date, for technical review. The above-referenced guidance manual will be used when making a determination of test acceptability.
  - 7) Staff will review test results for consistency with rules, procedures, and permit requirements.
- c. Dilution Water



- 1) Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point, but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall; (a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge, or (b) utilize the closest downstream perennial water unaffected by the discharge.
- 2) Where the receiving water proves unsatisfactory as a result of preexisting instream toxicity (i.e. fails to fulfill the test acceptance criteria of item 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
  - a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of item 2.a;
  - b) the test indicating receiving water toxicity was carried out to completion;
  - c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3 of this Section.

The synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or a natural water in the drainage basin that is unaffected by the discharge, provided the magnitude of these parameters will not cause toxicity in a synthetic dilution water control that has been formulated to match the pH, hardness, and alkalinity naturally found in the receiving water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

- 1) The permittee shall collect a minimum of two flow-weighted 24-hour composite samples from Outfall 001. The second 24-hour composite sample will be used for the renewal of the dilution concentrations for each toxicity test. A 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportionally to flow, or a sample continuously collected proportionally to flow over a 24-hour operating day.
- 2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first 24-hour composite sample. The holding time for any subsequent 24-hour composite sample shall not exceed 36 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time, is waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with daily renewal of the effluent. When possible, the effluent samples used for the toxicity tests

shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

- 5) The effluent samples shall not be dechlorinated after sample collection.

### 3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof, for every valid and invalid toxicity test initiated whether carried to completion or not. The full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.
- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit. All Table 1 reports must include the information specified in the Table 1 form attached to this permit.
  - 1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12 month period.
  - 2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6 month period.
  - 3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.
  - 4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.
- c. Enter the following codes on the DMR for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TEM3D, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 2) For the water flea, Parameter TOM3D, report the NOEC for survival.
  - 3) For the water flea, Parameter TXM3D, report the LOEC for survival.
  - 4) For the fathead minnow, Parameter TEM6C, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
  - 5) For the fathead minnow, Parameter TOM6C, report the NOEC for survival.

- 6) For the fathead minnow, Parameter TXM6C, report the LOEC for survival.
- d. Enter the following codes on the DMR for retests only:
    - 1) For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
    - 2) For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

#### 4. Persistent Toxicity

The requirements of this Part apply only when a toxicity test demonstrates significant lethality. Significant lethality is defined as a statistically significant difference, at the 95% confidence level, between the survival of the test organism at the critical dilution when compared to the survival of the test organism in the control.

- a. The permittee shall conduct a total of 2 additional tests (retests) for any species that demonstrates significant lethality. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.
- c. The provisions of item 4.a. are suspended upon completion of the two retests and submittal of the TRE Action Plan and Schedule defined in Part 5 of this Section.

#### 5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a Toxicity Reduction Evaluation (TRE). The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethality for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:
  - 1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the

methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- 2) Sampling Plan - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/ identification/ confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;
  - 3) Quality Assurance Plan - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
  - 4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and
  - 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall provide information pertaining to the specific control mechanism(s) selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism(s). A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.
- h. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify CS limits.

TABLE 1 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

Dates and Times No. 1 FROM: \_\_\_\_\_ Date Time TO: \_\_\_\_\_ Date Time  
 Composites  
 Collected No. 2 FROM: \_\_\_\_\_ Date Time TO: \_\_\_\_\_ Date Time

Test initiated: \_\_\_\_\_ am/pm \_\_\_\_\_ date  
 Dilution water used: \_\_\_\_\_ Receiving water \_\_\_\_\_ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	8%	11%	14%	19%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%							

\*Coefficient of Variation = Standard Deviation x 100/mean

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less (p = 0.05) than the control survival?

CRITICAL DILUTION (14%): \_\_\_\_\_ YES \_\_\_\_\_ NO

Enter percent effluent corresponding to the NOEC below:

- 1) NOEC survival = \_\_\_\_\_ % effluent
- 2) LOEC survival = \_\_\_\_\_ % effluent

TABLE 1 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

Dates and Times                      Date    Time                      Date    Time  
 Composites                      No. 1 FROM: \_\_\_\_\_ TO: \_\_\_\_\_  
 Collected                      No. 2 FROM: \_\_\_\_\_ TO: \_\_\_\_\_

Test initiated: \_\_\_\_\_ am/pm \_\_\_\_\_ date

Dilution water used: \_\_\_\_\_ Receiving water \_\_\_\_\_ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	8%	11%	14%	19%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

\* Coefficient of Variation = standard deviation x 100/mean

Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean survival at 48 hours significantly less (p = 0.05) than the control survival?

CRITICAL DILUTION (14%): \_\_\_\_\_ YES \_\_\_\_\_ NO

Enter percent effluent corresponding to the NOEC below:

- 1) NOEC survival = \_\_\_\_\_ % effluent
- 2) LOEC survival = \_\_\_\_\_ % effluent

24hs both same

semi weekly - daphnia } 24hs  
weekly - minnow

City of Bastrop

TPDES Permit No. WQ0011076001

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

40hs / 4 m sun days

The provisions of this section apply to Outfall 001 for whole effluent toxicity testing (biomonitoring)

1. Scope, Frequency and Methodology

- a. The permittee shall test the effluent for lethality in accordance with the provisions in this Section. Such testing will determine compliance with the Surface Water Quality Standard, 307.6(e)(2)(B), of greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.
- b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof:
  - 1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution.
  - 2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution.

A valid test result must be submitted for each reporting period. The permittee must report, then repeat, an invalid test during the same reporting period. The repeat test shall include the control and the 100% effluent dilution and use the appropriate number of organisms and replicates, as specified above. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

- c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and/or dilution water shall consist of a standard, synthetic, moderately hard, reconstituted water.
- d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, a Best Management Practice (BMP), Chemical-Specific (CS) limits, additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests and/or a Toxicity Reduction Evaluation (TRE) if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.

2. Required Toxicity Testing Conditions

- a. Test Acceptance - The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.
- b. Dilution Water - In accordance with item 1.c., the control and/or dilution water shall consist of a standard, synthetic, moderately hard, reconstituted water.
- c. Samples and Composites
  - 1) The permittee shall collect one flow-weighted 24-hour composite sample from Outfall 001. A 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time



intervals representative of a 24-hour operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a 24-hour operating day.

- 2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.
- 3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the 24-hour composite sample. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.
- 4) If Outfall 001 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report required in Part 3 of this Section.
- 5) The effluent samples may be dechlorinated after sample collection.

### 3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division. All DMRs, including DMRs with biomonitoring data, should be sent to the Enforcement Division (MC 224).

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition" (EPA-821-R-02-012), or the most recent update thereof, for every valid and invalid toxicity test initiated. All full reports shall be retained for 3 years at the plant site and shall be available for inspection by TCEQ personnel.
- b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit. All Table 2 reports must include the information specified in the Table 2 form attached to this permit.
  - 1) Semiannual biomonitoring test results are due on or before January 20th and July 20th for biomonitoring conducted during the previous 6 month period.
  - 2) Quarterly biomonitoring test results are due on or before January 20th, April 20th, July 20th, and October 20th, for biomonitoring conducted during the previous calendar quarter.
- c. Enter the following codes on the DMR for the appropriate parameters for valid tests only:
  - 1) For the water flea, Parameter TIE3D, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
  - 2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a

"1."

d. Enter the following codes on the DMR for retests only:

- 1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."
- 2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24-hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter a "1."

4. Persistent Mortality

The requirements of this Part apply when a toxicity test demonstrates significant lethality, here defined as a mean mortality of 50% or greater to organisms exposed to the 100% effluent concentration after 24-hours.

- a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These additional effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour. The retests shall also be reported on the DMRs as specified in Part 3.d.
- b. If one or both of the two retests specified in item 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5 of this Section.

5. Toxicity Reduction Evaluation

- a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a General Outline for initiating a Toxicity Reduction Evaluation (TRE). The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.
- b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethality for both test species defined in item 1.b. As a minimum, the TRE Action Plan shall include the following:
  - 1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification

Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

- 2) **Sampling Plan** - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/ identification/ confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;
  - 3) **Quality Assurance Plan** - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and
  - 4) **Project Organization** - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.
- c. Within 30 days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.
- d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly TRE Activities Reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:
- 1) results and interpretation of any chemical-specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;
  - 2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;
  - 3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
  - 4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;
  - 5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and
  - 6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office.

- e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species; testing for the less sensitive species shall continue at the frequency specified in Part 1.b.
- f. If the effluent ceases to effect significant lethality (herein as defined below) the permittee may end the TRE. A "cessation of lethality" is defined as no significant lethality for a period of 12 consecutive

weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b. The permittee may only apply the "cessation of lethality" provision once.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. "Corrective actions" are herein defined as proactive efforts which eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and/or effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and/or an appropriate control measure.

- g. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall specify the control mechanism(s) that will, when implemented, reduce effluent toxicity as specified in item 5.g. The report will also specify a corrective action schedule for implementing the selected control mechanism(s). A copy of the TRE Final Report shall also be submitted to the U.S. EPA Region 6 office.
- h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 307.6.(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE.

The requirement to comply with 307.6.(e)(2)(B) may be exempted upon proof that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g. metals) form a salt compound. Following the exemption, the permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

- i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify a CS limit.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time (am/pm)	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = \_\_\_\_\_% effluent

TABLE 2 (SHEET 2 OF 2)  
 FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Time (am/pm)	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24 hour LC50 = \_\_\_\_\_ % effluent

EXHIBIT C EXAMPLE FOR WHOLESALE WASTEWATER CONTRACT 3/19

Lift Station & Force main location

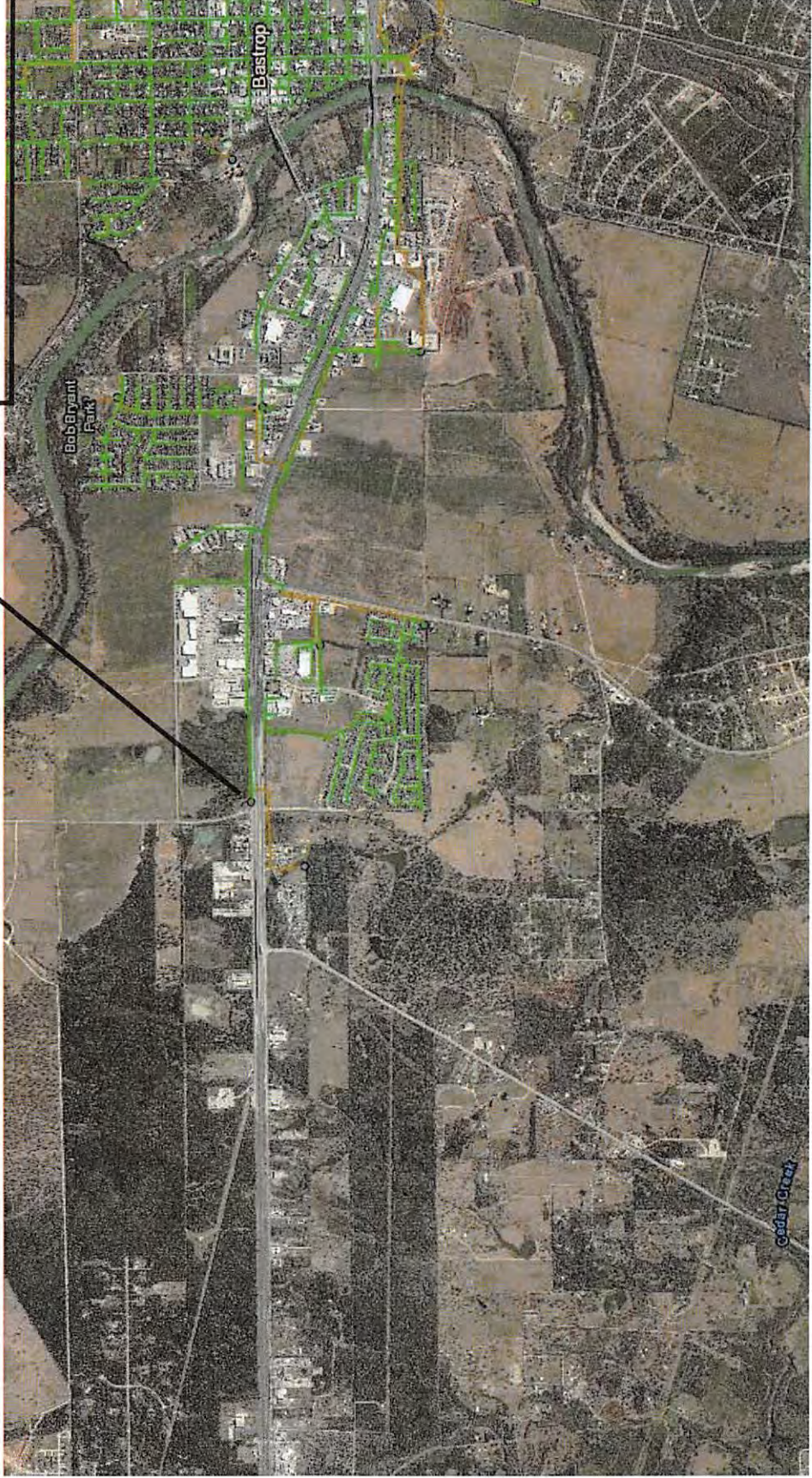
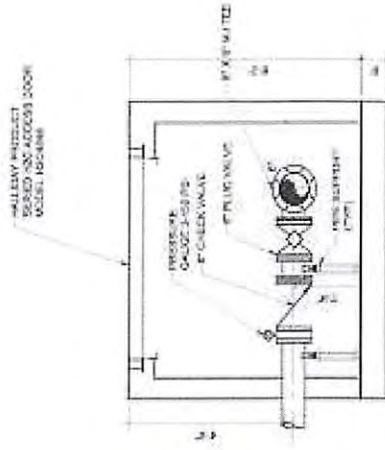
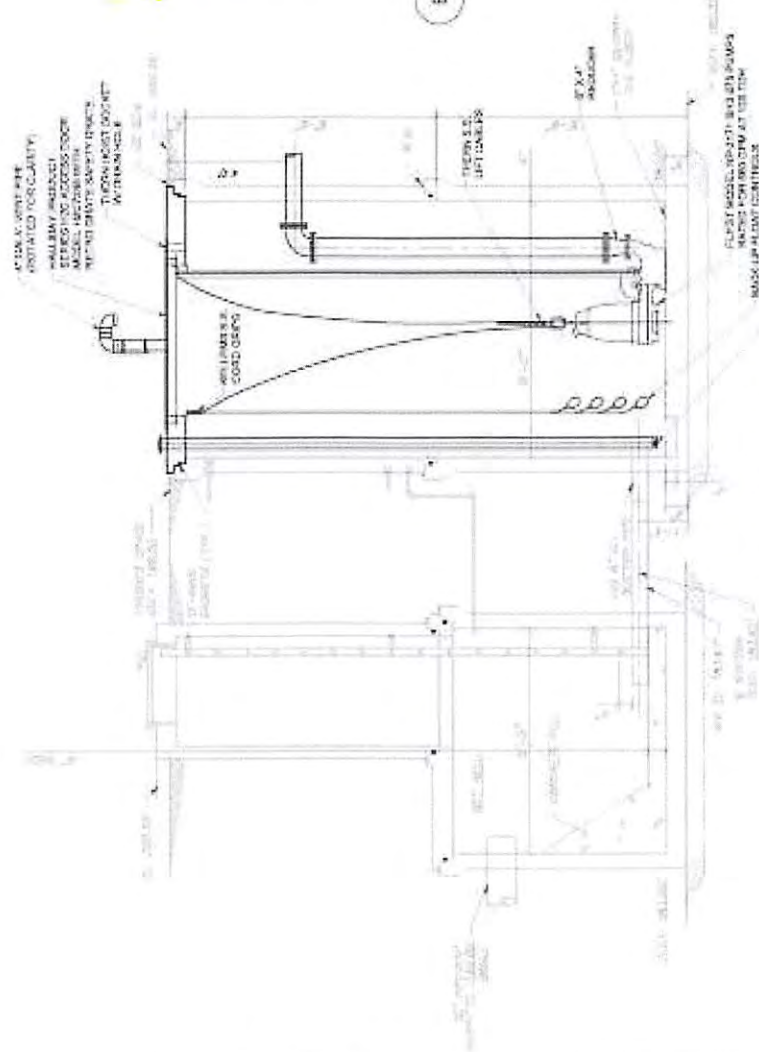


EXHIBIT D EXAMPLE FOR WHOLESALE WASTEWATER CONTRACT 3/19



**B** VALVE / METER VAULT SECTION

SCALE: 1/4" = 1'-0"



**A** PUMP STATION SECTION

SCALE: 3/4" = 1'-0"



**Exhibit "E"**

**Bastrop Impact Fee Calculation Sheet**

**BETWEEN CITY OF BASTROP, NAME OF MUNICIPAL UTILITY DISTRICT AND  
NAME OF DEVELOPER, IF APPLICABLE**

This **WHOLESALE WATER AGREEMENT** (this “**Agreement**”) is made and entered into by and between the **CITY OF BASTROP**, a home rule city located in Bastrop County (“**Bastrop**” or “**City**”) and the \_\_\_\_\_ District, a political subdivision of the state operating under Chapters 49 and 54, Texas Water Code (the “**District**”), and \_\_\_\_\_, a Texas \_\_\_\_\_ (“**Developer**”) (collectively referred to herein as the “**Parties**”). The Parties hereby mutually agree as follows:

**RECITALS**

**\*\*NOTE: WHEREAS STATEMENTS WILL BE TAILORED TO FIT THE AGREEMENT. WHOLESALE CUSTOMERS COULD BE A SINGLE CUSTOMER OR MUNICIPAL UTILITY DISTRICT (MUD). DEVELOPER WILL BE LISTED IF MUD IS NEWLY CREATED WITH NO ASSETS/CUSTOMERS.**

**WHEREAS**, the City and the Developer entered into a Planned Development Agreement, to be known in this Agreement as “the PDA” on \_\_\_\_\_, 20\_\_\_\_, requiring a wholesale water agreement; and

**WHEREAS**, by Resolution R-\_\_\_\_\_, on \_\_\_\_\_, 20\_\_\_\_, the City granted consent for creation of \_\_\_\_\_ District; and

**WHEREAS**, by Order signed on \_\_\_\_\_, 20\_\_\_\_, the Texas Commission on Environmental Quality granted the \_\_\_\_\_ Petition for Creation of \_\_\_\_\_ District; and

**WHEREAS**, by Resolution R-\_\_\_\_\_ the City confirmed its consent for creation of the \_\_\_\_\_ District, on \_\_\_\_\_, 20\_\_\_\_; and

**WHEREAS**, the District encompasses approximately \_\_\_\_\_ acres of land within the extraterritorial jurisdiction (“ETJ”) of the City (the “Tract”). The Tract is more particularly described in Exhibit “A”; and

**WHEREAS**, Developer intends to develop the Tract as a \_\_\_\_\_ community, initially to be referred to as “\_\_\_\_\_” projected to consist primarily of residential uses, expected at the time of execution of this Agreement to include approximately \_\_\_\_\_ homes, and also will include other limited nonresidential uses (the “Development”); and

**WHEREAS**, City, District and Developer wish to enter into this Agreement, to provide the terms of wholesale water service for the benefit of the present and future residents of City and the District; and

**WHEREAS**, the Tract is within the water CCN of Aqua Water Supply Corporation (10294), from which the City intends to purchase potable water at wholesale rates (the “Bastrop

Aqua Agreement”), and intends to sell potable water at wholesale rates to the District; and

WHEREAS, Bastrop has adequate water supply and distribution infrastructure to provide up to **AMOUNT OF WATER TO BE PURCHASED** gallons per day to District; and

NOW, THEREFORE, for and in consideration of the agreements set forth below, the City, District and Developer agree as follows:

## ARTICLE 1. DEFINITIONS

### Section 1.01 Definitions of Terms.

In addition to the terms otherwise defined in the above recitals; in the City’s ordinances; or the provisions of this Agreement, the terms used in this Agreement will have the meanings set forth below.

**Active Connection:** means a connection for which there is an open utility account with the District during any portion of a monthly billing period. Each connection is the equivalent of one SUE, provided that the property served by the connection is a single-family residence.

**Agreement:** means this Wholesale Water Agreement by and among the City of Bastrop, Texas, **MUNICIPAL UTILITY DISTRICT**, and **NAME OF DEVELOPER, IF APPLICABLE**.

**AWWA:** means the American Water Works Association.

**Bastrop Aqua Agreement:** means the Agreement to be entered by the City of Bastrop and Aqua Water Supply Corporation (“Aqua”) pursuant to which Aqua will sell potable water at wholesale to the City.

**Bastrop Service Area:** means the wholesale and retail water service territory for the City of Bastrop.

**Bastrop Water System or City Water System:** means the facilities, including water production wells, pumps, lines, meters, components, and equipment owned and operated by Bastrop, together with all extensions, expansions, improvements, enlargements, betterments and replacements to monitor, convey, supply, deliver and distribute potable water or Wholesale Water Services to Bastrop's customers, including \_\_\_\_\_. The Bastrop System does not include any improvements on District’s side of the Delivery Point or any facilities on any other wholesale customer’s side of its delivery point.

**Bastrop Water Conservation and Drought Contingency Plan:** means, collectively, the Bastrop Water Conservation Plan and the Bastrop Drought Contingency Plan, as may be amended by the Bastrop City Council from time to time. A copy of the Bastrop Water Conservation and Drought Contingency Plan in effect as of the Effective Date is attached hereto as Exhibit “B”.

**CCN:** means a certificate of convenience and necessity or similar permit authorizing a specified entity to be the retail water or sewer service provider in a specified area.

**City:** The City of Bastrop, Texas, a home rule municipality, organized and operating pursuant to the applicable laws of the State of Texas

**City Manager:** means the City of Bastrop’s City Manager

**Commercial Customers:** means all non-residential retail water customers of District in the Wholesale Water Service Area.

**Commission or TCEQ:** means the Texas Commission on Environmental Quality or its successor agency.

**Connecting Facilities:** means facilities connecting any Internal Facilities to a Delivery Point.

**Costs of the System:** means all of Bastrop’s costs of acquiring, constructing, developing, permitting, implementing, expanding, improving, enlarging, bettering, extending, replacing, repairing, maintaining, and operating the Bastrop System, including, without limiting the generality of the foregoing, the costs of property, interests in property, capitalized interest, land, easements and rights-of-way, damages to land and property, leases, facilities, equipment, machinery, pumps, pipes, tanks, valves, fittings, mechanical devices, office equipment, assets, contract rights, wages and salaries, employee benefits, chemicals, stores, material, supplies, power, supervision, engineering, testing, auditing, franchises, charges, assessments, claims, insurance, engineering, financing, consultants, administrative expenses, auditing expenses, legal expenses and other similar or dissimilar expenses and costs required for the System in accordance with policies of Bastrop’s City Council.

**County:** means Bastrop County, Texas.

**Delivery Point:** means the point at which Bastrop will deliver treated water to District under this Agreement, which point shall be at the \_\_\_\_\_ inch Master Meter as depicted on Exhibit “C”.

**Developer:** means \_\_\_\_\_, a Texas \_\_\_\_\_, its successors or assigns.

**Development:** means the mixed-use development of the Tract, including residential and non-residential land uses, together with parkland, open space, recreational amenities and related facilities, intended to produce developed lots.

**District:** means the municipal utility district organized and operating in accordance with Section 54.016, Texas Water Code and Section 42.042, Texas Local Government Code, encompassing the Tract, known as \_\_\_\_\_ District.

**District’s water system:** means District’s water transmission, distribution and delivery systems that provide service to District’s retail customers through the Wholesale Water Services provided under this Agreement. The District System shall be owned, operated and maintained by **NAME**

**OF MUNICIPAL UTILITY DISTRICT** and shall not include the Master Meter or any facilities on Bastrop's side of the Delivery Point.

**District Service Area:** means the retail water service territory of **MUNICIPAL UTILITY DISTRICT**, as amended from time to time.

**Effective Date:** means the last date of execution by all of the Parties.

**ETJ:** means extraterritorial jurisdiction.

**Emergency:** means a sudden unexpected happening; an unforeseen occurrence or condition; exigency; pressing necessity; or a relatively permanent condition or insufficiency of service or of facilities resulting from causes outside of the reasonable control of Bastrop. The term includes Force Majeure and acts of third parties that cause the Bastrop System to be unable to provide the Wholesale Water Services agreed to be provided herein.

**EPA:** means United States Environmental Protection Agency

**Force Majeure:** means acts of God, strikes, lockouts, or other industrial disturbances, acts of the public enemy, orders of any kind of any governmental entity other than Bastrop or any civil or military authority, acts, orders or delays of any regulatory authorities with jurisdiction over the parties, insurrections, riots, acts of terrorism, epidemics, landslides, lightning, earthquakes, fires, hurricanes, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or any other conditions which are not within the control of a party.

**Impact Fee:** means a charge imposed on each service unit on new development pursuant to Chapter 395 of the Local Government Code to generate revenue for funding or recouping the costs of capital improvements or facility expansions.

**Initial Wholesale Water Service:** means the diversion or the production of water, the transmission thereof to a place or places of treatment, the treatment of the water into potable form, and the transmission of the potable water to the Delivery Point in a quantity equal to **AMOUNT OF AGREED UPON WATER PURCHASE** GPD.

**Internal Facilities:** means the internal Water distribution facilities and related equipment, facilities, and appurtenances to be constructed by or on behalf of District for the District System.

**Maximum Water SUE Capacity:** Use of water treatment capacity up to **AMOUNT OF AGREED UPON WATER PURCHASE** GPD.

**Metering Facility:** means the water flow meter, meter vault, and all metering and telemetering equipment located at a Delivery Point to measure Wholesale Water Service to District. The Bastrop System shall include each Metering Facility.

**Monthly Water Supply:** means the quantity of water for which Bastrop agrees to provide Wholesale Water Services to District under the terms and conditions of this Agreement. The

Monthly Water Supply shall be **AMOUNT OF AGREED UPON WATER PURCHASE** gallons per month.

**Parties:** means the City, the District, and the Developer.

**Planned Development Agreement or PDA:** means the agreement that was entered into by the City and the Developer on \_\_\_\_\_, 20\_\_\_\_.

**Point(s) of Connection – Water:** The point(s) at which the City’s Water System connects to the District’s Water System, generally shown on Exhibit C.

**Residential Customers:** means retail residential water customers of District in the Wholesale Water Service Area.

**Single Family Residence:** means the use of a site for only one dwelling unit, where a dwelling unit is a building, or portion thereof, designed or used exclusively for residential occupancy (not including hotels and motels).

**SUE:** means service unit equivalent which is the basis for establishing equivalency among and within various customer classes, based upon the relationship of the continuous duty flow rate in gallons per minute for a water meter of a given size and type compared to the continuous duty maximum flow rate in gallons per minute for a 3/4 " diameter simple water meter, using American Water Works Association C700-C703 standards.

**SU multiplier:** means the number of SUEs to be multiplied by the Impact Fee for each active connection served that is not a single-family residence in accordance with the SU Equivalency Chart in Bastrop Code of Ordinances Section 10.02.004.

**Tract:** means the approximately \_\_\_\_\_ acres of land within the District’s boundaries to be served under the terms of this Agreement.

**Wholesale Water Services:** means the diversion or the production of water, the transmission thereof to a place or places of treatment, the treatment of the water into potable form, and the transmission of the potable water to the Delivery Point in a quantity equal to the Monthly Water supply.

## **Section 1.02 Captions.**

The captions appearing at the first of each numbered section or paragraph in this Agreement are inserted and included solely for convenience and shall never be considered or given any effect in construing this Agreement.

## **ARTICLE II. DESIGN AND CONSTRUCTION OF FACILITIES**

### **Section 2.01 Design and Construction of the Internal Facilities.**

- a. District will be responsible for design and construction of, or for causing one or more third parties to design and construct, the Internal Facilities within the District System.

- b. District agrees to be responsible for and pay for all costs of rights-of-way, easements, design, engineering, contracting, construction and inspection of the Internal Facilities; provided that District may require Developer to be responsible and pay for all or a portion of the costs of right-of-way, easements, design, engineering, contracting, construction, and inspection of the Internal Facilities.
- c. The Internal Facilities will be designed and constructed in accordance with applicable regulations and specifications of Bastrop, the State of Texas and United States, and with the terms and conditions of this Agreement.

### **Section 2.02 Design and Construction of the Connecting Facilities.**

- a. District shall be responsible for design and construction of, or for causing one or more third parties to design and construct, any Connecting Facilities, or modification to the existing Connecting Facilities, required for the transmission of water to the Bastrop System.
- b. Subject to the terms and conditions of this Agreement, District agrees to engage or cause to be engaged the services of a professional engineer registered in Texas to produce the engineering design, including detailed plans and specifications for Connecting Facilities in conformance with Bastrop's design criteria and construction standards in effect at the time the plans and specifications are submitted to Bastrop for approval, or in accordance with District's design criteria and construction standards if such are more stringent; provided that the parties shall reasonably cooperate to determine the design standards that will control. The plans and specifications will address the sizing, routing, material selection, service method, cost estimates, proposed construction schedule, easements, and such other and further information as Bastrop deems necessary or advisable for proper review and assessment of the plans and specifications. The design for the Connecting Facilities shall be procured at District's sole expense; provided that District may cause Developer to be responsible for designing the Connecting Facilities, and the cost thereof. The plans and specifications for the Connecting Facilities will be submitted to Bastrop for review and comment before District approves said plans and specifications. Bastrop shall provide written comments within thirty (30) days of the date of the receipt of the plans unless a longer period is specified by City Staff. District shall cause any comments provided by Bastrop to be addressed. If Bastrop does not provide comments within the greater of thirty (30) days or the time specified by City Staff, District may approve the plan and specifications, subject to compliance with District's regulations.
- c. District solely shall be responsible for funding construction, and all costs related thereto, of the Connecting Facilities, or for causing one or more third party developers or owners of land within the Wholesale Water Service Area to be responsible for funding construction, and all costs related thereto, of the Connecting Facilities.
- d. District agrees to be responsible for, and pay for all costs of rights-of-way, easements, design, engineering, contracting, construction and inspection of the Connecting Facilities required to be constructed for the connection to the Bastrop System, or for causing Developer to be responsible for and to pay all costs of rights-of-way, easements, design,

engineering, contracting, construction and inspection of the Connecting Facilities required to be constructed for the connection to the Bastrop System.

- e. The parties will cooperate in good faith to determine the location of Connecting Facilities that are located in Bastrop's city limits or ETJ. Bastrop agrees to make good faith efforts to cause the dedication of easements or right-of-way that may be necessary for the location and installation of Connecting Facilities within the city limits and ETJ of Bastrop. Pursuant to separate written instruments, Bastrop will further allow District to access and use rights-of-way and easements owned or controlled by City for the purpose of installing, constructing, repairing, replacing, maintaining, and operating or causing to be installed, constructed, repaired, replaced, maintained and operated, Connecting Facilities.

### **Section 2.03 Notification of Commencement of Construction on Connecting Facilities.**

After all required approvals for construction of the Connecting Facilities are obtained, but prior to commencement of construction, District will provide, or cause to be provided, written notice to Bastrop of the date on which construction of the Connecting Facilities is scheduled to commence. Bastrop must receive this written notice at least five (5) days before the scheduled construction date.

### **Section 2.04 Inspection and Acceptance of a Portion or All of the Connecting Facilities.**

The Parties agree that Bastrop has the right to make periodic inspections during the construction phase of the Connecting Facilities. Acceptance of the Connecting Facilities by District is subject to final inspection by Bastrop.

### **Section 2.05 Agreement to Submit As-Built or Record Drawings and Final Plats.**

District agrees to provide, or cause to be provided, to Bastrop: a) as-built or record drawings of all Internal Facilities and Connecting Facilities that take from the Bastrop System; and b) final plats for property located within the Wholesale Water Service Area; within thirty (30) days of District receiving them, not to exceed sixty (60) days following completion and acceptance of the construction of such facilities or recording of the final plat, as appropriate.

### **Section 2.06 Ownership and Operation of Connecting Facilities.**

Except as set forth below or otherwise agreed, District shall own and operate all Connecting Facilities located on its side of a Delivery after completion of construction by District or the Developer, and acceptance of the Connecting Facilities by Bastrop.

## **ARTICLE III. PROVISION OF WHOLESALE WATER SERVICES**

### **Section 3.01 Wholesale Water Services.**

Bastrop agrees to provide Wholesale Water Services to District for the Monthly Water Supply in accordance with the flow limitations and other provisions of this Agreement, all as hereafter specified.



**Section 3.02 District Responsible for Retail Connections.**

District will be solely responsible for providing retail water service within the District Service Area. District will be solely responsible for the proper and lawful application of District's policies and regulations governing connection to the District System.

**Section 3.03 Source.**

- a. Bastrop, by entering into this Agreement with District and Developer, confers upon District, the right to purchase on a wholesale basis the Monthly Water Supply from the water secured by Bastrop from Aqua Water Supply Corporation.
- b. In the event that the amount of water supplied by Aqua to Bastrop in the Aqua Agreement is reduced, the Monthly Water Supply to District shall be reduced on a pro rata basis.

**Section 3.04 Title to and Responsibility for Water; Delivery Point(s).**

- a. Title to the water diverted, treated and transported to District by Bastrop under this Agreement shall remain with Bastrop at all times until it reaches the Delivery Point. At the Delivery Point, title, control and dominion of the water shall pass to District. Each of Each party shall bear responsibility for the loss of water on their respective side of the point or points of delivery.
- b. District shall be solely responsible for conveying water from the Delivery Point to the District's intended places of use. At its cost and expense, District may change the Delivery Point from time to time following prior written notice to and written approval by Bastrop, which approval shall not be unreasonably withheld, denied or delayed.

**Section 3.04 Quantity and Pressure.**

Subject to the terms of this Agreement, Bastrop agrees to deliver potable water to District all water needed and requested by District for the District Service Area, at prevailing pressure up to, but not in excess of: (i) a minimum of [REDACTED] GPD per SUE (ii) a maximum daily delivery of [REDACTED] gallons per day; and (iii) a maximum flow rate of 0.6 gallons per minute per connection.

**Section 3.05 Quality of Water Delivered to District.**

The water delivered by Bastrop at the Delivery Point shall be potable water of a quality conforming to the requirements of any applicable federal or state laws, rules, regulations or orders, including requirements of the TCEQ applicable to water provided for human consumption and other domestic use. Each party agrees to provide to the other party, in a timely manner, any information or data regarding this Agreement or the quality of treated water provided through this Agreement as required for reporting to the TCEQ or other state and federal regulatory agencies.

**Section 3.06 Maintenance and Operation; Future Construction.**

- a. Bastrop shall be responsible for operating, maintaining, repairing, replacing, extending, improving and enlarging all current and future facilities of the City. The City commits to

acquire necessary easements and complete construction on a schedule that serves and protects the property owners and their structures in the District.

- b. District shall be responsible for operating, maintaining, repairing, replacing, extending, improving and enlarging the District System in good working condition and shall promptly repair any leaks or breaks in the District System.

**Section 3.07 Rights and Responsibilities in Event of Leaks or Breaks.**

District shall be responsible for paying for all water delivered to it under this Agreement at the Delivery Point even if such water passed through the Delivery Point as a result of leaks or breaks in the District System.

**Section 3.08 Commencement of Wholesale Water Service.**

Bastrop will commence the provision of Wholesale Water Service to District upon final inspection and approval of connecting facilities to the district.

**Section 3.09 Wholesale Service Commitment Not Transferable.**

Bastrop’s commitment to provide Wholesale Water Services is solely to District. District may not assign or transfer in whole or in part it’s right to receive Wholesale Water Services without Bastrop’s prior written approval.

**Section 3.10 Conservation and Drought Planning.**

District, within ninety (90) days of the date the District begins operation of the District Water System, the District shall adopt a water conservation plan consistent with and no less stringent than the City’s drought contingency plan then in effect and in compliance with TCEQ Rules, 30 Texas Administrative Code, Chapter 288. A copy of the City’s current drought contingency plan is attached as Exhibit “B” to this Agreement.

**Section 3.11 Curtailment of Service.**

The Parties agree that, if water service is curtailed by Bastrop to other similarly-situated customers of the Bastrop System, Bastrop may impose a like curtailment, with notice to District, on Wholesale Water Services delivered to District under this Agreement. Bastrop will impose such curtailments in a nondiscriminatory fashion. The Parties agree that they will not construe this Agreement to prohibit Bastrop from curtailing service completely in the event of a maintenance operation or Emergency for a reasonable period necessary to complete such maintenance operations or repairs or respond to an Emergency circumstance.

**Section 3.12 Cooperation during Maintenance or Emergency.**

District will reasonably cooperate with Bastrop during periods of Emergency or required maintenance. If necessary, upon prior notice, District will operate and maintain the District System at its expense in a manner reasonably necessary for the safe and efficient completion of repairs or

the replacement of facilities, the restoration of service, and the protection of the public health, safety, and welfare.

**Section 3.13 Re-sale of Water Prohibited.**

District is prohibited from selling any water sold to District hereunder to any person or entity, except to its retail water customers.

**ARTICLE IV. WATER METERING PROVISIONS**

**Section 4.01 Master Meter Accuracy.**

Meter shall meet accuracy standards required by the AWWA with calibration maintained as described in Section 4.02.

**Section 4.02 Meter Calibration.**

- a. The Master Water Meters shall be calibrated each calendar year by District at District's sole cost and expense. Bastrop shall provide prior notice of each such calibration, and a representative of Bastrop may be present to observe each calibration.
- b. In the event any question arises at any time as to the accuracy of the Master Meter, but not more than a frequency of once per consecutive twelve (12) month period without mutual consent of both Parties, then the Master Meter shall be tested by Bastrop promptly upon demand of District. The expense of such test shall be borne by Bastrop.
- c. If, as a result of any test, the Master Meter is found to be registering inaccurately (in excess of AWWA and manufacturer's standards for the type and size of meter), the readings of the Master Meter shall be corrected at the rate of their inaccuracy for any period which is definitely known or agreed upon, if no such period is known or agreed upon, the shorter of:
  - 1. a period extending back either sixty (60) days from the date of demand for the test or, if no demand for the test was made, sixty (60) days from the date of the test; or
  - 2. a period extending back one-half of the time elapsed since the last previous test; and the records of the readings, and all payments which have been made on the basis of such readings, shall be adjusted accordingly.

**ARTICLE V. WATER RATES AND CHARGES**

**Section 5.01 Wholesale Water Rates, Fees and Charges.**

District will pay Bastrop for the Wholesale Water Service provided under this Agreement based on a base meter charge and the volumetric charge. No other rates, fees or charges shall be owed by the District to Bastrop for Wholesale Water Service.

**Section 5.02 Bastrop Water Impact Fee.**

The Water Impact Fee is \$ **AS ADOPTED PER ORDINANCE** per SUE.

**Section 5.03 Base Meter Charge.**

District will pay Bastrop the monthly retail base meter charge applicable to the meter size at the Point of Delivery. Such fee shall be subject to change from time to time when Bastrop retail rates are reviewed. The initial base meter charge for the meter at the Point of Delivery is \$ **AS ADOPTED PER ORDINANCE** per month.

**Section 5.04 Volumetric Charge.**

- a. Bastrop will measure water flows monthly based on monthly readings of the Master Meter. The total of these amounts multiplied by the volumetric rate will be used by Bastrop to compute the volume charge as provided in Section 6.02 below.
- b. The initial volumetric rate shall be Bastrop's non-residential volumetric water rate (\$ **AS ADOPTED PER ORDINANCE** per 1,000 gallons of water).
- c. Bastrop may amend the volumetric rate from time to time when Bastrop retail rates are reviewed. Bastrop shall provide written notice to District of any rate adjustments not later than thirty (30) days prior to the effective date thereof.

**Section 5.05 Changes to Rates and Fees.**

The City agrees that a change in the monthly base meter charge or volumetric charge will not become effective against the District until thirty (30) days after effective written notice to the District if a change is provided by the City.

**Section 5.06 District Water Rates and Charges.**

District will determine and charge its retail water customers such rates as are determined by its governing body. During the term of this Agreement, District will fix and collect rates and charges for retail water service that are, in the opinion of its governing body, sufficient, together with any other revenues available to District, to produce the amount necessary to operate, repair, and maintain the District System, and to pay the cost of Wholesale Water Service from Bastrop. District will be solely responsible for ensuring that its retail rates and charges are determined and collected in accordance with applicable law.

**Section 5.07 District and Developer to Pay All Costs for Connection to the City.**

The District, or Developer if the District does not have sufficient funds, will pay the entire cost of connection to the City's Water System.

**Section 5.08 Wholesale Water Rates.**

The City shall invoice the District for wholesale water delivery and treatment service at the same rate that the City charges its other wholesale customers per gallon of use. The District shall pay the City monthly, one month in arrears, as more fully described in Article XIII of this Agreement.

**Section 5.09 District Payment for Wholesale Service.**

Billing for wholesale service will commence after the first date water service is provided to the District. The City will send one bill to the District on or before the first day of each month after the date water service has commenced, at a rate that is the same as the rate the City charges its city customers of each class. The Developer agrees to require the builders in the District to send notice of each such closing to the City within thirty (30) days of the closing of each lot in a separate agreement with each such builder.

**Section 5.10 Builder Payment for Impact Fees.**

Builders in the District will be required in a contract by and between the builder and the Developer to pay the standard impact fee to the City related to the use of the capacity in the City's Water System.

**ARTICLE VI. WHOLESALE WATER BILLING METHODOLOGIES; REPORTS AND OTHER RELATED MATTERS****Section 6.01 Monthly Statement.**

For each monthly billing period, Bastrop will forward to District a bill providing a statement of the Base Meter Fee and the total Volume Charge owed by District for Wholesale Water Service provided to District during the previous monthly billing period. District will pay Bastrop for each bill submitted by Bastrop to District by check or bank-wire on or before thirty (30) days from the date of receipt of the invoice. Payments shall be mailed to the address indicated on the invoice, or can be hand-delivered to Bastrop's headquarters in Bastrop County, Texas. If payments will be made by bank-wire, District shall verify wiring instructions. Payment must be received at Bastrop's headquarters or bank by the due date in order not to be considered past due or late. In the event District or an assignee responsible for payment in accordance with this Agreement fails to make payment of a bill within said thirty (30) day period, District shall pay in addition Bastrop's then current late payment charges on the unpaid balance of the invoice.

**Section 6.02 Monthly Billing Calculations.**

Bastrop will compute the sum of the base meter charge and the volume charge for Wholesale Water Service on the basis of monthly readings of the Master Meter and will bill District such sum on a monthly basis.

**Section 6.03 Effect of Nonpayment.**

With respect to monthly billings, if Bastrop has not received payment from District by the due date, the bill will be considered delinquent, unless contested in good faith. In such event, Bastrop



- c. In the event that any agreement provided for in the definition of Bastrop's System Agreements are terminated or expires, this Agreement shall be terminated and be of no further force or effect. Either party shall give thirty (30) days prior written notice of an anticipated termination or expiration of any agreement provided for in the definition of Bastrop's System Agreements.

**Section 8.02 Default.**

- a. In the event District shall default in the payment of any amounts due to Bastrop under this Agreement, or in the performance of any material obligation to be performed by District under this Agreement, then Bastrop shall give District at least thirty (30) days' written notice of such default and the opportunity to cure same. Thereafter, Bastrop shall have the right to pursue any remedy available at law or in equity, pending cure of such default by District.
- b. In the event Bastrop shall default in the performance of any material obligation to be performed by Bastrop under this Agreement, then District shall give Bastrop at least thirty (30) days' written notice of such default and the opportunity to cure same. Thereafter, in the event such default remains uncured, the District shall have the right to pursue any remedy available at law or in equity, pending cure of such default by Bastrop.

**Section 8.03 Additional Remedies upon Default.**

It is not intended hereby to specify (and this Agreement shall not be considered as specifying) an exclusive remedy for any default, but all such other remedies existing at law or in equity may be availed of by any party and shall be cumulative of the remedies provided. Recognizing however, that Bastrop's undertaking to provide Wholesale Water Service to the District System is an obligation, failure in the performance of which cannot be adequately compensated in money damages alone, Bastrop agrees, in the event of any default on its part, that District shall have available to it the equitable remedies of mandamus and specific performance in addition to any other legal or equitable remedies (other than termination of this Agreement) that may also be available. In recognition that failure in the performance of District's obligations could not be adequately compensated in money damages alone, District agrees in the event of any default on its part that Bastrop shall have available to it the equitable remedies of mandamus and specific performance in addition to any other legal or equitable remedies that may also be available to Bastrop including the right to obtain a writ of mandamus or an injunction against District requiring the District to collect rates and charges sufficient to pay the amounts owed to Bastrop by District under this Agreement. If either party institutes legal proceedings to seek adjudication of an alleged default under this Agreement, the prevailing party in the adjudication shall be entitled to its reasonable and necessary attorneys' fees. THE PARTIES ACKNOWLEDGE AND AGREE THAT THIS AGREEMENT IS SUBJECT TO SUBCHAPTER I, CHAPTER 271, TEXAS LOCAL GOVERNMENT CODE.

**ARTICLE IX. GENERAL PROVISIONS**

**Section 9.01 Assignability.**

Assignment of this Agreement by either party is prohibited without the prior written consent of the other party, which consent shall not be unreasonably withheld, delayed or conditioned.

**Section 9.02 Amendment.**

This Agreement may be amended or modified only by written agreement duly authorized by the respective governing bodies of District and Bastrop and executed by duly authorized representatives of each.

**Section 9.03 Necessary Documents and Actions.**

Each Party agrees to execute and deliver all such other and further instruments and undertake such actions as are or may become necessary or convenient to effectuate the purposes and intent of this Agreement.

**Section 9.04 Entire Agreement.**

This Agreement constitutes the entire agreement of the Parties and this Agreement supersedes any prior or contemporaneous oral or written understandings or representations of the Parties regarding Wholesale Water Service by Bastrop to District for the District Service Area.

**Section 9.05 Applicable Law.**

This Agreement will be construed under and in accordance with the laws of the State of Texas.

**Section 9.06 Venue.**

All obligations of the Parties created in this Agreement are performable in Bastrop County, Texas, and venue for any action arising under this Agreement will be in Bastrop County, Texas.

**Section 9.07 Third Party Beneficiaries.**

Nothing in this Agreement, express or implied, is intended to confer upon any person or entity, other than to the Parties, any rights, benefits, or remedies under or by reason of this Agreement.

**Section 9.08 Duplicate Originals.**

This Agreement may be executed in duplicate originals each of equal dignity.

**Section 9.09 Notices.**

Any notice required under this Agreement may be given to the respective Parties by deposit in regular first-class mail or by hand-delivery the address of the other party shown below:



**DISTRICT:**

**Name of Municipal Utility District or Customer  
Address  
City, State Zip  
Attn: Position**

**DEVELOPER:**

**Name  
Address  
City, State, Zip  
Attn: Position**

**CITY OF BASTROP:**

City of Bastrop  
1311 Chestnut Street  
Bastrop, Texas 78602  
Attn: City Manager

**WITH REQUIRED COPY TO:**

Alan Bojorquez  
Bojorquez Law Firm, PC  
12325 Hymeadow Drive, Suite 2-100  
Austin, Texas 78750

Notices shall be deemed received on the date of hand delivery or within three (3) days of deposit in first-class mail.

**Section 9.10 Consents and Approvals.**

Wherever this Agreement requires any Party, or its agents or employees to provide a consent, approval or similar action, the parties agree that such consent, approval or similar action will not be unreasonably withheld or delayed.

**Section 9.11 Severability.**

Should any court declare or determine that any provisions of this Agreement is invalid or unenforceable under present or future laws, that provision shall be fully severable; this Agreement shall be construed and enforced as if the illegal, invalid, or unenforceable provision had never comprised a part of this Agreement and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in place of each such illegal, invalid, or unenforceable provision, there shall be added automatically as a part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable. Texas law shall govern the validity and interpretation of this Agreement.

**Section 9.12 Records.**

Bastrop and District each agree to preserve, for a period of at least two (2) years from their respective dates of origin, all books, records, test data, charts and other records pertaining to this Agreement. Bastrop and District shall each, respectively, have the right during reasonable business hours to inspect such records to the extent necessary to verify the accuracy of any statement, charge or computation made pursuant to any provisions of this Agreement.

### **Section 9.13 State Approval; Compliance with TCEQ Rules.**

Anything herein to the contrary notwithstanding, it is the intention of the parties that this Agreement fully comply with the requirements of the TCEQ applicable to public drinking water systems which receive water through a sole-source water supply contract, including the requirements of 30 Texas Administrative Code, Section 290.45(f). The parties each agree to provide any information which may be requested by the other in order to respond to any inquiries or reports required by the TCEQ. If, at any time, it is determined that this Agreement does not comply with all applicable TCEQ requirements, the parties agree to cooperate to modify this Agreement in order to effect such compliance.

### **Section 9.14 Force Majeure.**

If any party is rendered unable, wholly or in part, by Force Majeure to carry out any of its obligations under this Agreement, other than an obligation to pay or provide money, then such obligations of that party to the extent affected by such Force Majeure and to the extent that due diligence is being used to resume performance at the earliest practicable time shall be suspended during the continuance of any inability so caused to the extent provided but for no longer period. Such cause, as far as possible, shall be remedied with all reasonable diligence. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the affected party, and that the above requirements that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demand of the opposing party or parties when such settlement is unfavorable to it in the judgment of the affected party.

### **Section 9.15 Good Faith.**

Each party agrees that, notwithstanding any provision herein to the contrary (i) it will not unreasonably withhold or condition or unduly delay any consent, approval, decision, determination or other action which is required or permitted under the terms of this Agreement, and (ii) it will act in good faith and shall at all times deal fairly with the other party.

### **Section 9.16 Authority of Parties Executing Agreement, Validity.**

By their execution, each of the individuals executing this Agreement on behalf of a Party represents and warrants to the other Party that he or she has the authority to execute the document in the capacity shown on this document. Each of the Parties further represent and warrant that this Agreement constitutes a valid and binding contract, enforceable against it in accordance with its terms.

### **Section 9.17 Exhibits.**

The following exhibits are attached to and incorporated into this Agreement for all purposes:

Exhibit A: Metes and Bounds Description of the Land

Exhibit B: Bastrop Water Conservation and Drought Contingency Plan

Exhibit C: Map Showing Locations of Water Delivery Points, Water Connection Points

**Section 9.18 Effective Date.**

This Agreement will be effective from and after the last date of due execution by all Parties.

**CITY OF BASTROP, TEXAS**

By: \_\_\_\_\_  
Name: Lynda Humble  
Title: City Manager  
Date: \_\_\_\_\_

**ATTEST:** \_\_\_\_\_  
**Ann Franklin, City Secretary**

\_\_\_\_\_ **DISTRICT**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF TEXAS           §

  §

COUNTY OF BASTROP   §

This instrument was acknowledged before me the \_\_\_\_ day of \_\_\_\_\_, 2018,  
by \_\_\_\_\_, \_\_\_\_\_ City of Bastrop, Texas, on behalf of City.

\_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
**(DEVELOPER)**

A \_\_\_\_\_

By:

A \_\_\_\_\_ company,

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: Manager

Date: \_\_\_\_\_

Attest:

\_\_\_\_\_

STATE OF \_\_\_\_\_ §

§

COUNTY OF \_\_\_\_\_ §

This instrument was acknowledged before me on the \_\_\_\_ day of \_\_\_\_\_,  
20\_\_, by \_\_\_\_\_, \_\_\_\_\_ of \_\_\_\_\_, a Texas  
\_\_\_\_\_ company, \_\_\_\_\_ of \_\_\_\_\_, a Texas  
\_\_\_\_\_, on behalf of said \_\_\_\_\_ company as \_\_\_\_\_  
of the \_\_\_\_\_.

\_\_\_\_\_  
Notary Public, State of \_\_\_\_\_

EXHIBIT A EXAMPLE FOR WHOLESALE WATER CONTRACT 3/19

STATE OF TEXAS COUNTY OF BASTROP

CITY OF BASTROP MUD 100.937 ACRE

All that certain tract or parcel of land containing 0.937 acre situated in the Stephen F. Austin Survey, A-3, in Bastrop County, Texas, being part of that tract described as 5,566.770 acres ("Exhibit A-4") in a deed from Steiner and Sons, Ltd. to XS Ranch Fund VI, L.P. dated December 19, 2006 and recorded in Volume 1701, Page 145 of the Official Records of Bastrop County, said 100.937-acre tract being more particularly described by metes and bounds as follows:

Commencing at a 1/2" iron rod found at the intersection of the fenced North margin of "Sayers Road" (County maintained public roadway - no record right-of-way width) with the Northwest right-of-way line of the Union Pacific Railroad (100' wide right-of-way) for a Southeast corner of said (called) 5,566.770 acre XS Ranch tract and the Southeast corner of a 30 foot wide easement tract also surveyed this date, said point having a coordinate value of North= 10,032,315.97 feet and East= 3,245,449.38 feet according to the Texas State Plane Coordinate System - Central Zone - NAD 83(CORS 96);

Thence North 28 degree 47 minutes 43 seconds East, 1,731.45 feet along the common line between said Union Pacific Railroad and said 5,566.770 acre XS Ranch tract to a 1/2" iron rod set for an angle point in the East line of said 30 foot wide easement tract also surveyed this date;

Thence North 06 degrees 58 minutes 04 seconds West, departing said common line, 562.23 feet to a 1/2" iron rod set within said XS Ranch tract for the most Northerly corner of said thirty foot wide easement tract also surveyed this date, the East corner of the tract herein described and the PLACE OF BEGINNING;

Thence South 28 degrees 47 minutes 51 seconds West, 240.00 feet to a 1/2" iron rod set for the South corner of the tract herein described;

Thence North 61 degrees 12 minutes 09 seconds West, 170.00 feet to a 1/2" iron rod set for the West corner of the tract herein described;

Thence North 28 degrees 47 minutes 51 seconds East, 240.00 feet to a 1/2" iron rod set for the North corner of the tract herein described;

Thence South 61 degrees 12 minutes 09 seconds East, 170.00 feet to the PLACE OF BEGINNING and containing 0.937 acre.

EXHIBIT A EXAMPLE FOR WHOLESALE WATER CONTRACT 3/19

CITY OF BASTROP

100.937 ACRE

PAGE 2 OF 3

Bearings, distances and coordinates used herein are "GRIDH based on the Texas State Plane Coordinate System - Central Zone - NAO 83(CORS 96). Convergence= +01 degree 32 minutes 47 seconds. Combined factor= 0.99997299.

STATE OF TEXAS

COUNTY OF BASTROP

I, \_\_\_\_\_, a Registered Professional Land Surveyor, do hereby certify the foregoing field notes to be true and correct to the best of my knowledge and belief.

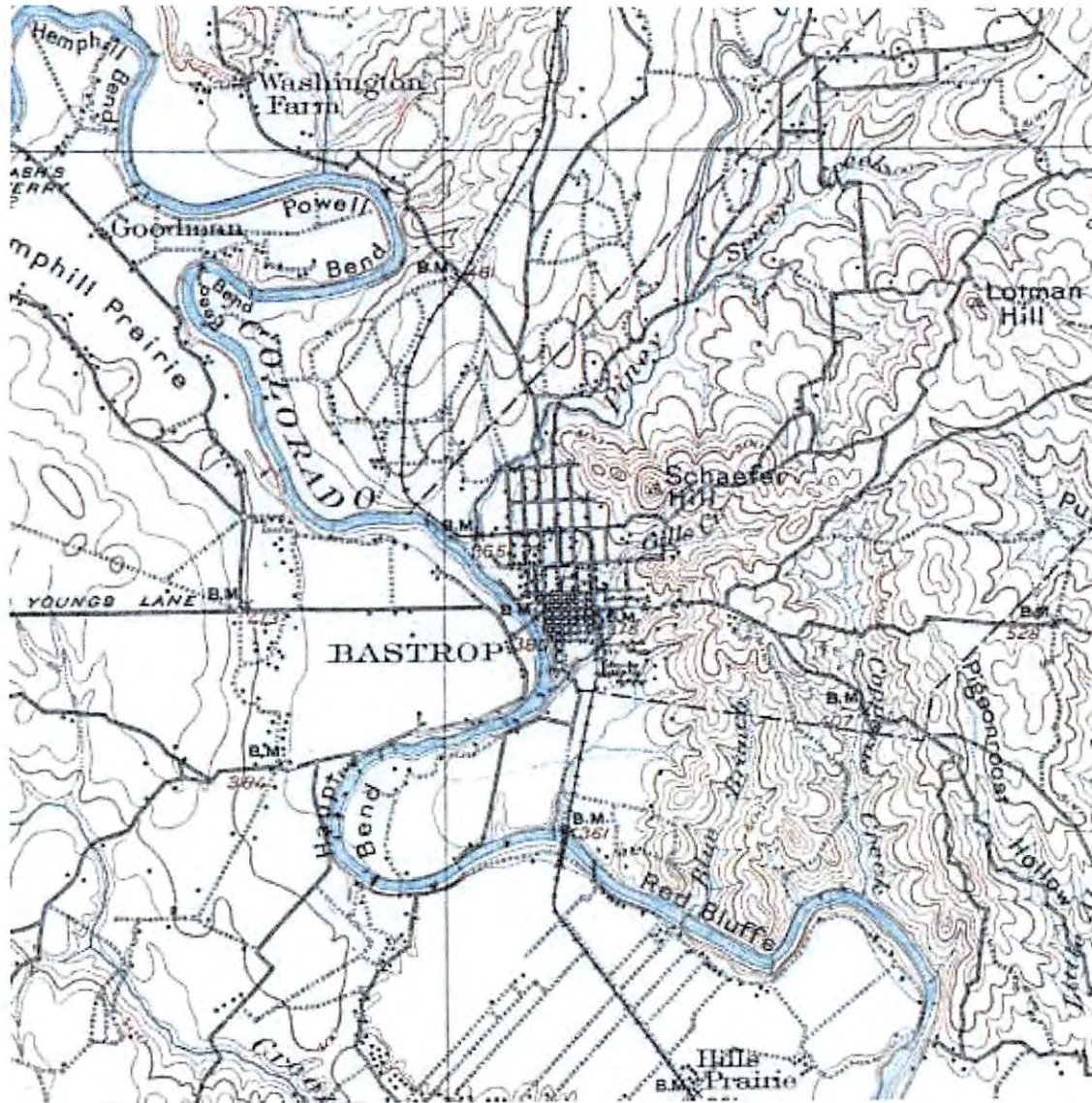


Signature *Baron de Bastrop*

Baron de Bastrop , R.P.L.S. Registration No. 1832 December 6 1832



EXHIBIT A EXAMPLE FOR WHOLESALE WATER CONTRACT 3/19



# Exhibit B

## CITY OF BASTROP WATER CONSERVATION PLAN

Prepared For:



City of Bastrop  
1311 Chestnut Street  
Bastrop, Texas 78602

Adopted April 26, 2016  
City Ordinance No. 2016-08

Prepared By:



BEFCO Engineering, Inc.  
485 N. Jefferson  
La Grange, Texas 78945  
(979) 968-6474  
Texas Registered Engineering Firm # F-2011  
[www.befcoengineering.com](http://www.befcoengineering.com)  
BEFCO Job No. 16-6608

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APPENDIX	A. City of Bastrop Utility Profile (TWDB Form No. 1965-R)
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APPENDIX	D. City Ordinance
APPENDIX	E. Regional Water Planning Group Notification

# **CITY OF BASTROP WATER CONSERVATION PLAN**

## **INTRODUCTION AND OBJECTIVES**

Water supply has always been a key issue in the development of Texas. In recent years, the increasing population and economic development in the Texas Water Development Board Lower Colorado Regional Water Planning Group (Region K) have led to growing demands for water. Additional supplies to meet higher demands are becoming increasingly expensive and difficult to develop. Therefore, it is imperative that we make efficient use of existing supplies and make them last as long as possible. This will delay the need for new supplies, minimize the environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

The Texas Commission on Environmental Quality (TCEQ) as well as the Texas Water Development Board through 30 Texas Administrative Code, Part 1, Chapter 288.2 and the Texas Water Code Section 16.403, requires all public water purveyors that provide water service to 3,300 or more retail water connections to develop and implement a Water Conservation Plan. Furthermore, the implemented plan shall be reviewed and updated every five years. The following plan serves to update the previous plan which was implemented by Ordinance No. 2010-8 on May 11, 2010. This plan addresses the following requirements as listed in the Texas Administrative Code for water conservation plans for public drinking water suppliers:

- Utility Profile;
- Records management system to record water pumped, water deliveries, water sales and non-revenue water which allow for the desegregation of water sales and uses in the following user classes: (i) residential; (ii) multi-family; (iii) commercial; (iv) industrial; (v) institutional and (vi) wholesale;
- Five-year and ten-year specific and quantified targets and goals for water use and loss;
- A schedule for implementing plan to meet the goals and targets;
- Method for tracking the effectiveness and efficiency of the plan;
- Accurate source water metering;
- Universal metering of both customer and public uses of water, meter testing and repair, and periodic meter replacement;
- Measures to determine and control water loss;
- A program for leak detection, repair and water loss accounting for the water transmission, delivery and distribution system;
- Program for continuing public education and information regarding water conservation;
- Non-promotional water rate structure;
- Means of implementation and enforcement;
- Requirements for wholesale water contracts to contain water conservation plans;
- Coordination with the Regional Water Planning Group;
- Formal adoption of plan by city council;
- Requirements for annual reporting.

## **A. UTILITY PROFILE**

The following is a brief summary of the City of Bastrop's Utility Profile. A detailed summary may be found in Appendix A.

### Water System

The City of Bastrop's Water and Wastewater Department manages a water distribution service area covering over 11 square miles in area and serves a population of approximately 8,230 people via roughly 3,800 connections. Water usage is divided between single family residential (64%), multi-family residential (19%) and commercial (17%). The City provides drinking water from a total of seven (7) groundwater wells capable of producing up to 3.06 million gallons per day (MGD). Customers are served through a network of approximately 70 miles of transmission and distribution lines ranging in size from 2-inch in diameter through 16-inch.

The 5-year historic average water use for the City is 493 million gallons with an average gallons per capita per day (GPCD) of 178. The GPCD has varied and decreased yearly from a high of 212 GPCD in 2011 to a low of 156 GPCD in 2015. Based on a Technical Memorandum prepared by CH2M Hill, "City of Bastrop, Water Demand Projections – Final," dated May 13, 2014, the 10 year (Year 2025) population is anticipated to be 12,743 with a water demand of approximately 833 million gallons.

### Wastewater Collection and Treatment System

Raw wastewater in Bastrop travels through a network of over 54 miles of wastewater collection lines and numerous lift stations to two wastewater treatment plants permitted through TCEQ under permit number WQ0011076001. The two plants are located on one site on the south end of Water Street. The City is also under contractual obligation to treat up to 200,000 gallons per day (GPD) of wastewater flows from Bastrop County Water Control and Improvement District #2 (BCWCID #2). The average daily flow in 2015 from BCWCID #2 was approximately 85,000 GPD. In total for 2015, the wastewater treatment plants treated an average daily flow of approximately 0.85 MGD at design capacity of 1.4 MGD.

In January of 2015, the City of Bastrop received authorization allowing the reuse of Type I and Type II wastewater effluent from their two wastewater treatment plants. By way of this authorization, the City provided just over 300,000 gallons of reuse water for local construction projects instead of utilizing treated drinking water.

## **B. RECORDS MANAGEMENT SYSTEM**

In 2015, the City of Bastrop completed a city wide upgrade to an Advanced Metering Infrastructure (AMI) system. This has allowed the city to begin tracking information in real time and has increased the accuracy of reporting data. The pumpage and meter reading records are compiled daily, monthly and annually on spreadsheets which are reviewed daily by city representatives, and are used to compile annual reports required by state agencies.

The water records include:

- Raw water pumpage;
- Backwash recycle waters;
- Treated water pumped to the distribution system;
- Water pumped into each zone;
- Water sold by user classifications:
  - Single family residential;
  - Commercial;

- Industrial;
- Multi-family residential;
- Institutional;
- Wholesale water;
- Total water sold;
- Water metered but not billed;
- Miscellaneous accounted for water.

Miscellaneous accounted for water includes such categories as tank overflows, pump testing, water leak repairs summary reports, fire hydrant flushing, flush valve usage, fire department usage, etc. The non-revenue water and water loss is compiled and reviewed on a monthly and annual basis.

**C. WATER CONSERVATION PLAN FIVE AND TEN YEAR GOALS**

The objective of the City’s Water Conservation Plan is to:

1. Establish water conservation strategies to achieve efficient use of water and reduce the gallons per capita per day (GPCD) consumption of water to meet specified goals; and,
2. Establish a program to reduce unaccounted for water in the system and improve the quality of data in water loss estimates expressed in percentage and GPCD to meet specific and quantified goals.

The City of Bastrop is situated in a high-growth corridor and anticipates experiencing continued economic growth. The total gallon per capita per day (GPCD) water use for the past five (5) years averaged 178 gpcd, which is good considering the Texas Water Development Board projects a 181 gpcd in the year 2020. Additionally, the gallons per capita per day has decreased every year over the last five years from a high of 212 gpcd in 2011 to a low of 156 gpcd in year 2015.

<b>5 and 10 Year Goals for Water Savings</b>				
City of Bastrop				
2015 Water Conservation Plan				
	Historic 5-yr Average	Baseline	5-yr Goal Year 2020	10-yr Goal Year 2025
Total GPCD	178	178	169	161
Residential GPCD	95	95	94	93
Water Loss (GPCD)	21	21	18	16
Water Loss (Percentage)	12%	12%	11%	10%

In any system, water loss may occur due to leaks, line breaks, meter inaccuracies, theft, and other issues. Over the last five years the City’s water loss has varied between 6 and 16 percent. The installation of the Advanced Metering Infrastructure in 2015 will provide city staff with more accurate and real time data which should assist in reducing unaccounted for water.

The goals outlined above are designed to be achieved within 5 to 10 years of the date of adoption of this plan. A copy of TWDB Form No. 1964 has been included in Appendix B. The City will periodically evaluate the plan in accordance with state and federal regulations to determine the extent, if any, that the plan needs modification.

#### **D. METHOD OF MONITORING THE EFFECTIVENESS OF THE PLAN**

The effectiveness and efficiency of the water conservation program will be monitored on an ongoing basis by the City of Bastrop staff via data collection from their Advanced Metering Infrastructure. The City of Bastrop will continue to track total gpcd and residential gpcd water usage, on an annual basis as well as water loss in gpcd and percentage on a monthly basis to determine whether reduction targets are being achieved.

#### **E. ACCURATE SOURCE WATER METERING**

Ground water from the city's seven (7) water wells are individually metered at the wellhead. These readings are taken daily by the City of Bastrop staff. The master meter calibrations are performed at least annually and more frequently if needed, by an outside firm specializing in this type of work with copies of the calibration log sheets maintained by the utility department. The source water meters will be maintained within a plus/minus 2.0% of 100% accuracy.

At least annually, surveillance of the groundwater transmission line routes from each wellhead to the water treatment plant are made to check for leaks that may be present. Repairs are performed in a timely manner.

#### **F. UNIVERSAL METERING**

The ability to meter all water distribution and consumption uses allows the city to closely monitor actual water use, water losses, and prevent unauthorized use. Beginning in late 2015 all service connections in the City are metered via an Advanced Metering Infrastructure (AMI). All residential, commercial, swimming pools, parks, and municipal structures operated by the City are also metered via AMI.

The City will continue to provide a preventive maintenance program for its water meters, wherein regular scheduled testing, repairs, and replacement are performed as follows:

- A representative number of 2-inch and smaller residential meters are tested annually to insure continued accuracy;
- Meter meters 3-inch in diameter and larger are tested once per year;
- Residential water meters shall be tested in accordance with AWWA recommendations found in Standard C700 and AWWA M6, *Water Meters – Selection, Installation, Testing, and Maintenance Manual*.

#### **G. TRACKING AND CONTROLLING WATER LOSS**

##### **Water Loss Control Measures**

The goal of the City's water loss control program is to not exceed 15 percent and to ultimately reduce unaccounted-for water to a level of 10% or below. Unaccounted-for water includes unbilled authorized usage and unbilled unauthorized usage. Unbilled authorized usage includes water used for fighting fires, flushing lines, etc. Unbilled unauthorized usage includes water lost to leaks, theft, etc. In some cases, the age of some of the distribution lines may be contributing to both the unbilled authorized and unauthorized usages. Due to their age, these lines are typically scheduled for more frequent flushing; and because of their age, these lines generally have a higher probability of leaking. However, in order to meet the goals set forth, the City has several programs in place, including routine water audits, a program of leak detection and repair, line replacement, and meter testing and accuracy.

The Water and Wastewater Department generates a monthly water loss report that compares metered production with metered consumption, as well as accounted-for and unaccounted-for losses. This report provides an effective tracking system of water loss. The City will also complete a detailed water system audit following Texas Water

Development Board (TWDB) guidelines at least once each year. TWDB rules only require this audit to be submitted once every five years. The water system audit determines the volume of actual water loss, the identification of water loss sources, the status and condition of primary water meters, an analysis of water line breaks, an evaluation of underground leakage potential, and provides recommendations for meter replacement.

#### **Leak Detection and Repair**

The City administers leak detection and repair programs for its water distribution system. Approximately 175 acoustic magnetic leak detection units are scattered throughout the City's distribution system and monitors the system nightly. The Utility Department then runs a report to evaluate the collected data and identify potential locations for leaks and dispatches repair crews as needed. Additionally, the City has a program that features a work order prioritization system for leaks needing repair and an inventory of equipment and materials needed to promptly repair all detected or reported leaks. The City also has a rehabilitation program to upgrade its aging water distribution system and address high volume leak areas. This program is based on findings in monthly water loss reports and the leak detection programs described above.

### **H. WATER CONSERVATION STRATEGIES**

There are a number of benefits that water conservation can have on the City and its customers: extending the life of existing water supplies and infrastructure; delaying costs for water right purchases and infrastructure improvements such as pipelines, pump stations, water storage and plant expansions; and lowering operating costs by reducing chemical and electricity demands. The City currently has several water conservation strategies in effect and include:

1. **Public Education Program** - The city public education program makes thousands of contacts, both direct and indirect, every year through presentations, community fairs, plant tours, utility bill inserts, newspaper and radio ads, and the City's website. The City promotes water conservation issues by informing the public in the following ways:
  - Making water conservation information available to new customers;
  - Making residential water audits available (hourly intervals available with AMI) to all customers upon request;
  - Providing water conservation information to all customers upon request, through the City's website and social media outlets;
  - Coordinating educational presentations, lectures, and demonstrations for schools, civic groups, and the general public;
  - Providing exhibits at public events held throughout the year;
  - Publishing water conservation information on a regular basis in the City's utility bill insert or other written form;
  - Participating in community environmental education activities with local organizations to promote water conservation education;
  - Supporting annual events and demonstrations relating to water conservation and environmental issues that affect water supply and quality.
  
2. **Plumbing Code and Retrofit Program** - The City has adopted the International Plumbing code, which requires the use of water saving, Ultra-Low Flow (ULF) fixtures to be installed in new construction and in the replacement of plumbing in existing structures. The City educates the residents, plumbers, and contractors on the benefits of retrofitting existing facilities with water saving devices through its public education program.



3. **Landscape Water Management** – The City provides information about the methods and benefits of water conserving landscaping practices and devices through public education to homeowners, business owners, landscape architects and designers, and irrigation professionals. The following methods are encouraged:
  - The use of Xeriscape™ and “Water Wise” landscaping techniques, including drought tolerant plants and grasses for landscaping new homes and commercial areas
  - The use of drip irrigation systems when possible or other water conserving irrigation systems that utilize efficient sprinklers and considerations given to prevailing winds.
  - Making sure that ornamental fountains and similar water features are designed to recycle water and use minimal amounts of water
  - Working with area landscape supply businesses and nurseries to encourage them to sell locally adapted, drought tolerant plants and grasses along with efficient irrigation systems, and to promote use of the materials through demonstrations and advertisements
  
4. **Non-promotional Water Rate Structure** – The City of Bastrop has a conservation oriented rate structure. The existing rates have a six tier increasing block structure where customers are billed a higher rate as water usage increases.
  
5. **Reuse Water** – In January of 2015, the City of Bastrop received authorization allowing the reuse of Type I and Type II wastewater effluent from their two wastewater treatment plants. By way of this authorization, the City provided just over 300,000 gallons of reuse water in 2015 for local construction projects instead of utilizing treated drinking water. Reuse water is also utilized in wastewater plant operations and basin wash downs.
  
6. **Advanced Metering Infrastructure (AMI)** – AMI allows for much more accurate accounting data which reduces non-revenue water issues. The following are some of the advantages of the AMI system:
  - Instant meter reading allows for concurrent pumped verse retail water record data which reduces accounting inaccuracies;
  - Allows for identification of potential water leaks on the customer side of each meter;
  - City provides post card mailers to customers with potential leaks;
  - Increased availability of data allows for additional customer support options.
  
7. **Water Pressure Reduction** – As required by location in system, each service connection incorporates pressure reducing valves where system pressures exceed 85 psi.
  
8. **Permanent Water Restrictions** – The City has implemented through its Drought Contingency Plan permanent water conservation regulations that apply year-round regardless of drought stages. Reference the Drought Contingency Plan for detail information.

## **I. NON-PROMOTIONAL WATER RATE STRUCTURE**

The City utilizes an inclining water rate structure to encourage customers to reduce both peak and overall water usage, while fairly allocating cost of service to each customer class. Under an inclining rate structure, the rate per thousand increases as the amount of water used increases. The current rate structure charges a minimum monthly service charge based on meter size plus a fee based on consumption. The following is the current water rate structure as of November 2015 per Ordinance No. 2015-17:

Residential & Commercial		
	Within City Limits	Outside City Limits
Meter Size	Minimum Charge	Minimum Charge
3/4" (or smaller)	\$27.72	\$41.59
1"	\$47.13	\$70.69
1-1/2"	\$79.47	\$119.22
2"	\$118.28	\$177.43
3"	\$221.78	\$332.68
4"	\$255.07	\$507.34
6"	\$661.68	\$992.48
Plus the following consumption charger per 1,000 gallons:		
0 – 3,000 gallons	\$2.85	\$4.13
3,001 – 5,000 gallons	\$3.04	\$4.42
5,001 – 10,000 gallons	\$3.22	\$4.70
10,001 – 20,000 gallons	\$3.42	\$4.98
20,001 – 50,000 gallons	\$3.69	\$5.39
Over 50,000 gallons	\$3.87	\$5.66

This rate structure will be reviewed on a regular basis to ensure that the rates adequately recover cost of service and meet the goals of the plan.

**J. MEANS OF IMPLEMENTATION AND ENFORCEMENT**

The Water Conservation Plan was adopted by the Bastrop City Council and a copy of the ordinance has been included in Appendix D. The City Manager, or designee will be responsible for implementing the plan and educating all City staff personnel. Implementation of the plan by City staff shall begin immediately in 2016 upon adoption.

**K. WHOLESALE WATER CONTRACTS**

The City will, as part of contracts for sale of water to any other entity re-selling water, require that entity to adopt applicable provisions of the City’s water conservation plan or have a plan in effect previously adopted and meeting the basic requirements of 30 TAC §288. These provisions will be through contractual agreement prior to the sale of any water to the water re-seller. It should be noted that at this time the city does not have any wholesale water contracts.

**L. COORDINATION WITH REGIONAL PLANNING GROUP**

The water service area for the City of Bastrop is located within the Region K planning area and the City will be providing a copy of this plan to Region K Group. A copy of the submission letter can be found in Appendix E.

**M. REPORTING REQUIREMENTS**

30 TAC § 288 requires that each entity that is required to submit a Water Conservation Plan to the Texas Water Development Board shall submit a Water Conservation Plan Annual Report to the TWDB on the entity's progress in

implementing each of the minimum requirements in their water conservation plan. This report will be submitted in accordance with the requirements.

**N. PLAN UPDATE**

At a minimum, the Water Conservation Plan shall be reviewed and updated every five years to coincide with the regional water planning group revision.

**APPENDIX A**

**CITY OF BASTROP  
UTILITY PROFILE  
TWDB Form No. 1965-R**

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible.  
If a field does not apply to your entity, leave it blank.

### CONTACT INFORMATION

Name of Utility: City Of Bastrop

Public Water Supply Identification Number (PWS ID): 0110001

Certificate of Convenience and Necessity (CCN) Number: 11198

Surface Water Right ID Number: \_\_\_\_\_

Wastewater ID Number: WQ0011076001-002

Completed By: Curtis Hancock Title: Systems Superintendent

Address: P.O. Box 427 City: Bastrop Zip Code: 78602

Email: chancock@cityofbastrop.org Telephone Number: 512-332-8960

Date: 3/2016

Regional Water Planning Group: K [Map](#)

Groundwater Conservation District: 50 [Map](#)

Check all that apply:

- Received financial assistance of \$500,000 or more from TWDB
- Have 3,300 or more retail connections
- Have a surface water right with TCEQ

# Section I: Utility Data

## A. Population and Service Area Data

1. Current service area size in square miles: 11  
 (Attach or email a copy of the service area map.)
  
2. Provide historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2015	8,323		9,081
2014	7,856		8,416
2013	7,378		7,902
2012	7,321		7,791
2011	7,237		7,771

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	10,540		11,629
2030	15,336		16,918
2040	22,195		24,494
2050	32,121		35,463
2060	46,485		51,344

4. Describe the source(s)/method(s) for estimating current and projected populations.

Water Years 2011-14 taken from Annual Estimates of Residential Population: April 1, 2010 to July 1, 2014; U.S. Census Bureau, Population Division, Release Date: May 2015 for Cities and Towns.

Water Years 2015-2060 taken from CH2M Hill Technical Memorandum, "City of Bastrop, Water Demand Projections - Final", dated May 13, 2014.

The City of Bastrop receives sewer flows from Bastrop County Water Control & Improvement District No. 2 (BCWCID #2). BCWCID #2's population was estimated by dividing their average daily flow (metered lift station) for the year by 100 gallons/capita. Sewer Years 2011 - 2015 were calculated by adding the BCWCID #2's population to the respective water service population. Sewer years 2020-2060 were calculated by applying the growth rate established in CH2M Hill's Technical Memo to the 2015 population of 9,081.

**B. System Input**

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2015	472,445,000	0		472,445,000	156
2014	478,959,000	0		478,959,000	167
2013	469,470,000	0		469,470,000	174
2012	485,138,000	0		485,138,000	182
2011	561,260,000	0		561,260,000	212
<b>Historic 5-year Average</b>	493,454,400	0	0	493,454,400	178

**C. Water Supply System (Attach description of water system)**

1. Designed daily capacity of system \_\_\_\_\_ **3,057,600** gallons per day.
2. Storage Capacity:  
 Elevated \_\_\_\_\_ gallons  
 Ground \_\_\_\_\_ gallons
3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
Well C	Ground	360,000
Well D	Ground	268,800
Well E	Ground	288,000
Well F	Ground	816,000
Well G	Ground	480,000
Wells H and I	Ground	844,800

\*Select one of the following source types: *Surface water, Groundwater, or Contract*

4. If surface water is a source type, do you recycle backwash to the head of the plant?  
 Yes \_\_\_\_\_ estimated gallons per day  
 No

**D. Projected Demands**

1. Estimate the water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)
2016	8,703	622,612,620
2017	9,173	649,540,130
2018	9,643	675,781,440
2019	10,114	701,405,900
2020	10,540	723,254,800
2021	10,966	744,481,740
2022	11,392	773,402,880
2023	11,818	789,383,310
2024	12,244	808,899,860
2025	12,743	832,563,905

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.

Projected water demands are based on CH2M Hill Technical Memorandum, "City of Bastrop, Water Demand Projections - Final", dated May 13, 2014. Per the memo, projected water demand per capita use was assumed as 200 gallons per day in 2014 and further assumed conservation practices would reduce the gallons per capita per day by one (1) percent each year thereafter until reaching a goal of 140 gpcd, a voluntary target developed by the TWDB's Water Conservation Task Force in 2004.



**E. High Volume Customers**

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Bastrop Co Law Center	Commercial	103,298,000	Treated
Buc-ees	Commercial	63,074,000	Treated
N.N.A. Bastrop	Commercial	50,866,000	Treated
The Arbors	Residential	50,777,000	Treated
Autumn Hills	Commercial	43,248,000	Treated

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use.](#)

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers**. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
N/A	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use.](#)

**F. Utility Data Comment Section**

Provide additional comments about utility data below.

## Section II: System Data

### A. Retail Connections

- List the active retail connections by major water use category.

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	2,428		2,428	64%
Residential – Multi-family (units)	718		718	19%
Industrial			0	0%
Commercial	650		650	17%
Institutional			0	0%
Agricultural			0	0%
<b>TOTAL</b>	3,796	0	3,796	

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use.](#)

- List the net number of new retail connections by water use category for the previous five years.

Water Use Category*	Net Number of New Retail Connections				
	2015	2014	2013	2012	2011
Residential – Single Family	47	73	35	30	41
Residential – Multi-family (units)	0	0	0	0	0
Industrial					
Commercial	-36	50	16	4	14
Institutional					
Agricultural					
<b>TOTAL</b>	11	123	51	34	55

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use.](#)

**B. Accounting Data**

For the previous five years, enter the number of gallons of RETAIL water provided in each major water use category.

Water Use Category*	Total Gallons of Retail Water				
	2015	2014	2013	2012	2011
Residential - Single Family	209,761,800	145,211,834	200,823,100	194,866,300	250,257,400
Residential – Multi-family	43,790,500	43,788,666	33,996,261	39,037,343	44,134,535
Industrial					
Commercial	184,368,600	209,547,600	170,433,539	174,376,557	186,327,565
Institutional					
Agricultural					
<b>TOTAL</b>	<b>437,920,900</b>	<b>398,548,100</b>	<b>405,252,900</b>	<b>408,280,200</b>	<b>480,719,500</b>

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

**C. Residential Water Use**

For the previous five years, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
	2015	2014	2013	2012	2011
Residential - Single Family	90	66	98	96	124
Residential – Multi-family	64	66	53	61	68

**D. Annual and Seasonal Water Use**

1. For the previous five years, enter the gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Retail Water				
	2015	2014	2013	2012	2011
January	30,727,000	33,470,000	30,634,000	31,881,000	31,682,000
February	27,785,000	29,361,000	29,016,000	28,368,000	31,384,000
March	30,402,000	32,613,000	37,646,000	33,542,000	39,262,000
April	32,247,000	36,264,000	35,254,000	38,160,000	49,606,000
May	32,250,000	41,211,000	39,002,000	41,594,000	49,818,000
June	35,497,000	40,811,000	47,014,000	44,806,000	51,113,000
July	47,627,000	43,029,000	48,867,000	44,374,000	55,519,000
August	62,415,000	53,140,000	50,972,000	51,844,000	56,282,000
September	50,748,000	39,930,000	43,641,000	45,267,000	55,425,000
October	47,771,000	39,029,000	36,553,000	38,955,000	47,250,000
November	33,622,000	31,215,000	32,083,000	37,987,000	37,755,000
December	32,544,000	30,696,000	30,868,000	35,241,000	31,863,000
<b>TOTAL</b>	<b>463,635,000</b>	<b>450,769,000</b>	<b>461,550,000</b>	<b>472,019,000</b>	<b>536,959,000</b>

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2015	2014	2013	2012	2011
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
<b>TOTAL</b>	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2015	2014	2013	2012	2011	
Summer Retail (Treated + Raw)	145,539,000	136,980,000	146,853,000	141,024,000	162,914,000	146,662,000 5yr Average
TOTAL Retail (Treated + Raw)	463,635,000	450,769,000	461,550,000	472,019,000	536,959,000	476,986,400 5yr Average

**E. Water Loss**

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365

Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2015	27,986,119	9	6%
2014	75,702,620	26	16%
2013	60,889,390	23	13%
2012	63,738,800	24	13%
2011	56,239,500	21	10%
<b>5-year average</b>	56,911,286	21	12%

**F. Peak Water Use**

Provide the Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2015	1,271,000	2,323,000	1.83
2014	1,234,000	2,082,000	1.69
2013	1,263,000	2,041,000	1.62
2012	1,289,000	2,119,000	1.64
2011	1,470,000	2,274,000	1.55

**G. Summary of Historic Water Use**

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	200,184,087	64%	0%
Residential MF	40,949,461	19%	0%
Industrial	0	0%	0%
Commercial	185,010,772	17%	0%
Institutional	0	0%	0%
Agricultural	0	0%	0%

**H. System Data Comment Section**

Provide additional comments about system data below.

## Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the [Water Conservation Plan Checklist](#) to complete your Water Conservation Plan.

**A. Wastewater System Data** (Attach a description of your wastewater system.)

1. Design capacity of wastewater treatment plant(s): 1,400,000  
gallons per day.
2. List the active wastewater connections by major water use category.

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	2,185		2,185	80%
Industrial			0	0%
Commercial	559		559	20%
Institutional			0	0%
Agricultural			0	0%
<b>TOTAL</b>	2,744	0	2,744	

2. What percent of water is serviced by the wastewater system? 95%
3. For the previous five years, enter the number of gallons of wastewater that was treated by the utility.

Month	Total Gallons of Treated Wastewater				
	2015	2014	2013	2012	2011
January	26,056,000	22,612,000	23,550,000	24,226,000	24,372,000
February	21,857,000	21,223,000	20,833,000	24,015,000	22,920,000
March	26,743,000	24,298,000	24,537,000	28,021,000	25,674,000
April	27,420,000	23,662,000	23,391,000	25,341,000	26,406,000
May	34,613,000	27,146,000	23,736,000	27,532,000	27,168,000
June	29,418,000	26,962,000	23,792,000	26,899,000	26,682,000
July	29,701,000	25,623,000	24,495,000	27,968,000	26,793,000
August	28,918,000	26,275,000	23,723,000	28,419,000	26,369,000
September	26,346,000	26,446,000	23,169,000	26,091,000	24,666,000
October	29,864,000	26,243,000	23,757,000	25,249,000	25,317,000
November	28,349,000	24,195,000	23,136,000	22,772,000	24,135,000
December	26,958,000	24,227,000	22,239,000	23,058,000	24,878,000
<b>TOTAL</b>	336,243,000	298,912,000	280,358,000	309,591,000	305,380,000

4. Can treated wastewater be substituted for potable water?  
 Yes       No

**B. Reuse Data**

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	26,280,000
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other      Construction Projects	303,400
<b>TOTAL</b>	<b>26,583,400</b>

**C. Wastewater System Data Comment**

Provide additional comments about wastewater system data below.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the [Water Conservation Plan Checklist](#) to complete your Water Conservation Plan.

**TEXAS WATER DEVELOPMENT BOARD  
UTILITY PROFILE  
ATTACHMENT 1**

*Water Supply, Treatment & Distribution System*

The water system is designated a ground water system under the influence (GUI) of surface. The existing water system is divided into two pressure planes. Zone 1 serves the lower elevations that include the Old Town area on the east side of the river and the area west of the river. It has a design hydraulic gradient of 535 feet, mean sea level (MSL). Zone 2 serves the higher elevations east of the river with a hydraulic gradient of 654 feet MSL and the majority of the west side using a PRV located at Willow Plant.

*Wells*

Presently, the City has seven (7) water wells --- C, D, E, F, G, H and I. Wells C, D, E, F and G are located in Fisherman's Park area. These wells withdraw water from the alluvial layer and are treated for distribution at the Willow Water Plant which includes a cartridge filter system for Log 2 and 3 removal. Wells H and I are treated for distribution at the Bob Bryant Plant which includes a methane stripper.

<i>Well</i>	<i>Permitted 24 hr/day (gpm)</i>	<i>Equivalent Permitted 16 hr/day (gpm)</i>	<i>Actuals 16 hr/day (gpm)</i>
A	Abandoned	Abandoned	
B	Abandoned	Abandoned	
C	550	825	375
D	750	1,125	280
E	750	1,125	300
F	1,030	1,545	850
G	1,000	1,500	500
H	400	600	415
I	1,000	1,500	465
<b>Totals</b>	<b>5,480</b>	<b>8,220</b>	<b>3,185</b>

*Equipment Breakdown*

The equipment at the existing facilities is shown below:

*Willow Water Plant*

- Service Pump Capacity:
  - 3-750 Gallons Per Minute (GPM)
  - 3-800 GPM
- Ground Storage Tank (GST) Capacity:
  - GST #1 – 500,000 Gallons
  - GST #2 – 500,000 Gallons

*Loop 150 Tank Yard*

- Transfer Pump Capacity:
  - 2 – 400 GPM
- Ground Storage Tank (GST) Capacity:
  - GST #3 – 225,000 Gallons
- Elevated Storage Tank (EST) Capacity:
  - EST #1 – 250,000 Gallons
  - Standpipe (SP) – 1,000,000 Gallons

*Bob Bryant Plant*

- Service Pump Capacity:
  - 2 – 1,400 GPM
- Transfer Pump Capacity:
  - 2 – 400 GPM
- Ground Storage Tank (GST) Capacity:
  - Bob Bryant Tank (BBT) – 285,000 Gallons



**TEXAS WATER DEVELOPMENT BOARD  
UTILITY PROFILE  
ATTACHMENT 1**

***Hydraulic Design Elevation Zones***

Below is a breakdown of equipment per zone and a summary of operational characteristics.

	<b>Zone 1</b>	<b>Zone 2</b>	<b>Zone 3</b>
Design Hydraulic Gradient (MSL)	535	654	
<b>Willow Water Plant</b>			
Service Pumps (gpm)	750	800	
	750	800	
	750	800	
Ground Storage Tank No. 1 (gal)	500,000		
Ground Storage Tank No. 2 (gal)		500,000	
<b>Loop 150 Tank Yard</b>			
Transfer Pumps (gpm)		400	
		400	
Ground Storage Tank No. 3 (gal)	225,000		
Elevated Storage No. 1 (gal)		250,000	
Standpipe (gal)	1,000,000		
<b>Bob Bryant Plant</b>			
Transfer Pumps (gpm)			400
			400
Service Pumps (gpm)			1,400
			1,400
Bob Bryant Ground Storage (gal)			285,000

**Zone 1**

Zone 1 service pumps at Willow Water Plan supply from GST #1 and pump water to GST #3 at the Loop 150 Tank Yard. By virtue of its elevation at the Loop 150 Tank Yard, GST #3 serves as elevated storage for Zone 1. The standpipe (SP) at the Tank Yard is interconnected to GST #3 via an automatic solenoid valve. And thus by gravity, supplements Zone 1 elevated storage with its 1,000,000 gallon capacity. Zone 1, therefore, has 1,725,000 gallons of total storage capacity which includes GST #1 (500,000 gallons), GST #3 (225,000 gallons), and 1,000,000 gallons of the SP. The total elevated storage for Zone 1 is 1,225,000 which includes SP (1,000,000 gal) and GST #3 (225,000 gal). The hydraulic elevation of Zone 1 is 535 feet.

**Zone 2**

Zone 2 service pumps at Willow Water Plan supply from GST #2 and pump water to GST #1 and the SP. Also the two transfer pumps at the Loop 150 Tank Yard are capable of lifting water from GST #3 to the SP or EST #1. The total storage capacity of Zone 2 is 1,750,000 gallons consists of GST #2 (500,000 gal), EST #1 (250,000 gal) and the SP (1,000,000 gal). The elevated storage for Zone 2 at Loop 150 is supplied exclusively by EST #1 (250,000 gallons).

**Zone 3**

Zone 3 service pumps at Bob Bryant Plant supply from the Bob Bryant GST. Well "I" raw water passes through a methane stripper before transfer pumps lift the water into the ground storage tank. The total storage capacity of Zone 3 is 285,000 (Bob Bryant GST).

**Texas Water Development Board  
Utility Profile  
Attachment 2**

**Existing Wastewater System Information**

The City of Bastrop Wastewater System consists of 4"-18" gravity collection lines, 3"-10" force mains, and multiple lift stations to transport wastewater from individual connections to the wastewater treatment facility located on the east side of the Colorado River on the south end of Water Street. City of Bastrop currently operates Wastewater Treatment Plant ("WWTP") #1 and #2 under permit number WQ0011076001. The permitted treatment capacity for WWTP #1 and #2 is a total of 1.4 Million Gallons per Day ("MGD"). In addition, the City is also under contractual obligation to treat up to 200,000 Gallons per Day ("GPD") of wastewater flows from Bastrop County Water Control and Improvement District #2 ("BCWCID #2"). This contract expires on April 30, 2030.

The steel plant is an activated sludge-extended aeration process capable of treating 1.06 MGD. The plant consists of a bar screen, aeration basin, and clarifier. The concrete plant is a plug-flow process capable of treating 0.34 MGD. This plant consists of a bar screen, aeration basin, and clarifier. Flow from both plants' clarifiers use the same chlorine contact basin where it is aerated, goes over a baffle, down cascading steps and then dechlorinated prior to discharging through a 12" pipe to Segment 1402 of the Colorado River Basin. Both plants also utilize a digester for sludge processing and either drying beds or a dewatering box prior to sludge haul off. The effluent from the plants is required to produce the following parameters: CBOD 10 mg/L, TSS 15 mg/L, NH<sub>3</sub> 2 mg/L, DO > 5 mg/L, E-coli 126 CFU or MPN/100 mL, and pH between 6.5 & 9. Effluent must contain a chlorine residual of at least 1.0 mg/L after a detention time of at least 20 minutes to meet disinfection requirements.

**APPENDIX B**

**Five and Ten-Year Goals Table  
TWDB Form No. 1964**

## WATER CONSERVATION PLAN 5- AND 10-YR GOALS FOR WATER SAVINGS

Facility Name: City of Bastrop

Water Conservation Plan Year: 2015

	<b>Historic 5yr Average</b>	<b>Baseline</b>	<b>5-yr Goal for year <u>2020</u></b>	<b>10-yr Goal for year <u>2025</u></b>
Total GPCD <sup>1</sup>	178	178	169	161
Residential GPCD <sup>2</sup>	95	95	94	93
Water Loss (GPCD) <sup>3</sup>	21	21	18	16
Water Loss (Percentage) <sup>4</sup>	12 %	12 %	11 %	10 %

1. Total GPCD = (Total Gallons in System + Permanent Population) + 365

2. Residential GPCD = (Gallons Used for Residential Use + Residential Population) + 365

3. Water Loss GPCD = (Total Water Loss + Permanent Population) + 365

4. Water Loss Percentage = (Total Water Loss + Total Gallons in System) x 100; or (Water Loss GPCD + Total GPCD) x 100

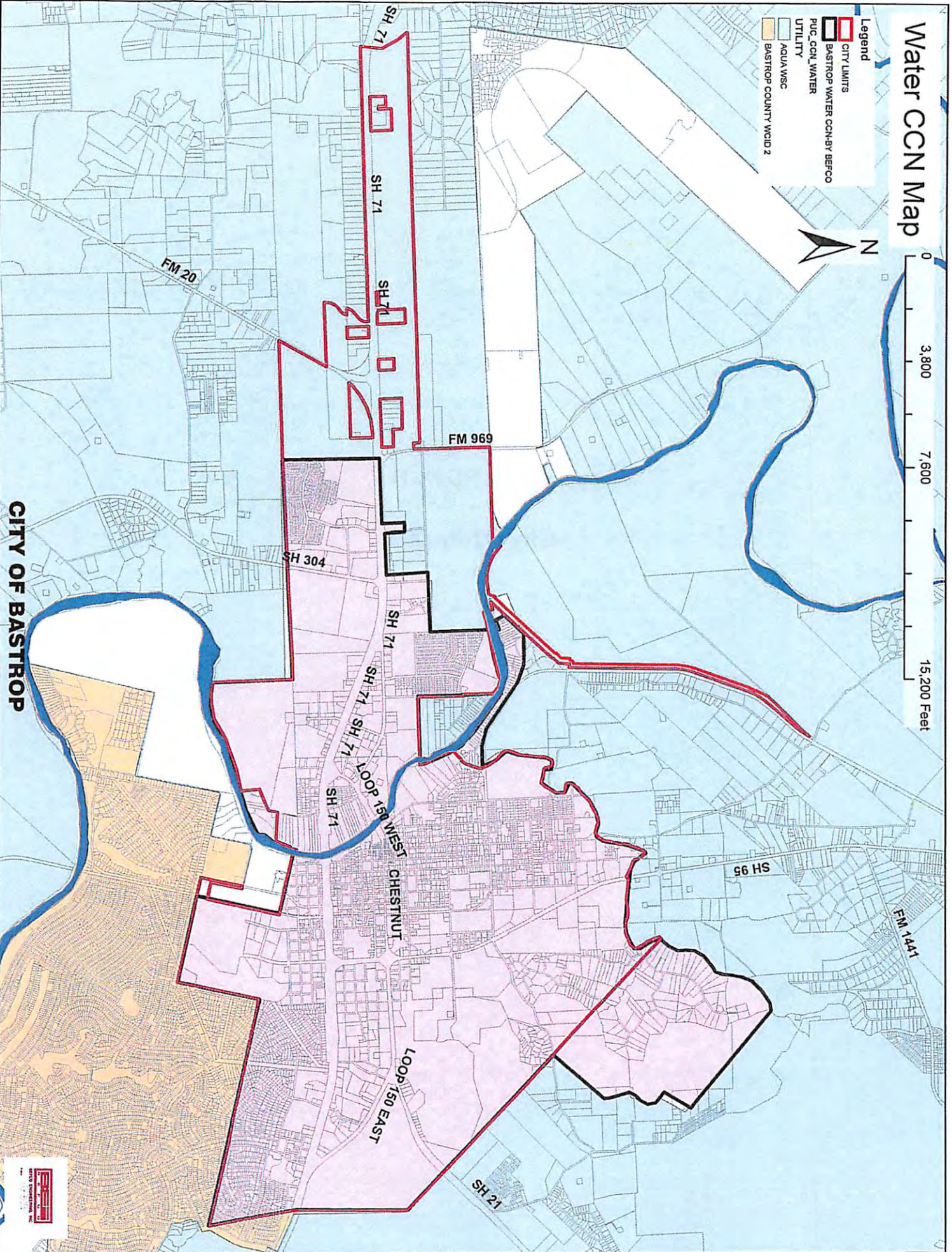
**APPENDIX C**

**City of Bastrop  
Water CCN Map**

# Water CCN Map



- Legend**
- CITY LIMITS
  - BASTROP WATER CCN-BY BEFCO
  - PUG, CCN, WATER UTILITY
  - AQUA WSC
  - BASTROP COUNTY WCID 2



**CITY OF BASTROP**



**APPENDIX D**

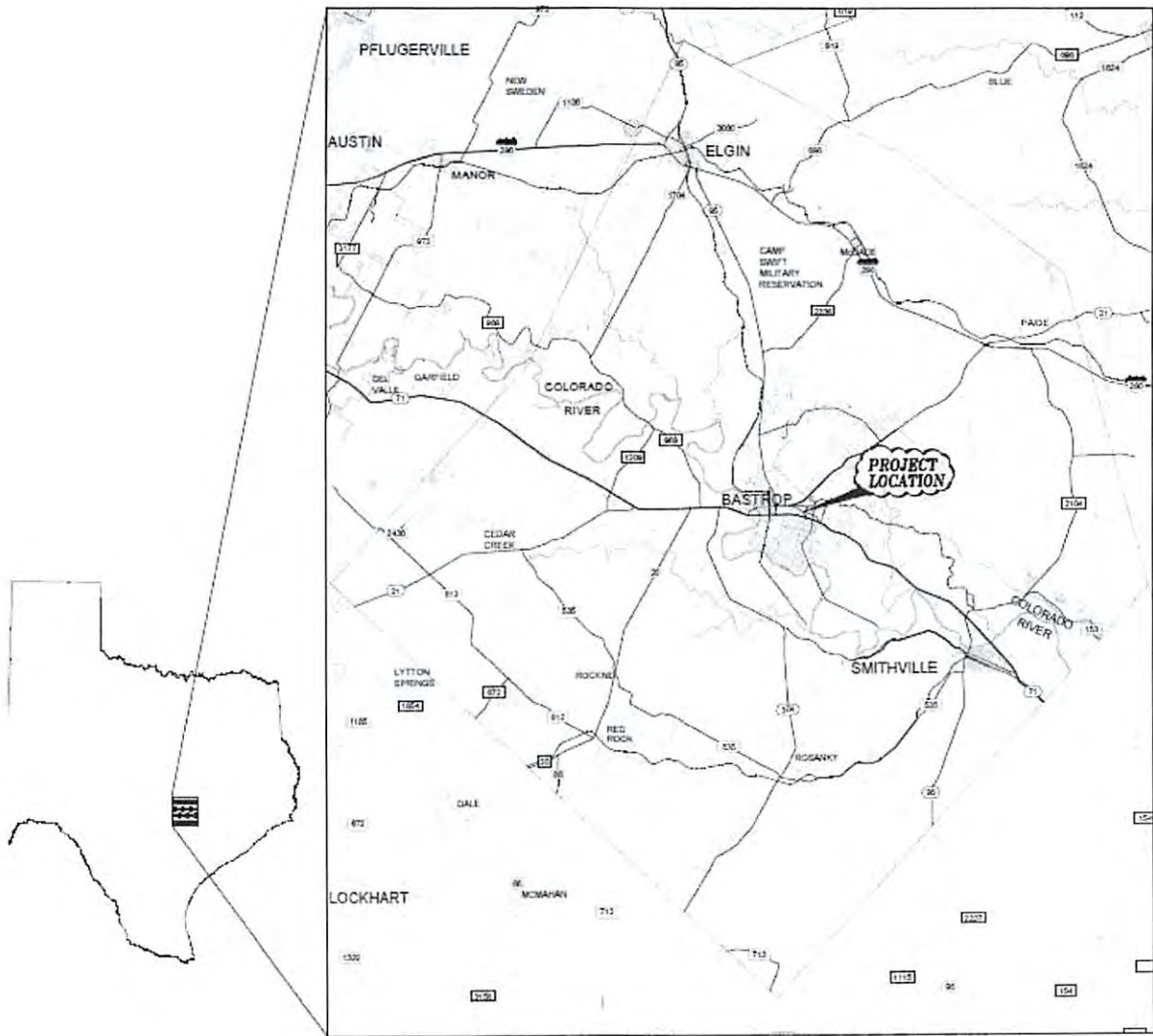
**City Ordinance**

**APPENDIX E**

**Regional Water Planning Group  
Notification**



EXHIBIT C WHOLESALE WATER AGREEMENT EXAMPLE



Sheet List Table  
Sheet Number Sheet Title

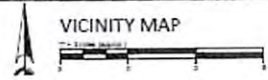
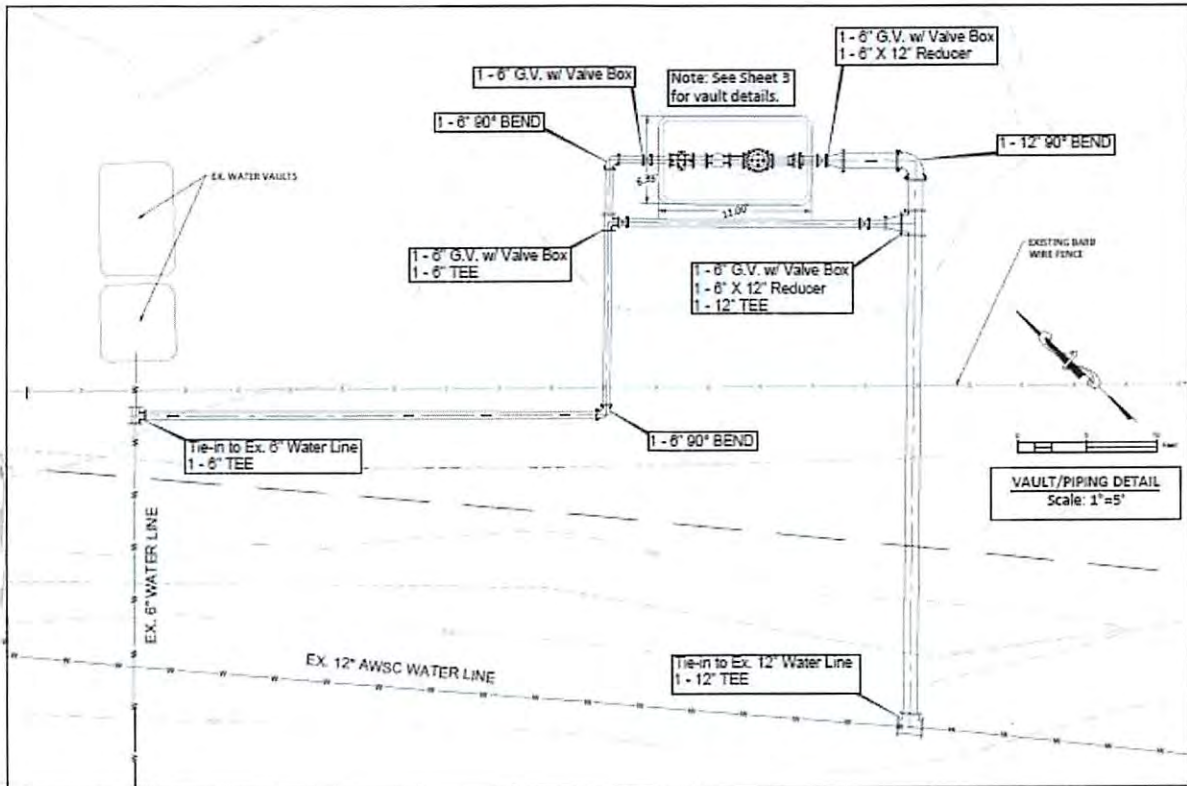


EXHIBIT C WHOLESALE WATER AGREEMENT EXAMPLE





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8H

**TITLE:**

Receive presentation and continue discussion regarding Storm Drainage Design Manual & Ordinance.

**STAFF REPRESENTATIVE:**

Trey Job, Managing Director of Public Works & Leisure Services

**HISTORY/ BACKGROUND:**

The City of Bastrop is embarking on an exciting journey. Now with the new Bastrop Building Block (B<sup>3</sup>) codes underway, an important part of our fiscal sustainability will be how we manage our growing City's drainage. Staff will present information about process changes in the new Drainage Design Manual and explain why the following questions are important to be addressed:

- Is the calculation correct? (math)
- Can it be built? (constructability)
- How will it be maintained? (maintenance)
- What does the new process look like?
- What is the impact to the everyday citizen?

The revised ordinance is quite similar to the old one; however, the overarching difference is drainage will be addressed upfront and often. The more defined drainage requirements include a more stringent review of upstream and downstream conditions, that is why math calculations are important. Previously, the City required the rational method be used when calculating things such as detention, storm sewer design. The rational method has not completely gone away but can only be used as part of the conceptual design for large developments. It will be a process called a sketch plat.

The preliminary and final plats will require the Snyder method (hydrograph), which provides a much more in-depth analysis of how the drainage will perform within the entire watershed. It will also impact detention and better control velocities leaving the property. Sample checklist/forms are attached, which will be a part of the new stormwater permit process relating to the preliminary and final platting process. Not only are checklists related to a drainage study required, but the developer must provide a maintenance plan and fiscal surety for the maintenance of items such as ponds, or large drainage infrastructure upfront in the process.

As noted above, the rational method has not completely been removed because it can still be used when sizing culverts for a 25-year storm event. It can also be used for the small property owners that want to add sheds, carports, driveways, or build an addition to their home as long as it is less than 10,000 square feet or they are not creating soil disturbance over 20,000 square feet (approximately ½ an acre).

In addition to the square footage limits, Strand and Associates are adding additional language to the design manual. The additions will incorporate items included in the Emergency Drainage Ordinance, as approved by Council, as follows:

- A pre-application meeting will remain part of the process simply because it allows staff to get a better understanding of any project.
- Residential infill will have maximum impervious coverage limits of 65%.
- If the current lot coverage is less than 65% and the increase in impervious cover being requested is less than a 5% increase, it will be considered a no impact project and will fit into the exception category.
- If the increase in impervious cover exceeds 5% or the overall lot coverage of 65%, the requestor can request an exemption and will be required to have an engineer certify the project will have no significant impact to the surrounding neighborhood.
- Small items such as new fencing will be approved by staff with a site visit, if a sufficient level of detail cannot be provided by the property owner on a survey.

The Public and the Development Community will be provided an opportunity to review and comment on this proposed Stormwater Drainage Ordinance at the upcoming Transportation & Drainage Rodeo on April 10, 2019. The public portion of the Drainage Rodeo will be held at City Hall from 2 pm to 4 pm. Once we receive public input, any needed revisions will be included in the revised ordinance, which will be placed on the April 23, 2019 agenda for additional discussion. Once Council has provided guidance on any additional revisions, the final version of this ordinance will be placed on the May 14, 2019 agenda for consideration.

**ATTACHMENTS:**

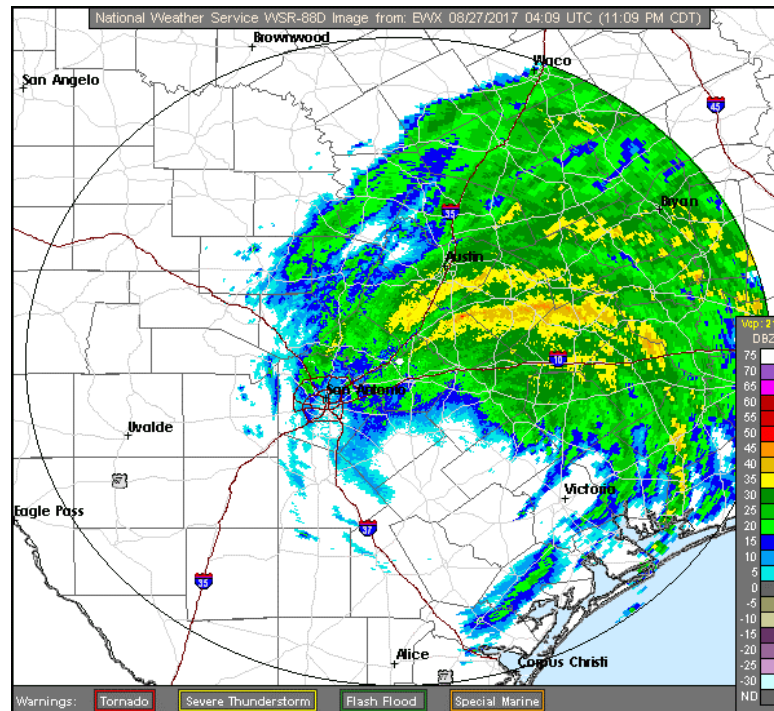
- Presentation
- Draft Drainage Checklist for permit application

# Stormwater Drainage Design Manual

With every project,  
we start with the  
Why/Purpose.



# Stormwater Drainage Design Presentation



# Stormwater Drainage Design

Building Bastrop Purpose Statement:

**“Create a fiscally sustainable community through land-use regulations that are authentic Bastrop and geographically sensitive.”**



# Stormwater Drainage Design

## What is different?

Old Ordinance	New Ordinance/Design Manual
Allowed the rational method for detention and conveyance.	<ul style="list-style-type: none"><li>• Excludes the rational method for detention.</li><li>• Allows the rational method for conveyance for small site subdivisions and sketch plats/preliminary plans</li></ul>
2004 & 2008 (24hr) rainfall depths	2018 (24hr) rainfall depths
Water quality none	Water quality required for the first 1.5''
Velocity for peak runoff downstream is not defined	Velocity maximums are established for outfall structures and storm sewer and roadside ditches (Requires surface treatment based on velocity limits)



# Stormwater Drainage Design

## What is different?

Old Ordinance	New Ordinance
Evaluation of upstream and downstream flow conditions (Trust)	Detailed and defined analysis of upstream and downstream flow conditions (Trust & Verify)
No permit requirement	Requires a permit & fee and has a checklist
Defers maintenance to property owner for private infrastructure (such as ponds)	Owner maintains but must provide a maintenance plan and fiscal surety
Allows the use of corrugated metal pipe (15'' Min)	Only allows concrete reinforced pipe on the publicly maintained areas (18'' Min)



# Stormwater Drainage Design

## What is different?

Old Ordinance	New Ordinance
Drainage full design was required prior to construction	Drainage is addressed upfront and often. Complete design is required at the final plat
No permit	Threshold when permit is required is an addition of 10,000 sq. ft. of impervious cover or land disturbance of 20,000 sq. ft.
Alternative design techniques were at the City Engineer's discretion	Light Imprint Development (LID) is an added tool, but not required

The overarching change is drainage is addressed first!!!!



# Fiscally Sustainable Drainage

## What are we doing to meet fiscal sustainability?

- Requiring a pre-application (Sketch Plat) meeting that will lay out steps to move forward into the process.
  - Review drainage and terrain first. (basic drainage info required)
  - Considers flood mitigation, conveyance, stream bank protection, and water quality.



# Fiscally Sustainable Drainage

What are we doing to meet fiscal sustainability?

- The new Stormwater Drainage Design Manual provides additional methods of drainage design providing a win-win scenario for the Developers and the City.



# Geographically Sensitive Drainage

## Why is this important?

- Bastrop's natural beauty is also a challenge to development:
  - Soil Conditions that are different;
  - Floodplain : Gill's Branch, Piney Creek, Colorado River;
  - Lost Pines; and
  - Drastic changes in topography.



# Geographically Sensitive Drainage

Why is this important?

- Challenges:
  - Union Pacific
  - Endangered species



# Geographically Sensitive Drainage

What are we doing to ensure we meet geographic sensitivity?

- Requiring a conceptual sketch plat:
  - Existing Conditions Hydrologic Analysis.
  - Project Description and Design Considerations.
  - Post-Development Hydrologic Analysis.
  - Stormwater Management System Design.
  - Plans shall show storm (flood) water routing and all drainage structures with sizes of culverts etc...



# Authentically Bastrop Drainage

## Why is this important?

- Development will be vetted against the Policy Statement.
- It preserves the natural landscape and protects resources like the Colorado River.
- Build to the existing topography, reduce runoff that causes flash flooding, and helps maintain the authentic feel.





# Authentically Bastrop Drainage

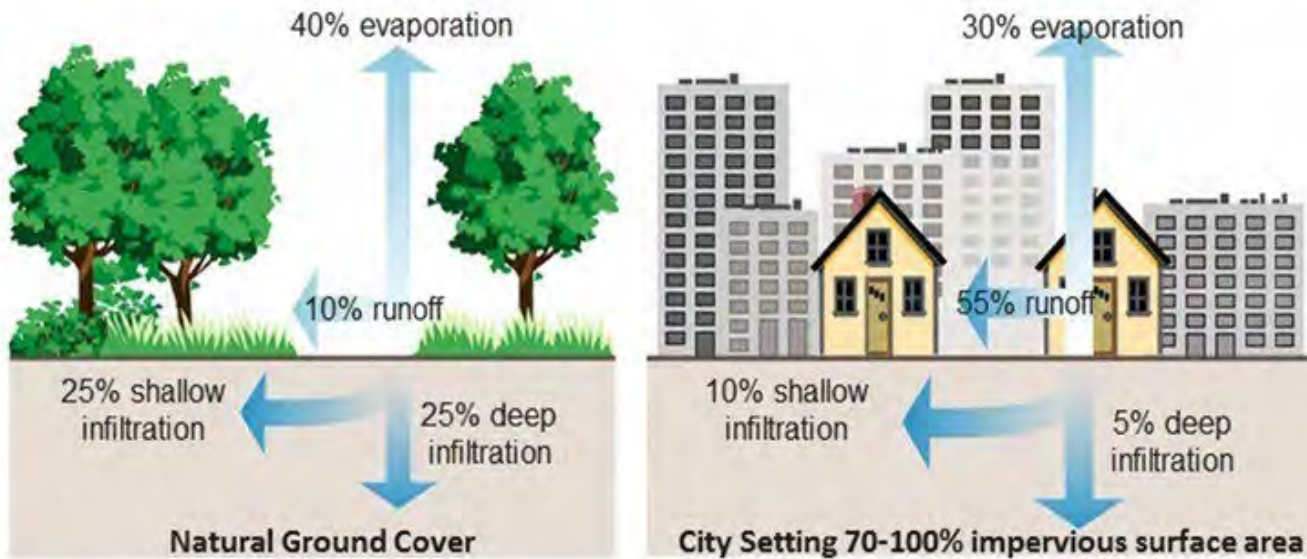
What are we doing to meet Bastrop authenticity?

- Writing new codes that were extracted from the original layout of the town (Our DNA).
- Changing ordinances to protect our history and natural landscape.
- Protecting our citizens from subsidizing development.



# What are we trying to achieve?

## NATURAL vs. URBAN STORMWATER DRAINAGE



Stormwater infiltrates into the ground  
Plants and trees work to absorb stormwater

Water hits impervious surface and runs off roofs, streets, parking lots etc.  
Runoff goes into the sewers

[http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/alphabetical/water/restoration/?&cid=nrcs143\\_026903](http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/alphabetical/water/restoration/?&cid=nrcs143_026903)

# Fiscally Sustainable, Geographically Sensitive, & Authentic Bastrop

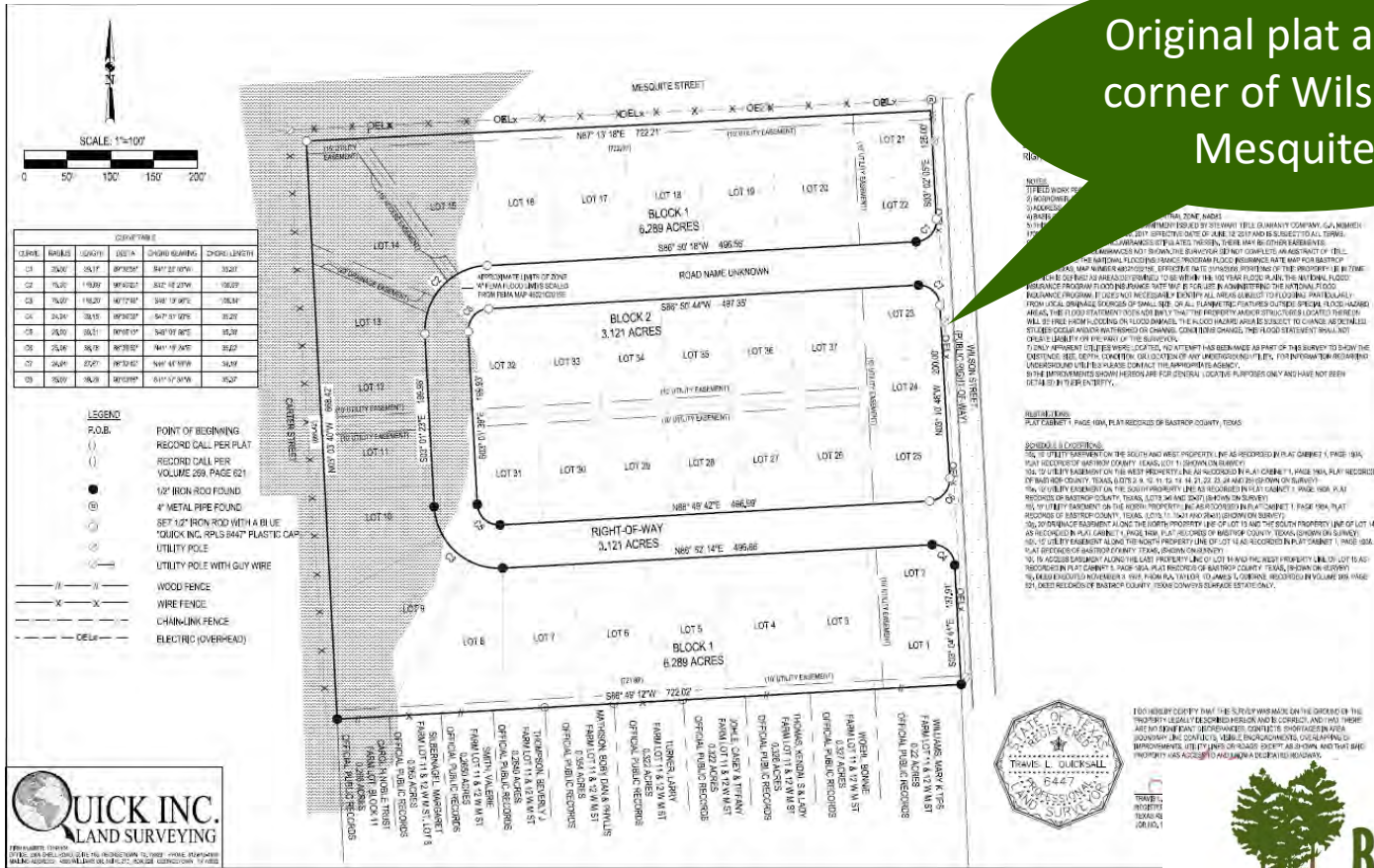
Site Location



2<sup>nd</sup> Site Location

# Fiscally Sustainable, Geographically Sensitive, & Authentic Bastrop

Lot Yield: 37



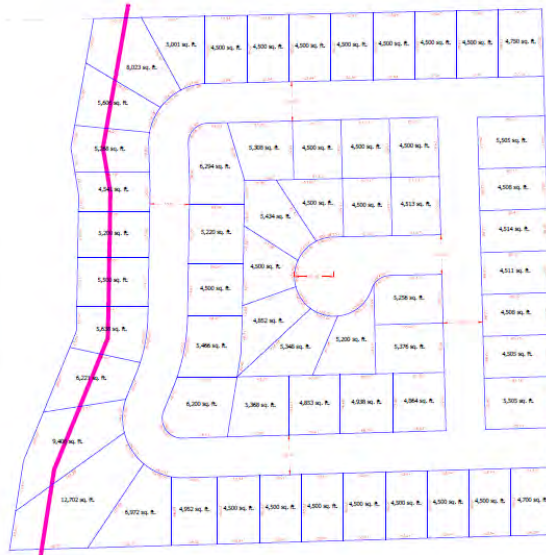
Original plat at the corner of Wilson & Mesquite



# Fiscally Sustainable

Lot Yield: 59

A SCHEMATIC DEPICTING THE REPLAT OF  
LOTS IN RIVER TERRACE  
&  
PLATTING/DEVELOPMENT OF AN ADJACENT  
TRACT BETWEEN WILSON AND MAIN STREET;  
CITY OF BASTROP, TEXAS.



Lot Yield: 33

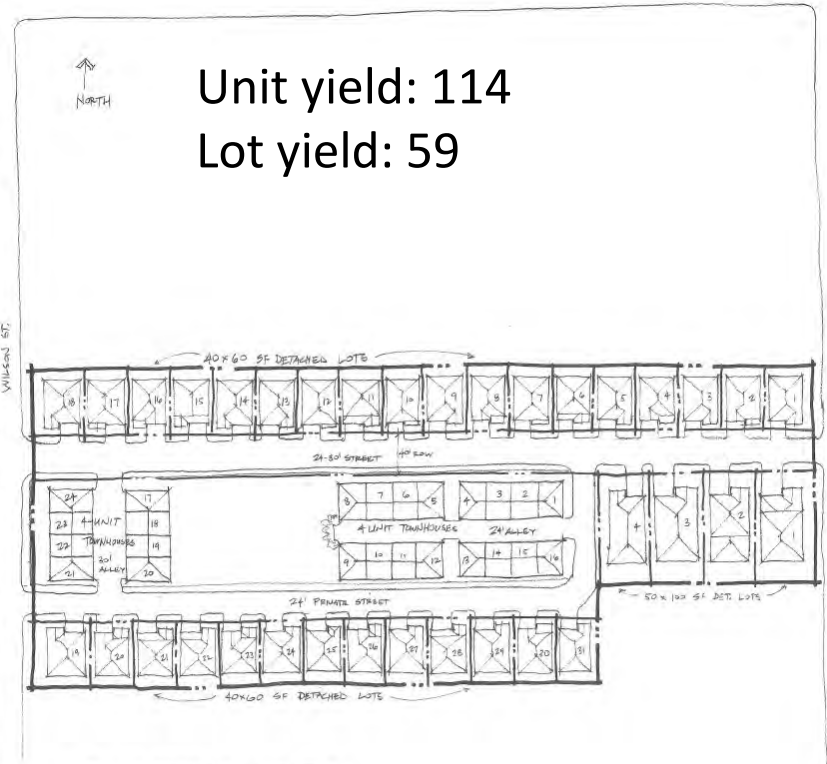
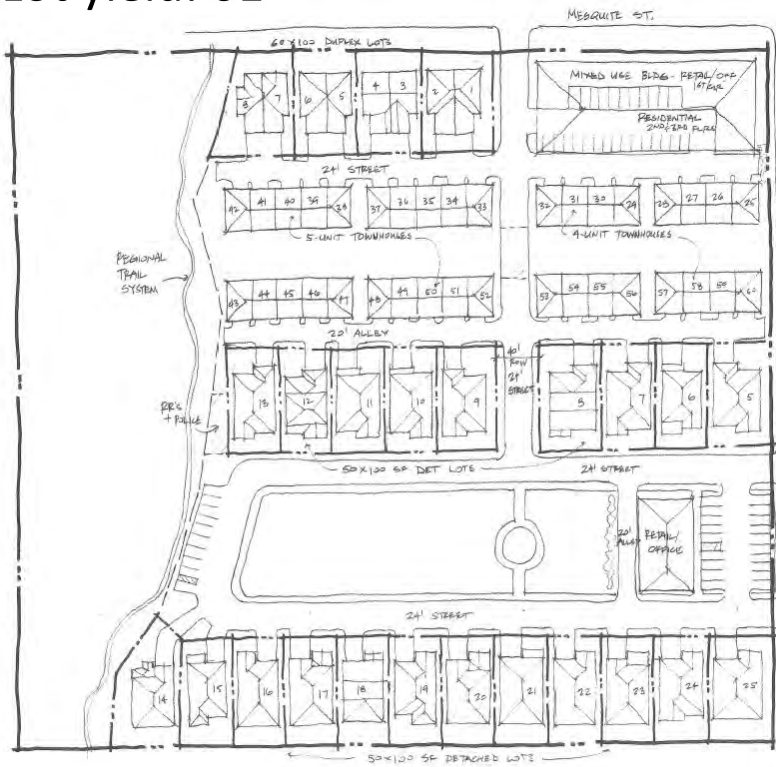


# Fiscally Sustainable, Geographically Sensitive, & Authentic Bastrop

Unit yield: 199

Lot yield: 61

## Authentic Bastrop



Unit yield: 114  
Lot yield: 59

RIVER TERRACE SITE PLAN  
SC 1/3 60'  
CHESLER / DART PROBY  
© DANIEL & DAVIS ARCHTS



# Fiscally Sustainable, Geographically Sensitive, &

# Authentic Bastrop

Has a commercial component

Fiscal sustainability:  
(Higher lot yield)  
(Narrow pavement)  
(Less infrastructure)

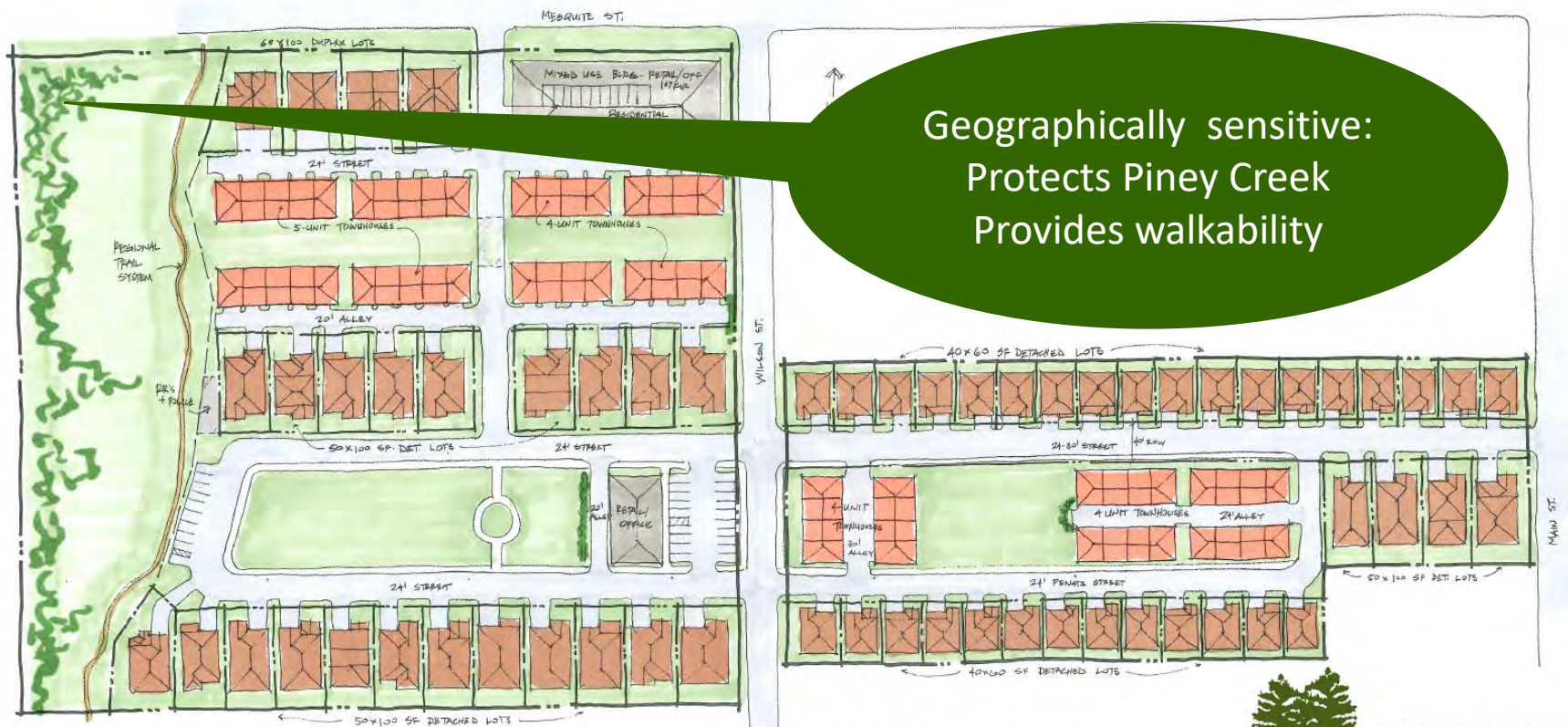


RIVER TERRACE SITE PLAN  
SC P 501  
CHESLER / DART FROG  
© DANIEL & DAVIS ARCHTS.



# Fiscally Sustainable, Geographically Sensitive, & Authentic Bastrop

Geographically sensitive:  
Protects Piney Creek  
Provides walkability



RIVER TERRACE SITE PLAN  
 50' 1" = 50'  
 CHESLER / DART FROG  
 © DANIEL & DAVIS ARCHIT.





# Fiscally Sustainable, Geographically Sensitive, & Authentic Bastrop

Authentic Bastrop:  
Preserves the natural  
landscape



RIVER TERRACE SITE PLAN  
50' P = 50'  
CHESLER / DART FROG  
© DANIEL & DAVIS ARCHTS.



# Example of light imprint development



# What does the process look like?

- Math ( Do the calculation work?)
- Constructability is Key ( Does the infrastructure work?)
- Maintenance (Who will maintain the infrastructure so it always functions as designed?)



# How does the new manual impact the process?

- Impervious cover limits for residential at 65%.
- Small increases under 5% are considered no impact projects.
- A permit is only required when land disturbance reaches 20,000 sq.ft.
- Large developments 0-200 acres are required to do a more in-depth review of the existing conditions.



?



## CITY OF BASTROP

### CONCEPTUAL DRAINAGE PLAN SUBMITTAL CHECKLIST

#### A. Conceptual Drainage Site Plan

The conceptual drainage site plan shall be submitted at the time of sketch plat submittal at the same scale as the sketch plat, preferably one inch is equal to fifty feet (1"=50') and shall include:

1. Project Description.
  - a. Address and legal description of site.
  - b. Vicinity map.
  - c. Land use.
2. Existing Conditions.
  - a. Copy of applicable digital orthophotos showing the proposed project boundaries;
  - b. A topographic map of existing site conditions (no greater than two-foot (2') contour interval) with drainage basin boundaries indicated and project boundaries shown at the same scale as the Sketch Plat;
3. Total area size of development (in acres);
4. Total impervious area as a percentage (%) of total area;
5. Benchmarks used for site control;
6. Perennial and intermittent streams;
7. Map of predominant soils from USDA soil surveys;
8. Boundaries of existing predominant vegetation;
9. Location and boundaries of other natural feature protection and conservation areas, such as wetlands, lakes, ponds, floodplains, stream buffers and other setbacks (e.g., drinking water well setbacks, septic setbacks, etc.);
10. Location of existing roads, buildings, parking areas and other impervious surfaces;
11. Existing utilities (e.g., water, sewer, gas, electric) and easements;
12. Location of existing drainage conveyance systems such as grass channels, swales, and storm drains;
13. Flow paths;
14. Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainage systems;
15. Location and dimensions of existing channels, bridges or culvert crossings.

#### B. Conceptual Site Layout

1. Completed drainage Conceptual Plan Worksheet as provided by the City Engineer.
2. Hydrologic analysis to determine conceptual runoff rates, volumes, and velocities to support selection of stormwater controls.
3. Conceptual site design identifying integrated site design practices used.

4. Identification of stormwater site design credits.
5. Identification and calculation of water quality volume reduction, if applicable.
6. Conceptual estimates of the three-storm design approach requirements (i.e. 2-year, 25-year and 100-year 24-hour storms)
7. Conceptual selection, location and size of proposed structural stormwater controls.
8. Conceptual limits of proposed grading and clearing.
9. Total proposed impervious area, as a percentage of total area.

# Draft

## CITY OF BASTROP

### PRELIMINARY DRAINAGE PLAN SUBMITTAL CHECKLIST

For a standard plat, this sheet shall be submitted with the preliminary plat and shall be at the same scale as the preliminary plat. For a minor plat, this sheet shall be submitted with the final plat. The preliminary drainage site plan should consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system. The scale of supplementary plans, profiles and cross-sections shall be sufficient to clearly show details, if required to demonstrate the adequacy of existing or proposed facilities. The Preliminary Drainage Plan shall include the following sections:

1. Existing Conditions Hydrologic Analysis. Provide an existing condition hydrologic analysis for stormwater runoff rates, volumes, and velocities which includes:
  - a. Existing conditions data developed in the conceptual drainage site plan;
  - b. All existing stormwater conveyances and structural control facilities;
  - c. Direction of flow and exits from the site;
  - d. Analysis of runoff provided by off-site areas upstream of the project site;
  - e. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology.
2. Project Description and Design Considerations. Provide an updated description of the project and the considerations and factors affecting the design approach that have changed between the conceptual and preliminary plans, including:
  - a. A description of the overall project and the site plan showing facility locations, roadways, etc.;
  - b. A discussion of the applicable local criteria and how it will be integrated into the design of the project;
  - c. Evaluate the integrated site design practices and their applicability to this site;
  - d. A discussion of any credits for integrated site design being requested;
  - e. A discussion of the water quality treatment techniques (pollution prevention practices) that are to be utilized on this site, if applicable;
  - f. A determination of groundwater recharge considerations, if applicable, for this site;
  - g. Identify hotspot land uses, if applicable, and how runoff will be addressed.
3. Post-Development Hydrologic Analysis. Provide a post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities, which includes:
  - a. A topographic map of developed site conditions (minimum two-foot (2') contour interval recommended) with post development basin boundaries indicated;
  - b. Total area of post development impervious surfaces and other land cover areas for each subbasin affected by the project;
  - c. Runoff calculation for flood control and streambank protection for each subbasin, as well as any applicable water quality calculations;
  - d. Location and boundaries of proposed natural feature protection and conservation areas;



- e. Documentation and calculations for any applicable site design credits or water quality volume reduction methods being used;
- f. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the post-development conditions site hydrology;
- g. Supporting documentation that there is existing streambank protection/reinforcement or that the planned development will provide streambank protection downstream;
- h. Supporting calculations for a downstream peak flow analysis to show safe passage of post-development design flows downstream. Document point downstream at which analysis ends, and how it was determined.
- i. Where a lot is located adjacent to a major drainage course or overflow channel, such that a part of all of the lot lies within the regulatory 100-year flood boundary, the drainage plan shall show proposed building sites and elevations required to put finish floor a minimum of one foot (1') above the 100-year flood level of drainage course or overflow channel as stipulated in the City of Bastrop's Flood Damage Prevention Regulations, as periodically amended.

In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. Depending on the site characteristics and given local design criteria, upstream lands may need to be modeled as "existing conditions" or "projected buildout/future condition" when sizing and designing on-site conveyances and stormwater controls.

4. Stormwater Management System Design. Provide drawings and design calculations for the proposed stormwater management system, including:
  - a. A drawing or sketch of the stormwater management system including the location of nonstructural site design features and the placement of existing and proposed structural stormwater controls. This drawing should show design water surface elevations, storage volumes available from zero to maximum head, location of inlets and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes;
  - b. Narrative describing that appropriate and effective structural stormwater controls have been selected;
  - c. Cross-section and profile drawings and design details for each of the structural stormwater controls in the system. This should include supporting calculations to show that the facility is designed to the applicable design criteria;
  - d. Hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (should include stage-storage or outlet rating curves, and inflow and outflow hydrographs);
  - e. Documentation and supporting calculations to show that the storm water management system adequately meets the integrated design approach (see iSWM™ Technical Manual)
  - f. Drawings, design calculations and elevations for all existing and proposed stormwater conveyance elements including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow.
5. Plans shall show storm (flood) water routing and all drainage structures with sizes of culverts, retarding and retaining structures, drainage easements with course and

- distance of centerline and boundaries, lot lines, street layout, proposed inlets, culverts, roadside swales, channel sections and slopes, bridges, channel improvements, levees, or berms, fills necessary to elevate land above flood levels, and remove same from the flood area.
6. The limits of the 100-year frequency storm watershed area shall be shown for all water ways, including overflow of structures and related backwater effects. Storm water runoff resulting from a design storm of 100-year frequency shall be contained within the available right-of-way and/or drainage easement. All drainage facilities must be designed for a capacity to safely contain storm water from a design storm of 25-year frequency and sufficient right-of-way and drainage easements to accommodate the 100-year frequency.
  7. The drainage plan shall be prepared by a Licensed Professional Engineer of the State of Texas, whose seal and signature shall appear on the plan.
  8. Engineering drainage report to support all drainage designs shall be submitted to the City. Computations shall be complete and orderly and shall clearly state all assumptions and design basis.
  9. Profiles, cross-sections, or substantiating data may be required at the City's request as necessary to support flood levels and backwater analysis.

# Draft

## CITY OF BASTROP

### FINAL DRAINAGE PLAN SUBMITTAL CHECKLIST

1. Final Drainage Plans. Upon approval of the preliminary drainage study, the developer shall submit detailed plans, specifications and cost projections prepared by a registered professional engineer registered in the State of Texas and experienced in municipal drainage work. Existing and proposed flow lines of all improvements shall be shown. Unless otherwise specified herein, drainage requirements shall be based on the ISWM™ Criteria Manual for Site Development and Construction. The Hydraulic Manual prepared and compiled by the Texas Department of Transportation Bridge Division, with current revisions, may be used in cases not covered by the iSWM Design Manual for Site Development. The following shall be included in the Plans:
  - a. Final drainage site plan, which includes all the revised elements included in the preliminary drainage site plan, plus a construction stormwater pollution prevention plan (SWPPP), a landscaping plan, operations and maintenance plan, evidence of acquisition of applicable federal and state permits, and any waiver requests.
    - (1) Existing and proposed topographic information, with minimum two-foot contour intervals.
    - (2) Location map.
    - (3) Off-site and on-site drainage area maps.
    - (4) Centerline of watercourses.
    - (5) Regulatory flood elevations and boundaries of flood prone areas, including Floodways where designated.
    - (6) Drainage easements.
    - (7) All street widths and grades.
    - (8) Calculations showing the anticipated stormwater flow, including watershed area, runoff coefficient, and time of concentration. When a drainage structure or storm sewer is proposed, calculations shall be submitted showing basis for design.
    - (9) Storm sewer plans and profiles showing size, grade, and pipe or culvert material. Runoff, inlet, conduit hydraulic grade line calculations are required.
  - b. Final grading and drainage construction plans, indicating two-foot contours. All street width and grades shall be indicated on the plan, and runoff figures shall be indicated on the outlet and inlet side of all drainage ditches and storm sewers, and at all points in the street at changes of grade or where the water enters another street or storm sewer or drainage ditch. Drainage easements shall be indicated. A grading plan shall be prepared for each subdivision and show in sufficient detail grading of all roads, streets, drainage structures, channels, swales, or other drainage related features and provide minimum finished floor elevations, based on an acceptable elevation datum, for proposed structures to assure a minimum of two feet (2') of freeboard to computed flood elevations for the rainfall runoff events for a one hundred (100) year frequency storm.
  - c. The location and dimensions of proposed storm drainage easements. The limits of the one hundred-year floodplain shall be shown and encompassed in a dedicated easement (see paragraph gg below). Minimum finished floor elevations at least

two feet (2') above the one hundred-year (100-year) water surface elevations shall be shown for any lot within the 100-year and five-hundred-year floodplain, or adjacent to any channel, sump inlets or drainage facilities.

For water courses and easement: Distances to be provided along the side lot lines from the front lot line or the high bank of a stream. Traverse line to be provided along the edge of all large water courses in a convenient location, preferably along a utility easement or drainage if paralleling the easement or stream. The 100-year flood plain easement shall be shown where applicable. A note shall be provided prohibiting construction within the 100-year flood plain except for public streets or roads and utilities.

- d. When a drainage channel or storm sewer is proposed, complete plans, profiles and specifications shall be submitted showing complete construction details. Scales shall be no greater than one inch equals to forty or fifty feet (1" = 40' or 50') horizontally and one inch equal four or five feet (1" = 4' or 5') vertically.
- e. Two (2) copies of detailed cost estimates.
- f. A plan of the development shall be submitted depicting the final grading contours and elevations, earthwork, slopes, retaining walls, minimum finished floor elevations of all affected structures, and any other information considered necessary by the City Engineer at a scale of one inch is equal to one hundred feet (1" = 100') minimum.
- g. Complete detention pond plans and calculations.
- h. All drainage calculations are required to be present on the plans or in an engineering report signed and sealed by an engineer licensed in the State of Texas. Computations shall be complete and orderly and shall clearly state all assumptions and design basis.
- i. The following full statement of restrictions shall be placed in the dedication instrument of any subdivision plat that contains land designated as part of a one hundred-year (100 yr) floodplain by FEMA:

"Floodplain Restriction

No construction shall be allowed within a floodplain easement unless specifically approved by the City of Bastrop. Where construction is permitted, all finished floor elevations shall be a minimum of two (2) foot above the base flood elevation (100-year flood or one percent probability flood elevation.)

Any existing creeks, lakes, reservoirs, or drainage channels traversing along or across portions of this addition, will remain as an open channel at all times and will be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across said lots. The City of Bastrop will not be responsible for the maintenance and operation of said drainage ways or for the control of erosion. Each property owner shall keep the natural drainage channels traversing adjacent to their property clean and free of debris, silt, or any substance which would result in unsanitary conditions and the City shall have the right of ingress and egress for inspection and supervision of maintenance work by the property owner to alleviate any undesirable conditions which may occur. The natural drainage channel, as in the case of all-natural drainage channels, is subject to storm water overflow

and natural bank erosion to an extent that cannot be defined definitively. The City of Bastrop shall not be liable for damages of any nature resulting from the occurrence of these natural phenomena, nor resulting from a failure of any structures within the natural drainage channels. The natural drainage channel crossing each lot is shown by the floodplain easement line as shown on the plat.”

# Draft

**GENERAL INFORMATION  
STORMWATER MANAGEMENT PERMIT APPLICATION**

**Send Application to:**

City of Bastrop  
1311 Chestnut Street, P.O. Box 427  
Bastrop, Texas 78602

**Official Use Only**

Date Received	_____
Number	_____
Fee Received	_____
Reviewer	_____

This application applies to the any of the following:

1. Any development that results in 20,000 square feet or more of land disturbing activity.
2. Any development that results in the addition of 10,000 square feet or more of impervious area.
3. A subdivision plat.

**Instructions:** Please type or print. Read all instructions before completing application. Refer to the Fee Schedule adopted by the City Council for applicable fees. Submit 2 hard copies and 1 digital copy on CD or jump drive.

Name of Project: \_\_\_\_\_

Applicant/Entity Receiving Permit

Name of Applicant: \_\_\_\_\_  
First Name of Contact: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Name: \_\_\_\_\_  
Street (1): \_\_\_\_\_  
Street (2): \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone Number: (\_\_\_\_) \_\_\_\_\_  
Fax Number: (\_\_\_\_) \_\_\_\_\_

Property Owner

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Street (1): \_\_\_\_\_  
Street (2): \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone Number: (\_\_\_\_) \_\_\_\_\_  
Parcel Identification Number(s): \_\_\_\_\_

Engineer

Name of Firm: \_\_\_\_\_  
First Name of Contact: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Name: \_\_\_\_\_  
Street (1): \_\_\_\_\_  
Street (2): \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone Number: (\_\_\_\_) \_\_\_\_\_  
Fax Number: (\_\_\_\_) \_\_\_\_\_

**CITY OF BASTROP**  
STORMWATER MANAGEMENT PERMIT NO. \_\_\_\_\_

Date of Application \_\_\_\_\_  
Site Address \_\_\_\_\_  
Plat Name \_\_\_\_\_

I have reviewed and understand Chapter **XX-X** of the City of Bastrop general ordinances regarding stormwater management and I shall implement the stormwater management plan for this project as approved by the City.

**General Conditions:**

- (a) All storm water management measures shall be installed in accordance with the approved storm water management plan and this permit.
- (b) The City shall be notified at least 3 business days before commencing any work in conjunction with the storm water management plan, and within 3 business days upon completion of the storm water management practices.
- (c) Practice installations shall be certified "as built" by a licensed professional engineer. Completed storm water management practices must pass a final inspection by the City or its designee to determine if they are in accordance with the approved storm water management plan and ordinance.
- (d) The City shall be notified of any significant proposed modifications to an approved storm water management plan.
- (e) All storm water management practices shall be maintained in accordance with the storm water management plan until the practices either become the responsibility of the City of Bastrop, or are transferred to subsequent private owners as specified in the approved maintenance agreement.
- (f) The City of Bastrop is authorized to perform any work or operations necessary to bring storm water management measures into conformance with the approved storm water management plan, and consent to a special assessment, or to charging such costs against the financial guarantee posted under S. **XX**.
- (g) If so directed by the City, all damage to adjoining facilities and drainage ways caused by runoff, where such damage is caused by activities that are not in compliance with the approved storm water management plan shall be repaired at the permittee's expense.
- (h) Access is permitted to the City or its designee for the purpose of inspecting the property for compliance with the approved storm water management plan and this permit.

**APPLICANT  
MUST FILL  
IN BOXED  
AREA**

Owner \_\_\_\_\_  
(please print or type full name)

Address \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature or Owner or Authorized Representative

Gross Aggregate Area (Square Feet) \_\_\_\_\_

SPECIAL CONDITIONS: \_\_\_\_\_

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CONDITIONAL APPROVAL: \_\_\_\_\_

Administrative Authority

Title

Date

Permit VALID for a period of twelve (12) months from date of issuance by City and all work must be completed prior to the expiration unless authorized in writing from the City.

This permit applies to the any of the following:

1. Any development that results in 20,000 square feet or more of land disturbing activity.
2. Any development that results in the addition of 10,000 square feet or more of impervious area.
3. A subdivision plat.

Draft



AGREEMENT TO MAINTAIN  
STORMWATER FACILITIES  
BY AND BETWEEN  
THE CITY OF BASTROP AND

\_\_\_\_\_, AND  
ITS HEIRS, SUCCESSORS, OR ASSIGNS

The upkeep and maintenance of stormwater facilities and the implementation of pollution source control best management practices (BMPs) is essential to the protection of water resources in the City of Bastrop. All property owners are expected to conduct business in a manner that minimizes impacts of stormwater runoff. This Agreement contains specific provisions with respect to maintenance of stormwater facilities. The authority to require maintenance and pollution source control is provided in the City of Bastrop Stormwater Management Ordinance.

FACILITY LOCATION AND AREA SERVED (Attach Map if Necessary):

Whereas, Owner has constructed improvements, including but not limited to, buildings, pavement, and stormwater facilities on the property described above. In order to further the goals of the stormwater management goals of the City of Bastrop, the City and Owner hereby enter into this Agreement. The responsibilities of each party to this Agreement are identified below.

OWNER SHALL:

- (1) Implement the stormwater facility maintenance plan included herein as Attachment A.
- (2) Implement the stormwater management plan included herein as Attachment B.
- (3) Allow the City or designee to access the property to conduct inspections of storm water management practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.
- (4) Undertake corrective actions required by City within a reasonable time frame as set by the City.
- (5) Maintain a record of steps taken to implement the programs referenced in (1) and (2) above. Record shall be available for inspection by City staff at Owners business during normal business hours. The record shall catalog the action taken, who took it, when it was done, how it was done, and any problems encountered or follow-on actions recommended.

THE CITY OF BASTROP SHALL:

- (1) Provide technical assistance to Owner in support of its operation and maintenance activities conducted pursuant to its maintenance and source control programs. Said assistance shall be provided upon request, and as City time and resources permit.

City of Bastrop, 02/20/2019

(2) Maintain public records of the results of the site inspections, inform the party responsible for maintenance of the inspection results, and specifically indicate any corrective actions required to bring the storm water management practice into proper working condition.

(3) Notify the Owner of maintenance problems that require correction.

REMEDIES:

(1) If corrective actions required by the City are not completed within the time set by the City, written notice will be sent to the persons who were given notice stating the City intention to perform such maintenance and bill the owner for all incurred expenses.

(2) If at any time the City determines that the existing system creates any imminent threat to public health or welfare, the City may take immediate measures to remedy said threat. No notice to the persons listed in (1), above, shall be required under such circumstances.

(3) The owner grants unrestricted authority to the City for access to any and all stormwater system features for the purpose of performing maintenance or repair as may become necessary under Remedies (1) and/or (2).

(4) The persons listed in (1), above, shall assume all responsibility for the cost of any maintenance and for repairs to the stormwater facility. Such responsibility shall include reimbursement to the City within 30 days of the receipt of the invoice for any such work performed. Overdue payments will require payment of interest at the current legal rate for liquidated judgments. If legal action ensues, any costs or fees incurred by the City will be borne by the parties responsible for said reimbursements.

(5) The owner hereby grants to the City a lien against the above-described property in an amount equal to the cost incurred by the City to perform the maintenance or repair work described herein.

This Agreement is intended to protect the value and desirability of the real property described above and to benefit all the citizens of the City. It shall run with the land and be binding on all parties having or acquiring from Owner or their successors any right, title, or interest in the property or any part thereof, as well as their title, or interest in the property or any part thereof, as well as their heirs, successors, and assigns. They shall inure to the benefit of each present or future successor in interest of said property or any part thereof, or interest therein, and to the benefit of all citizens of the City.

\_\_\_\_\_  
\_\_\_\_\_

STATE OF TEXAS )

COUNTY OF BASTROP

) ss

) ss

On this day and year above personally appeared before me, a Notary Public in and for the State of Texas duly commissioned and sworn, personally appeared \_\_\_\_\_, to me known to be the \_\_\_\_\_ of \_\_\_\_\_ and acknowledge the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that \_\_\_\_\_ is authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

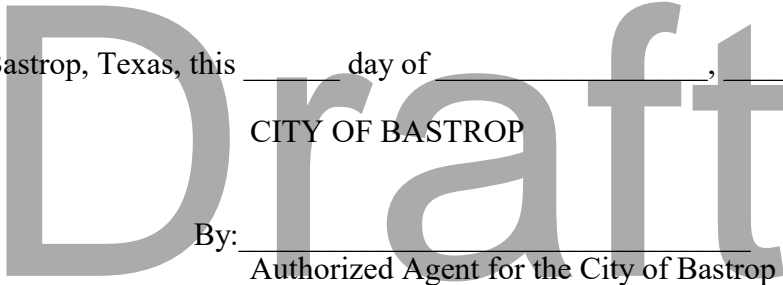
WITNESS my hand and official seal the day and year first above written.

\_\_\_\_\_  
Notary Public in and for the State of  
Texas, residing in \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

Dated at City of Bastrop, Texas, this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

CITY OF BASTROP

By: \_\_\_\_\_  
Authorized Agent for the City of Bastrop



**City of Bastrop  
Stormwater Management Plan**

**Financial Guarantee**

To: [permit holders name]  
Date:  
Subject: **Financial Guarantee** in the Amount of \$ \_\_\_\_\_  
Check # \_\_\_\_\_ Received by (staff initials): \_\_\_\_\_

Project Name: \_\_\_\_\_

Location: Section [no.], Town of [public land survey township name]

This memo shall serve as a receipt for the above noted Financial Guarantee and as an agreement of the purpose and conditions for release by the City of Bastrop (herein referred to as the "City").

**Authority.**

The authority of the City to collect and hold this Financial Guarantee is stated in Article XX, Section XX of the City of Bastrop Code of Ordinances – Stormwater Management Ordinance (herein referred to as the "Ordinance").

**Purpose.**

The purpose of this Financial Guarantee is to ensure compliance with Ordinance Article XX, and the terms and conditions of a Stormwater Management Permit issued for the above noted project and location.

**Conditions For Release.**

Terms for release of the Financial Guarantee shall include all of the following:

1. Construction Certification. A professional engineer licensed in Texas shall certify that construction of all stormwater management practices comply with the approved plans and the technical standards of the City. "As-built" plans shall be submitted for stormwater management practices showing actual location, elevations, GPS locations, materials, construction methods and other items as deemed necessary by the City to determine compliance.
2. Maintenance Agreement. A copy of an approved maintenance agreement for all stormwater management practices associated with this project must be provided to the City. The agreement shall be stamped by the Register of Deeds, showing that it has been recorded for all applicable properties.
3. Final Inspection. The City shall complete a final inspection of the property and certify compliance with the permit and Ordinance Article XX.

If the City should use any portion of the Financial Guarantee to complete permit activities, due to default or improper action by the permit holder, the City shall withhold any amounts owed for this work, in accordance with Ordinance Article XX.



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 8I

**TITLE:**

Update and discussion of current Legislative Session and its impact on local municipalities.

**STAFF REPRESENTATIVE:**

Lynda K. Humble, City Manager





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 9A

**TITLE:**

Receive Monthly Report from Visit Bastrop.

**STAFF REPRESENTATIVE:**

James K. Altgelt, Director of Public Safety/Chief of Police  
Susan Smith, President/CEO of Visit Bastrop, DMO

**BACKGROUND/HISTORY:**

Visit Bastrop, a 501(c)6 organization, was engaged to provide destination marketing services and provide brand marketing for Bastrop as a destination.

As outlined in the Annual Management Agreement, the City and Visit Bastrop recognize the visitor industry as a key economic generator. Visit Bastrop's purpose is to provide "brand" marketing for Bastrop as a destination and to serve as the primary brand advocate. Visit Bastrop will also leverage utilization of existing facilities, while providing global oversight of Bastrop's visitor assets and activities. Visit Bastrop will also provide a level of unity and representation to maximize Bastrop's brand potential.

The Visit Bastrop Board of Directors meets monthly on the third Thursday at 8:30 a.m. and rotates meeting locations at different hospitality venues.

City Council established that the Visit Bastrop Board of Directors include broad representation of community assets and identified those as Arts, History, Hotels, Restaurants, Sports, Outdoors, Recreation, Hyatt, Nightlife, Entertainment, and Film in the Destination Services Management Agreement.

Per their management agreement, Visit Bastrop must make a monthly presentation to the City Council outlining progress in implementing their annual Business Plan, meeting performance targets, and the scope of services pursuant to that agreement.

Specifically Visit Bastrop shall work to:

- (1) attract leisure visitors to the City and its vicinity;
- (2) attract and secure meetings, events, retreats, and conventions to the City and its vicinity; and
- (3) serve as a liaison to local businesses (including hoteliers, restaurateurs, and other similar entities) and City departments to attract leisure and business visitors, meetings, events, retreats, and conventions to the City and its vicinity.

Visit Bastrop shall also:

- (A) carry out the actions defined in the applicable Annual Business Plan;

- (B) utilize research reports on economic trends, growth sectors, and regional competitive strengths and weaknesses, as is customary in the destination and marketing organization industry;
- (C) provide marketing and imaging campaigns for the City's tourism and convention industry;
- (D) inform and partner with the City regarding high-profile or significant recruitment/attraction efforts;
- (E) provide, in appropriate detail in accordance with the Tax Code, reports listing the Visit Bastrop's expenditures made with Hotel Occupancy Tax (HOT), and Visit Bastrop's progress in performing the services in conformance with implementation of the Annual Business Plan; and
- (F) provide expertise in destination management in conjunction with the City of Bastrop to leverage available resources (such as community assets and activities to maximize opportunities to attract visitors to Bastrop, both leisure and business) recognizing the critical role tourism plays in Bastrop's economy, both in HOT and sales tax revenue.

**POLICY EXPLANATION:**

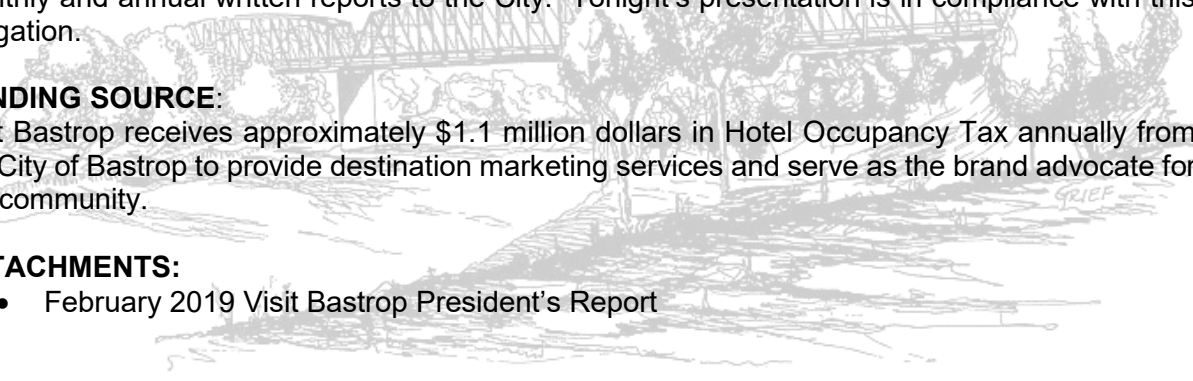
On September 12th, 2017, the City Council passed Resolution Number R-2017-74 which approved a Destination and Marketing Services Agreement between the City of Bastrop and Visit Bastrop. Pursuant to Section 2.3(C) of this agreement, Visit Bastrop committed to providing monthly and annual written reports to the City. Tonight's presentation is in compliance with this obligation.

**FUNDING SOURCE:**

Visit Bastrop receives approximately \$1.1 million dollars in Hotel Occupancy Tax annually from the City of Bastrop to provide destination marketing services and serve as the brand advocate for our community.

**ATTACHMENTS:**

- February 2019 Visit Bastrop President's Report





**VISIT**  
**BASTROP** **EST.**  
**1832**  
*Texas*

**VISIT BASTROP | PRESIDENT'S REPORT**

Reporting: February 1 - 28, 2019

Submitted: March 14, 2019

Presented: March 26, 2019



# VISITBASTROP.COM SUMMARY - FEBRUARY

## YOY (YEAR OVER YEAR) SUMMARY

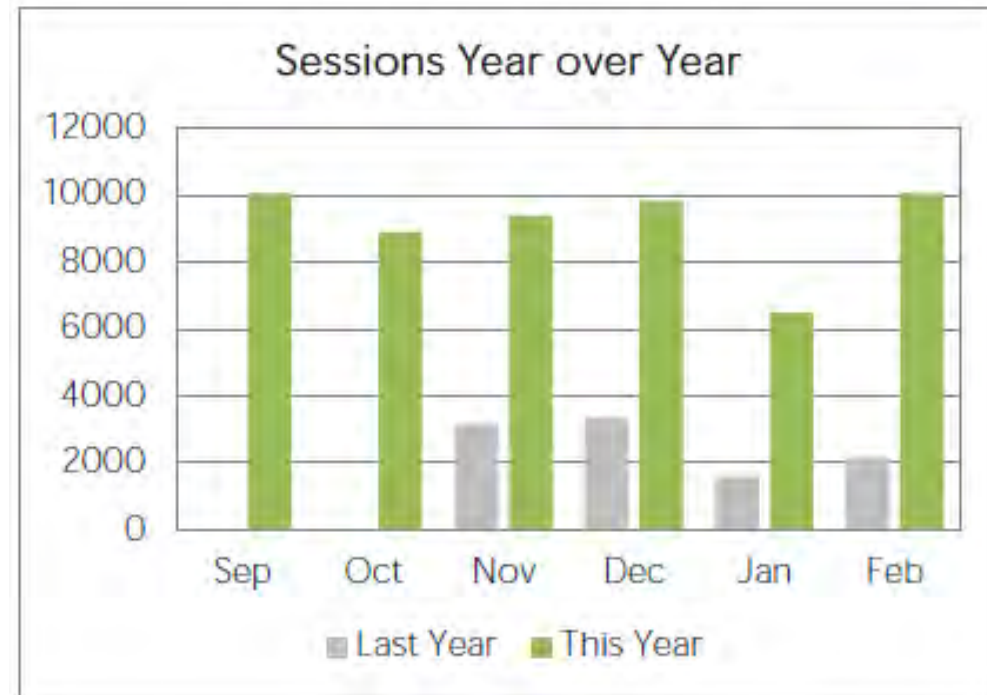
- Overall sessions – 10,059 | increase of 367.21% YOY
- Organic sessions accounted for the largest increase in sessions, 305.99% over last year.
  - Organic increase driven by the Lost Pines Knife Show (1,118 sessions)

## WEBSITE (FEBRUARY) SUMMARY

- 5,148 Organic Sessions
- Top Organic Pages
  - Lost Pines Knife Show (1,118 sessions)
  - Homepage (729 sessions)
  - Things To Do (488 sessions)
  - Hyatt On-Site Activities (217 sessions)

### Top Cities

Austin, Houston, Bastrop, Chicago, Dallas, San Antonio, New York, Round Rock, Wyldwood, Georgetown



## SOCIAL MEDIA STATISTICS - FEBRUARY

	Total Fans	Fan Increase	Engagement	Impressions
Facebook	44,897	.03% ↑	1,643	98,866
Instagram	1,031	2.2% ↑	177	2,603

# PUBLIC RELATIONS SUMMARY - FEBRUARY

Total Clips: 14

Est. Total Potential Audience: 12,748,369

Est. Total Coverage Views: 55,686

Est. Advertising Value: \$3,838.37

## PROACTIVE OUTREACH

Travel Channel.com – Spring Break for Families with Teens

Animal Wellness Magazine – Spring Events that Welcome Dogs

Best Company – Romantic Getaways

The Active Times – Weekend Trips to Take this Spring in Every State

HARO(anonymous) – Unique Family Vacations in the US

The Gentleman Racer – Luxury Travel Destinations in Texas

Los Angeles Magazine – Off the Beaten Path Travel

A Story Idea on “Why Visit Bastrop, TX” was submitted to freelance writers who write for the following outlets:

CNN, The New York Times, Forbes, Texas Highways, Travel Channel, AAA's Texas Journey, Southwest: The Magazine, Family Vacation Critic, Budget Travel, Dallas Morning News, Travel + Leisure.



**The New York Times**

**TRAVEL+  
LEISURE**



# PUBLIC RELATIONS SUMMARY - FEBRUARY

## SECURED COVERAGE

SOUTHERN LIVING - 12 Best Last-Minute Spring Break Trips

<https://www.southernliving.com/travel/last-minutespring-break-ideas-families-2019?slide=584447#584447>

Est. Monthly Visits: 6.04 MIL

Est. Coverage Views: 19.6K

Est. Advertising Value: \$2,521.23

*Industries Represented: art, dining, outdoors, history, retail, Hyatt Regency Lost Pines  
(Pitched in January)*

## SECURED COVERAGE

BEST COMPANY - 12 Super Romantic Texas Getaways for Couples

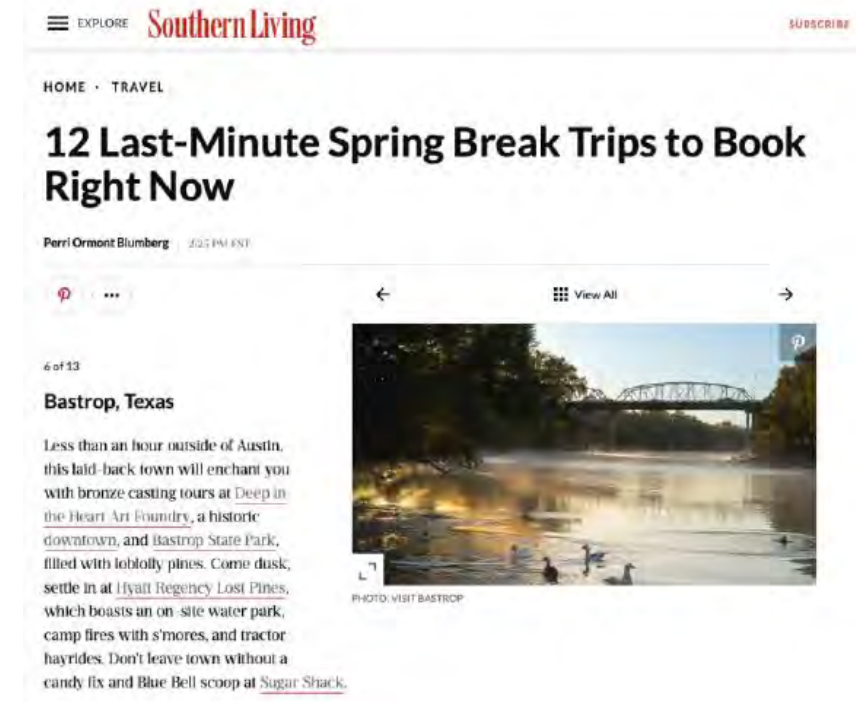
<https://bestcompany.com/travel/blog/5-ingredients-for-a-romantic-getaway>

Est. Monthly Visits: 744K

Est. Coverage Views: 4.9K

Est. Advertising Value: N/A

*Industries Represented: outdoors, history, dining*



"Here, locals believe that the key ingredient to a perfect romantic getaway is authenticity, which helps couples bond. Include some exhilarating outdoor activities like [zip lining](#) or [paddle boarding](#). Take a romantic stroll around a historic downtown and top everything off with a fresh, home-cooked meal." — Susan Smith, [Visit Bastrop](#)

# PUBLIC RELATIONS SUMMARY - FEBRUARY

## PICKED-UP SUBMISSIONS

### THE NIGHT POUR | March 8, 2019

#### Community Impact

Est. Monthly Visits: 738K

Est. Coverage Views: 4.34K

Est. Ad Value: \$50.16

#### Austin Family

Est. Monthly Visits: 9.87K

Est. Coverage Views: 1.18K

Est. Ad Value: \$13.80

#### Spectrum News

Est. Monthly Visits: 1.18M

Est. Coverage Views: 6.94K

Est. Ad Value: \$50.16

#### KXAN

Est. Monthly Visits: 2.64M

Est. Coverage Views: 9.39K

Est. Ad Value: \$694.1

#### The Austinet

Est. Monthly Visits: 75.6K

Est. Coverage Views: 508

Est. Ad Value: N/A

#### Austin Monthly

Est. Monthly Visits: 80.3K

Est. Coverage Views: 517

Est. Ad Value: \$29.82

#### Free Fun in Austin

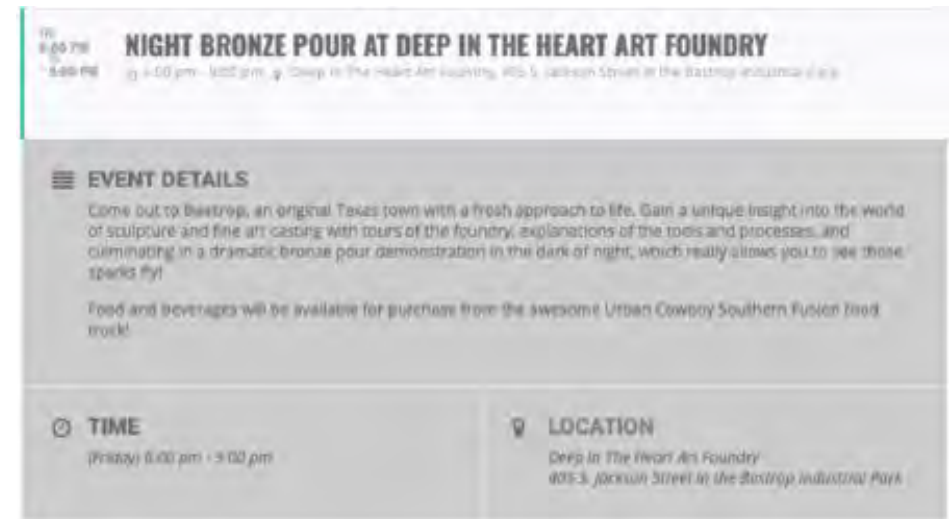
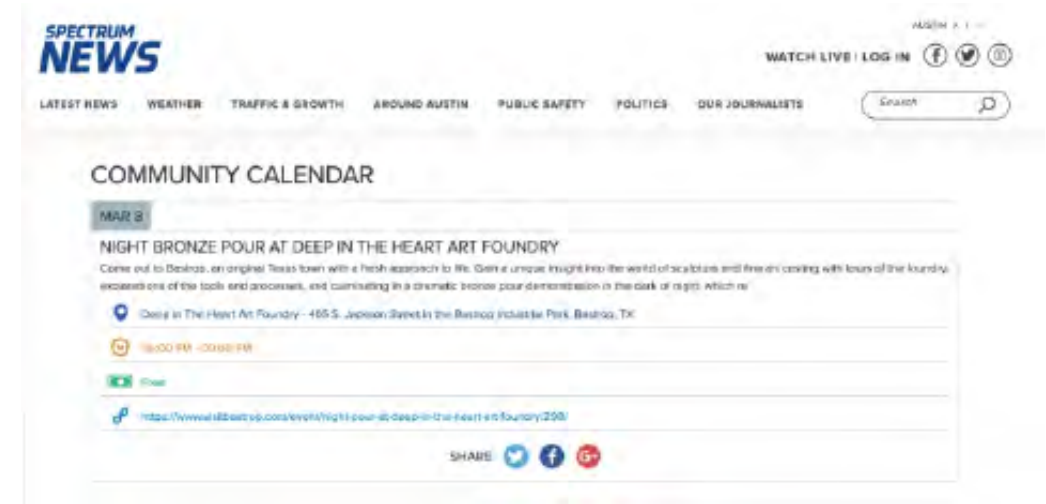
Est. Monthly Visits 90.2K

Est. Coverage Views: 2.08K

Est. Ad Value: N/A

#### Other Submissions

- 365 Things Austin
- Tyler Morning Telegraph
- Austin Chronicle
- Elgin Courier
- County Line Magazine
- Texas Independent Trail Region
- Texas Highways



# PUBLIC RELATIONS SUMMARY - FEBRUARY

## PICKED-UP SUBMISSIONS

TABLE ON MAIN | April 29, 2019

[Visit Austin](#)

Est. Monthly Visits: 255K

Est. Coverage Views: 1.47K

Est. Ad Value: N/A

[Other Submissions](#)

- 365 Things Austin
- Tyler Morning Telegraph
- Austin Chronicle
- Elgin Courier
- County Line Magazine
- Texas Independent Trail Region
- Texas Highways

BASTROP MUSIC FESTIVAL | May 16 - 19, 2019

Submissions: Texas Highways

DEARLY BELOVED | Play at Bastrop Opera House

Submissions: Texas Highways

CORVETTE INVASION | July 19-21, 2019

Submissions: Texas Highways

NEWSIES THE BROADWAY MUSICAL | Opera House

Submissions: Texas Highways



[Back To Previous Page](#)

### TABLE ON MAIN

#### ANNUAL EVENTS

Downtown Bastrop

Main Street

Bastrop, TX 78602

April 28, 2019

Time: 5:00 PM to 8:00 PM

[Website](#)



#### DETAILS

#### MAP

Imagine an evening with friends sharing local food and drinks at a long table in the heart of historic downtown Bastrop underneath the stars of a Texas sky. You can be a part of this one-of-a-kind event. The Bastrop Main Street Program is pleased to announce the 3rd Annual Table on Main.

# LOOKING AHEAD – MARKETING INITIATIVES

- East & West Facing billboards on HWY 71 promoting our historic downtown district and it's offering to commuters.
- Working with our website team and agency to develop/roll out the Visit Bastrop Blog.
- Develop a media alert to conduct TV outreach for Table on Main, day of coverage of event.
- Refresh of content/images on website to align with new brand.
- Continued proactive outreach for media opportunities relevant for the destination both regionally and nationally.
- Continue to work with our agency to gather details on upcoming events for pitching opportunities.



# LODGING INDUSTRY REPORT - FEBRUARY

Current Month - January 2019 vs January 2018												
	Occ %		ADR		RevPAR		Percent Change from January 2018					
	2019	2018	2019	2018	2019	2018	Occ	ADR	RevPAR	Room Rev	Room Avail	Room Sold
Bastrop	53.0	48.1	136.36	133.78	72.23	64.36	10.1	1.9	12.2	12.2	0.0	10.1
Average	50.8	48.9	101.0	100.6	52.9	50.4	3.6	0.2	3.7	6.1	2.5	6.0

Year to Date – January 2019 vs January 2018												
	Occ %		ADR		RevPAR		Percent Change from YTD 2018					
	2019	2018	2019	2018	2019	2018	Occ	ADR	RevPAR	Room Rev	Room Avail	Room Sold
Bastrop	53.0	48.1	136.36	133.78	72.23	64.36	10.1	1.9	12.2	12.2	0.0	10.1
Average	50.8	48.9	101.0	100.6	52.9	50.4	3.6	0.2	3.7	6.1	2.5	6.0

ADR – Average Daily Rate

RevPAR – Revenue per Available Room

Occ - Occupancy

# SALES REPORT – FEBRUARY

STATUS	QUANTITY	ROOM NIGHTS	ESTIMATED ATTENDEES	ECONOMIC IMPACT	NOTES
LEADS	9	2,288	5,502	\$4,030,169.38	
DEFINITES	3	90	1,270	\$159,690.14	
LEAD SERVICE REQUEST	1	N/A	20	-	
DEFINITE SERVICE REQUEST	3	N/A	140	-	
LOST LEADS	3	71	3,432	\$3,020,772.23	<ol style="list-style-type: none"> <li>Cancelled by client</li> <li>Metro location needed</li> <li>Conv. Center too small</li> </ol>
LOST SERVICE REQUESTS	1	N/A	500	-	<ol style="list-style-type: none"> <li>Cancelled by client</li> </ol>
LEAD ASSIST - HYATT	-	-	-	-	
DEFINITE ASSIST - HYATT	-	-	-	-	
LEAD SERVICE REQUEST - HYATT	1	N/A	-	-	
DEFINITE SERVICE REQUEST - HYATT	3	N/A	-	-	
LOST LEADS ASSIST – HYATT	1	100	600	-	<ol style="list-style-type: none"> <li>Chose another location; location not known</li> </ol>



# QUESTIONS, THOUGHTS COMMENTS?

Chamber of Commerce Newsletter  
Board of Director Meetings  
City Council Meetings  
1408 B Chestnut Street  
[www.visitbastrop.com](http://www.visitbastrop.com)

Susan Smith, President  
512-332-8991  
[susan@visitbastrop.com](mailto:susan@visitbastrop.com)



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 9B

**TITLE:**

Receive Quarterly Report on the Bastrop Convention & Exhibit Center.

**STAFF REPRESENTATIVE:**

Kathy Danielson, Bastrop Convention & Exhibit Center Director  
James K. Altgelt, Director of Public Safety/Chief of Police

**BACKGROUND/HISTORY:**

Opened in the Spring of 2011, this full-service facility has changed directional courses over the last 18 months. Available to host conventions, trade shows, corporate meetings, weddings, concerts, art events, or banquets, the 26,000 square foot Bastrop Convention & Exhibit Center can accommodate up to 750 banquet-style seating or 800 theater-style seating in the flexible Main Ballroom. In October of 2017, the once standalone Bastrop Convention & Exhibit Center Department became a part of the Hospitality and Downtown Department. Highlights of the positive changes, efficiency, and increased economic benefit as a result of the restructuring are outlined below:

- Increased rentals at the Bastrop Convention & Exhibit Center by 50% in FY 2018 over FY 2017, with repeat conventions booked through FY 2020.
- Revised contracts, marketing materials, and time offerings making renting the Bastrop Convention & Exhibit Center competitive.
- Provide full-service rentals at the Bastrop Convention & Exhibit Center including catering services (through contractual services with outside vendors), room setups and teardowns, tablecloths, table decorations, and drink stations.
- Provide successful programming including the Farm Street Opry monthly and our annual Boogie Back to Bastrop Western Swing Festival and Red White & You Dance.

During the 2<sup>nd</sup> Quarter of FY 2019, the Bastrop Convention & Exhibit Center continued to increase its productivity in all areas, which include occupancy, bookings, when compared to the 2<sup>nd</sup> Quarter of FY 2018. The following is an illustration of the Bastrop Convention & Exhibit Center's progress:

- Occupancy increased 25%.
- Bookings increased 32%.
- Revenue increased 75%.

A comparison between FY 2018 Year to Date figures and FY 2019 Year to Date Figures also shows increases in all productivity areas.

- Occupancy increased 3%.
- Bookings increased 36%.
- Total Revenue increased 54%.
  - Revenue for the Farm Street Opry increased 7%.

**POLICY EXPLANATION:**

The Bastrop Convention and Exhibit Center revised its mission and vision statements in FY 2018 to align with the City Council's focus areas and strategic focus. As outlined in this year's organizational work plan, the following projects are underway:

- FY 2019 Work Plan Economic Vitality #3: Continue increasing rental revenue of Convention Center by supporting local businesses, small conventions, and conferences. (Comp. Plan – 8.3.2)

**FUNDING SOURCE:**

N/A

**ATTACHMENTS:**

- FY 2019 2<sup>nd</sup> Quarter Bastrop Convention Center & Exhibit Center PowerPoint Presentation Report



# Bastrop Convention & Exhibit Center



FY 2019 2<sup>nd</sup> Quarter Report  
Kathy Danielson, Director

# Bastrop Convention & Exhibit Center

## Mission

The Bastrop Convention & Exhibit Center is committed to serving our community and guests by working as a team to build local partnerships, enhance local and regional events and provide efficient results ensuring vitality for Bastrop.



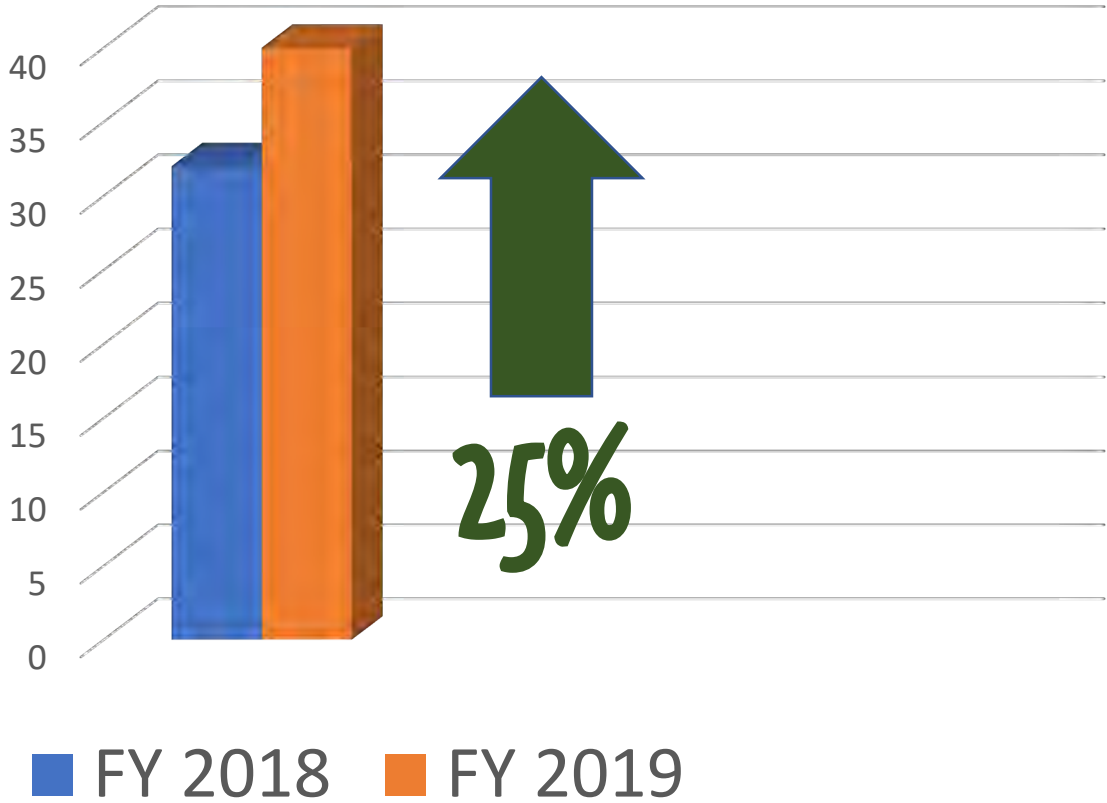
# Bastrop Convention & Exhibit Center

## Vision

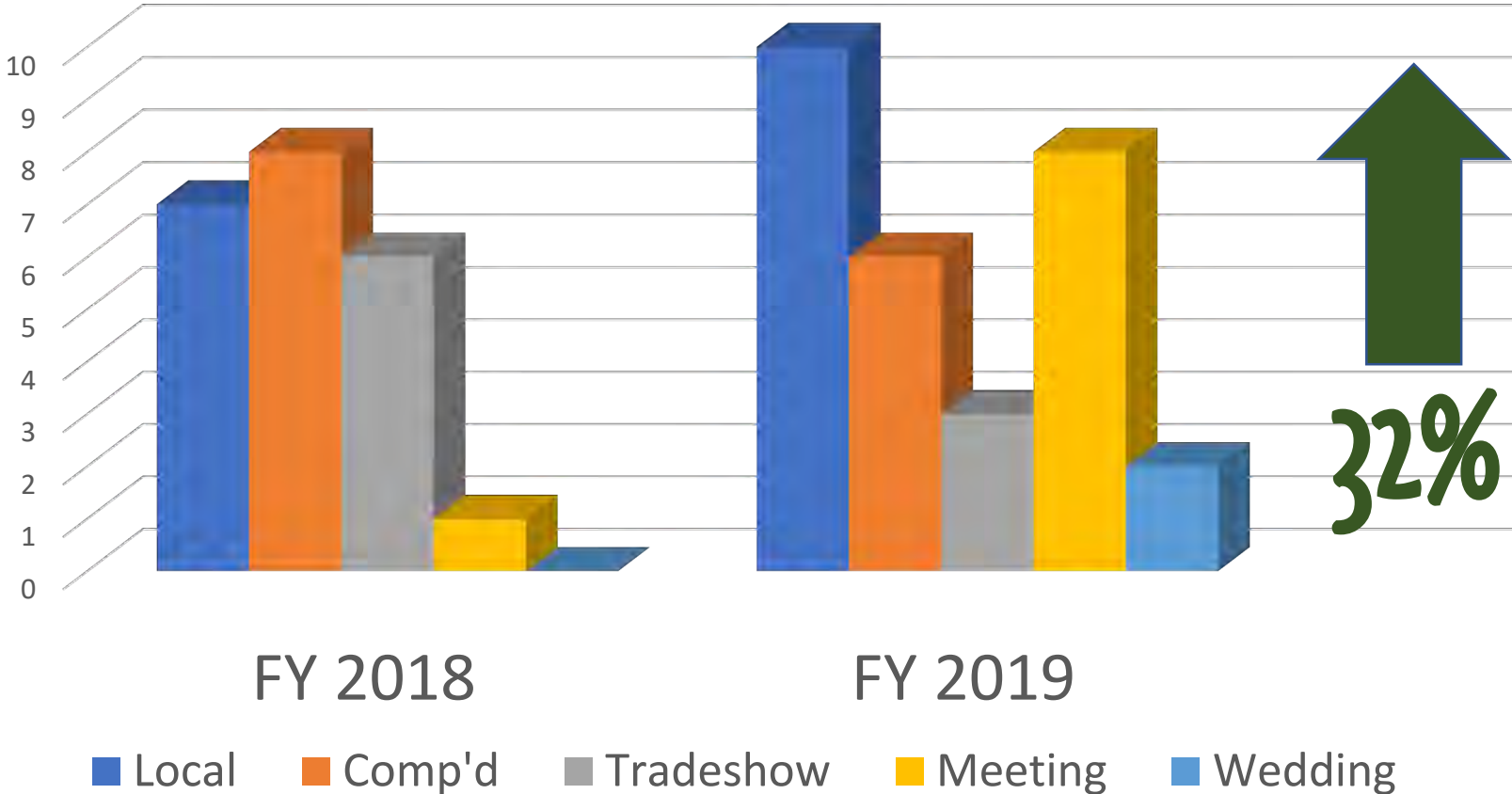
The Bastrop Convention & Exhibit Center will strive to showcase small town charm and hospitality within the local meetings and events industry. Focusing on customer service and exceptional experiences, the Bastrop Convention & Exhibit Center will provide a unique combination of local and non-local use creating a positive economic impact for our community and partners.



# 2<sup>nd</sup> Quarter Occupancy

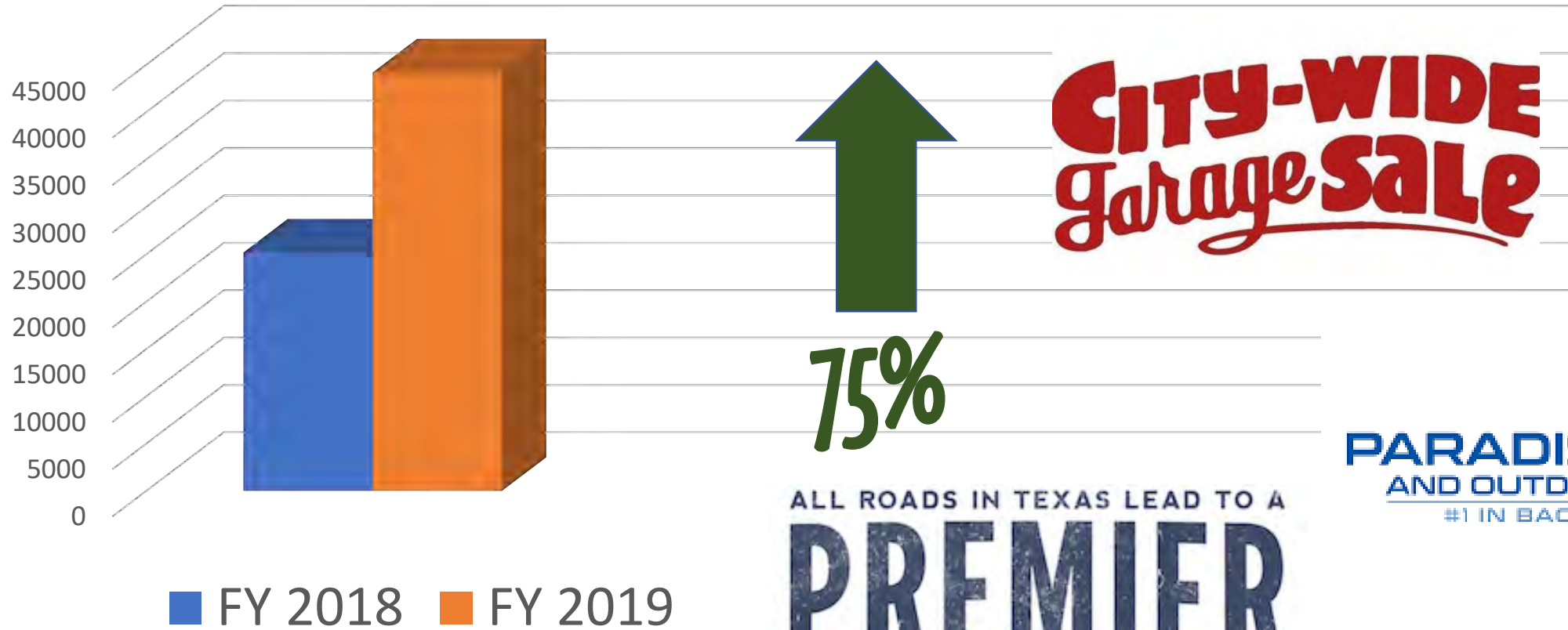


# 2<sup>nd</sup> Quarter Bookings





# 2<sup>nd</sup> Quarter Revenue

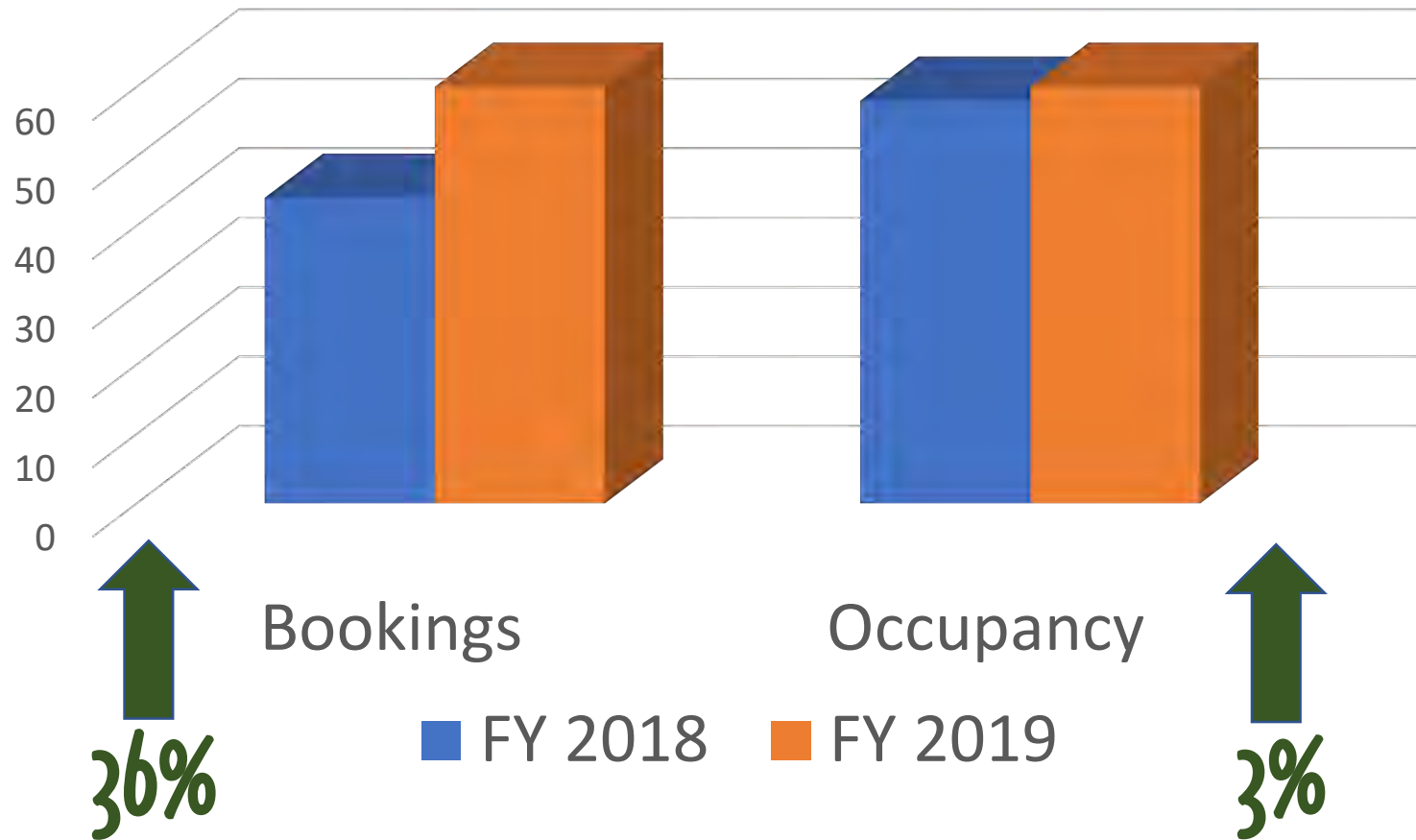


ALL ROADS IN TEXAS LEAD TO A  
**PREMIER**  
19 GUN SHOW 72

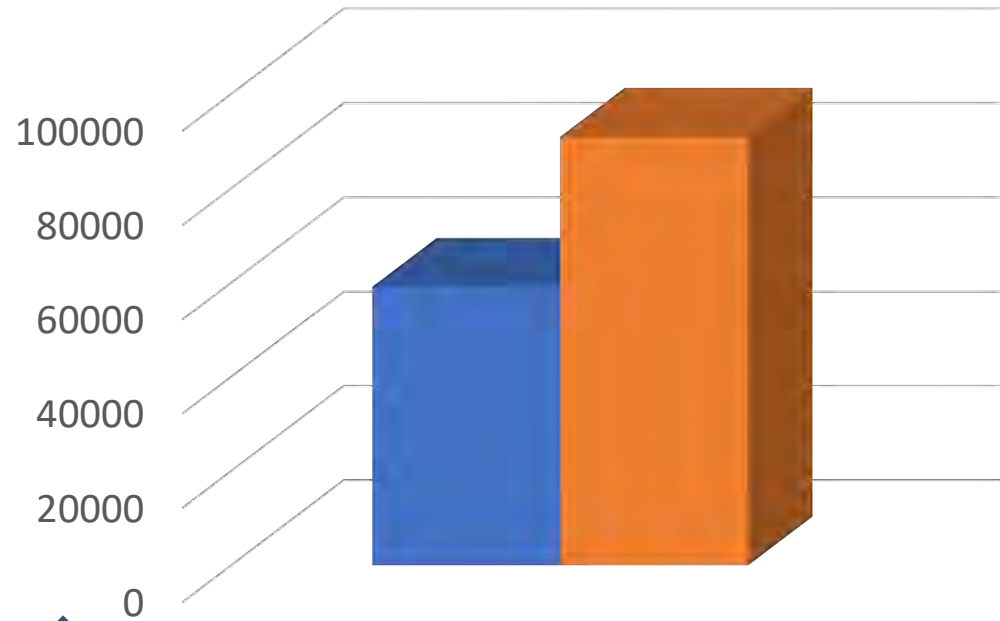
**PARADISE SPAS**  
AND OUTDOOR LIVING  
#1 IN BACKYARD FUN

**BASTROPTX**  
Heart of the Lost Pines / Est. 1832

# FY 2018 / FY 2019 Year to Date Comparison



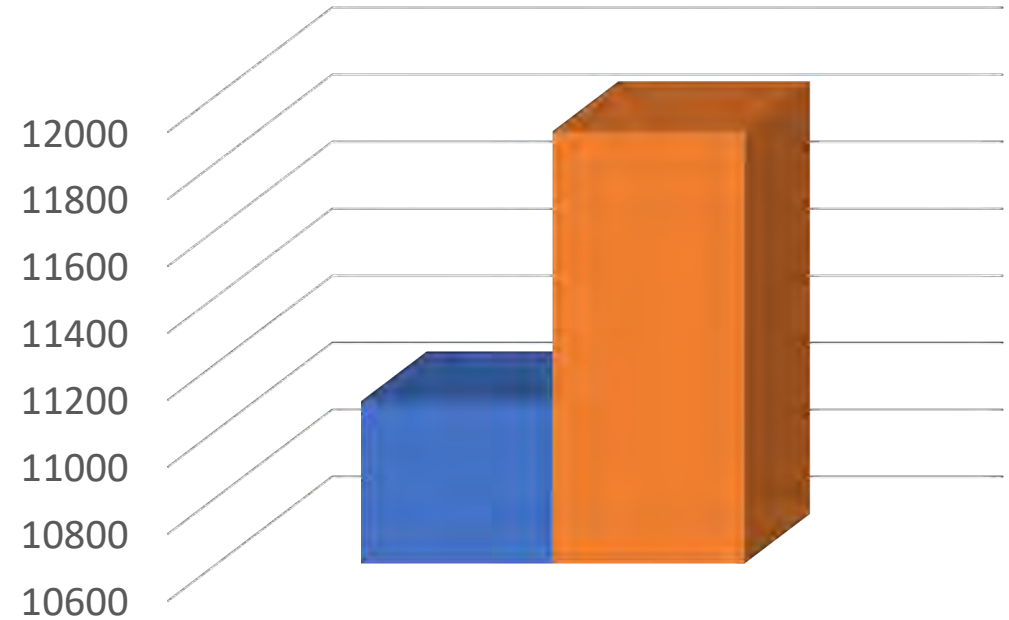
# FY 2018 / FY 2019 Year to Date Comparison



↑  
54%

Total Revenue

■ FY 2018 ■ FY 2019



↑  
7%

Farm Street Opry

■ FY 2018 ■ FY 2019



# 2019 Red, White, & You

## July 6<sup>th</sup> Dance

New tourism event created to enhance July 4<sup>th</sup> week celebration.

Working with Visit Bastrop on room blocks and additional promotions.

Finalize advertising campaign.

City of Bastrop's Convention & Exhibit Center Proudly Presents

# ★ RED, WHITE & YOU ★

*Dancing Through the Decades*

**SATURDAY  
JULY 6**

BIG BAND DANCE PARTY ★ LIVE MUSIC ★ DANCE LESSONS  
FOOD ★ DRINKS ★ VINTAGE DRESS CONTEST

Featuring  
*Tony Harrison Band*

**7pm - 10pm**  
doors open 5:00 | dance lessons 8:15

Reserve tickets online!  
**\$20**  
CASH @ Door until capacity

VINTAGE DRESS ENCOURAGED  
WIN PRIZE for best dressed!  
FOOD & ALCOHOL CONCESSIONS AVAILABLE

*Online Tickets Available Now!*

BASTROP CONVENTION & EXHIBIT CENTER | 1408 CHESTNUT ST., BASTROP TX | 512.332.8984

[RedWhiteYouDance.com](http://RedWhiteYouDance.com)

# 2019 Boogie Back to Bastrop Western Swing Festival

## August 23<sup>rd</sup> & 24<sup>th</sup>

Attendees from Texas, Oklahoma, & New Mexico.

Working with Visit Bastrop on room blocks and additional promotions.

Finalize advertising campaign.



# THE END



A CITY OF BASTROP PRODUCTION COPYRIGHT MMXVII





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 9C

**TITLE:**

Provide an update on the Chicken Relocation Project in Downtown Bastrop, Texas.

**STAFF REPRESENTATIVE:**

James K. Altgelt, Director of Public Safety/Chief of Police



# Chicken Relocation Project Update



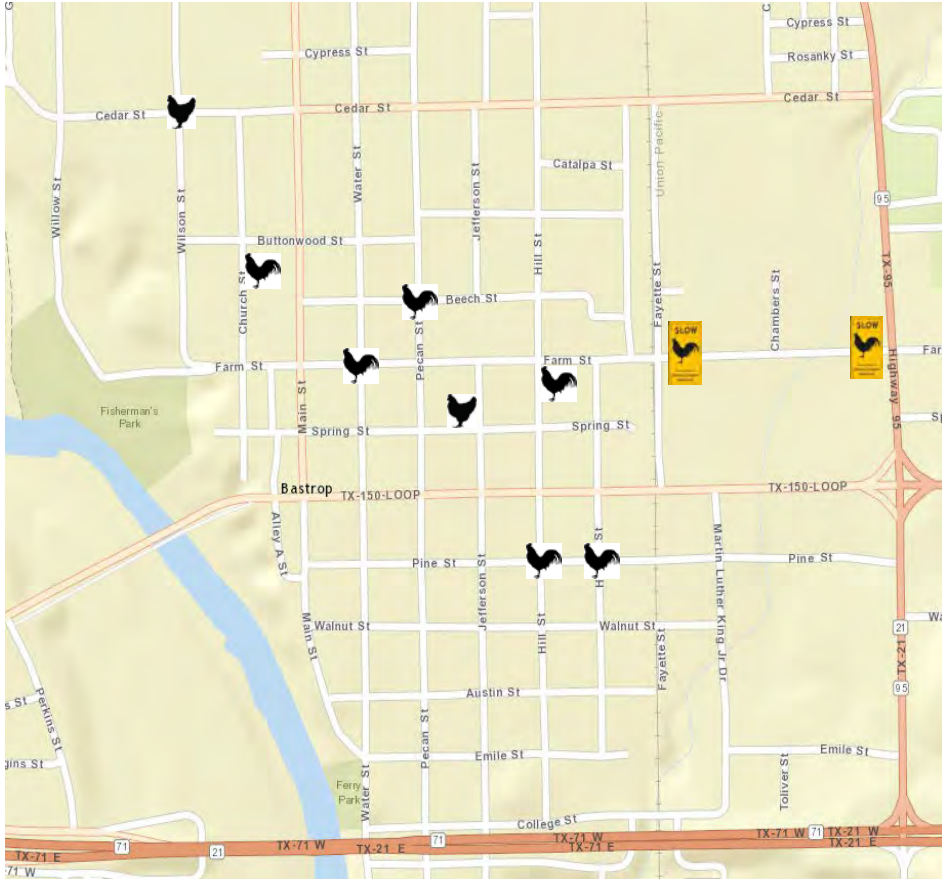


# Background

In June 2009, the City Council adopted Ordinance Number 2009-013 and created what became to be known as the “Chicken Sanctuary”.



# Background



Over the passage of time, some of these chickens migrated from the Chicken Sanctuary to other parts of the City. These broods have become a nuisance to residential and business owners.

# Background

On November 29, 2017 a Public Hearing was conducted during the City Council Meeting to address the public's concerns pertaining to the chickens and what would be the appropriate action.

At that time, any chicken that was at-large and outside the Chicken Sanctuary were deemed to be a nuisance and prohibited from being allowed to roam free.



# Background



On March 14, 2018, Dan Hepker, dba Texas Nuisance Wildlife Relocation, entered into a Professional Services Agreement for the humane capture, transportation, and relocation of the chickens from private property within the City.

# Background

On March 27, 2018, after receiving an update, the City Council unanimously opined that the removal of the Chicken Sanctuary would be in the City's best interest.

On May 22, 2019, the City Council passed an ordinance that dissolved the Chicken Sanctuary.



# Methodology



- Identifying a location and securing permission / release of liability
- Deploying and baiting the trap area
  - Two week period
- Checking the trap throughout the day in order to prevent having the chicken remain trapped for an extended period of time
  - Limits ability to trap on weekends

# Progress to Date

From March 2018 through today at noon, **126** chickens have been captured, transported, and relocated.

- 59 hens
- 32 chicks
- 35 roosters



Month	# Hens	# Chicks	# Roosters	Monthly Total	Grand Total
March - April	17	0	12	<b>29</b>	<b>29</b>
May	9	12	0	<b>21</b>	<b>50</b>
June	4	0	2	<b>6</b>	<b>56</b>
July	10	7	7	<b>24</b>	<b>80</b>
August	3	7	3	<b>13</b>	<b>93</b>
September - November	0	0	0	<b>0</b>	<b>93</b>
December	3	0	3	<b>6</b>	<b>99</b>
January	0	0	0	<b>0</b>	<b>99</b>
February	3	0	0	<b>3</b>	<b>102</b>
March	10	6	8	<b>24</b>	<b>124</b>

# Monthly Breakdown





# Challenges

Some property owners do not want to help

- Worried about liability
- Do not want their landscape damaged
- Like the chickens

Two (2) weeks to acclimate chickens to the trap

- Once the trap is deployed, other chickens learn to avoid the trap



# Challenges

(Continued)

Some chickens run to property where we have been refused consent to enter

Finding locations to relocate the roosters can be challenging

Chickens are fast!!!



# Laws

## City of Bastrop Code of Ordinances

### § 2.01.007 – Injury or Destruction of Wild Birds

- (a) The city is hereby declared a bird sanctuary. ***Any person who shall willfully kill or injure any wild bird***, remove the eggs or young from the nest of a wild bird, or in any manner destroy the eggs or young of wild birds, excluding the pigeon, English sparrow, European starlings, grackles, ravens, red-winged blackbirds, blackbirds, cowbirds, feral rock doves, and crows, ***shall be guilty of a Class C Misdemeanor***. Canaries, parrots, and other exotic non-game birds may be sold, purchased, and kept as domestic pets.



# QUESTIONS ?





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 9D

**TITLE:**

Receive presentation on the unaudited Monthly Financial Report for the period ending February 28, 2019.

**STAFF REPRESENTATIVE:**

Tracy Waldron, Chief Financial Officer

**BACKGROUND/HISTORY:**

The Chief Financial Officer provides the City Council a monthly financial report overview for all funds to include detailed analysis for General Fund, Water-Wastewater Fund, Bastrop Power & Light and the HOT Tax Fund.

**POLICY EXPLANATION:**

This reporting requirement is set forth by the City of Bastrop Financial Management Policies, Chapter IV. Operating Budget, Section D. Reporting, adopted in conjunction with the FY2019 budget on September 25, 2018.

**FUNDING SOURCE:**

N/A

**ATTACHMENTS:**

- Unaudited Monthly Financial Report for the period ending February 28, 2019

# CITY OF BASTROP

Comprehensive Monthly Financial Report  
February 2019








# Performance at a Glance as of February 28, 2019



	YEAR TO DATE	REFERENCE
<b>ALL FUNDS SUMMARY</b>		
ALL FUNDS SUMMARY	POSITIVE	Page 4-5
GENERAL FUND REV VS EXP	POSITIVE	Page 6
SALES TAXES	POSITIVE	Page 7
PROPERTY TAXES	POSITIVE	Page 8
WATER/WASTEWATER FUND REV VS EXP	POSITIVE	Page 9
WATER/WASTEWATER REVENUES	POSITIVE	Page 10
ELECTRIC FUND REV VS EXP	POSITIVE	Page 11
ELECTRIC REVENUES	WARNING	Page 12
HOT TAX FUND REV VS EXP	POSITIVE	Page 13
HOTEL OCCUPANCY TAX REVENUES	POSITIVE	Page 14
Legal fees	N/A	Page 15
<b>PERFORMANCE INDICATORS</b>		
<b>POSITIVE</b>	= Positive variance or negative variance < 1% compared to seasonal trends	
<b>WARNING</b>	= Negative variance of 1-5% compared to seasonal trends	
<b>NEGATIVE</b>	= Negative variance of > 5% compared to seasonal trends	



ECONOMIC INDICATORS	February 28, 2019 – NEWS FOR YOU
<b>ECONOMY</b>	
<p><u>National:</u>                       Real gross domestic product (GDP) decreased at an annual rate of 3.6% in the 4th quarter of 2018. This is down from 3.4% from 3<sup>rd</sup> quarter. The personal income decreased by .1% in Jan. 2019 after increasing in Dec. 2018 by 1.0%. The personal consumption expenditures had no change since Dec. 2018 (All of these reported by the Bureau of Economic Analysis.)</p> <p><u>U.S. Retail Sales:</u>                       Up .2% in Jan. 2019</p> <p><u>Texas Retail Sales:</u>                       This index is a single summary statistic that sheds light on the future of the state's economy. The index is a composition of eight leading indicators. The index is at 126.18 in Dec. 2018, down 1.05% from Nov. 2018 and down 2.44% from one year ago.</p>	<p>Attached is the Comprehensive Monthly Financial report for Feb. 2018. This is 5 month of FY2019, or 41.7% of the fiscal year is complete.</p> <p><u>Revenues:</u> Overall, the City has earned \$17,949,728. This amount is 46% of the approved budget of \$38,754,087 and is 1.1% higher than the amount forecasted through the month of Feb.</p> <p><u>Expense:</u> Overall, the City has spent 16.2% less than forecasted.</p>
<b>UNEMPLOYMENT</b>	<b>Noteworthy</b>
<p><u>State-wide:</u>                       The state unemployment is 3.7% in Dec. 2018 which is no change from Nov. 2018.</p> <p><u>Bastrop:</u>                       Bastrop County has an unemployment rate of 3.1% in Dec. 2018 which is up from 3.0% in Nov. 2018.</p>	

## BUDGET SUMMARY OF ALL FUNDS

	<u>FY2019 Budget</u>	<u>FY2019 Forecast</u>	<u>FY2019 YTD</u>	<u>Variance</u>
<b><u>Revenues:</u></b>				
General	\$ 11,509,784	\$ 6,623,387	\$ 6,607,512	-0.2%
Designated	58,100	26,033	31,019	19.2%
Innovation	763,825	193,260	199,774	3.4%
Street Maintenance	1,106,000	1,102,500	1,109,275	0.6%
Debt Service	2,637,663	1,865,885	1,912,134	2.5%
Water/Wastewater	5,707,190	2,076,413	2,099,484	1.1%
Water/Wastewater Debt	2,235,643	694,980	696,285	0.2%
Water/Wastewater Capital Proj	155,000	64,583	73,931	14.5%
Impact Fees	509,600	166,333	156,925	-5.7%
Vehicle & Equipment Replacement	611,563	399,110	396,226	-0.7%
Electric	7,721,040	2,736,231	2,662,372	-2.7%
HOT Tax Fund	3,571,246	1,292,161	1,352,856	4.7%
Library Board	20,550	7,563	7,594	0.4%
Park/Trail Land Dedicaiton	102,791	208	919	341.8%
Cemetery	113,700	39,417	39,401	0.0%
Capital Bond Projects	75,000	31,250	55,664	78.1%
Grant Fund	1,416,576	17,000	26,691	57.0%
Hunter's Crossing PID	440,666	419,083	521,666	24.5%
<b>TOTAL REVENUES</b>	<b>\$ 38,755,937</b>	<b>\$ 17,755,397</b>	<b>\$ 17,949,728</b>	<b>1.1%</b>

POSITIVE

= Positive variance or negative variance < 1% compared to forecast

WARNING

= Negative variance of 1-5% compared to forecast

NEGATIVE

= Negative variance of >5% compared to forecast

## BUDGET SUMMARY OF ALL FUNDS

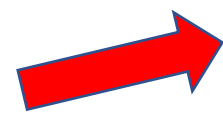
	<u>FY2019 Budget</u>	<u>FY2019 Forecast</u>	<u>FY2019 YTD</u>	<u>Variance</u>
<b><u>Expense:</u></b>				
General	\$ 11,519,785	\$ 4,431,747	\$ 4,200,972	-5.2%
Designated	535,150	91,729	64,283	-29.9%
Innovation	2,210,488	936,559	598,495	-36.1%
Street Maintenance	566,797	-	-	0.0%
Debt Service	2,716,641	644,287	644,413	0.0%
Water/Wastewater	5,821,984	2,367,243	2,217,088	-6.3%
Water/Wastewater Debt	1,425,805	402,430	385,862	-4.1%
Water/Wastewater Capital Proj.	2,582,500	499,051	500,009	0.2%
Impact Fees	710,242	19,115	18,840	-1.4%
Vehicle & Equipment Replacement	423,764	23,500	22,299	-5.1%
Electric	8,192,778	3,192,887	3,061,862	-4.1%
HOT Tax Fund	3,929,045	1,571,131	1,289,576	-17.9%
Library Board	21,475	8,948	1,669	-81.3%
Park Dedication	107,977	-	-	0.0%
Cemetery	97,480	38,658	30,091	-22.2%
Hunter's Crossing PID	112,720	61,550	62,801	2.0%
Capital Projects (Bond)	5,551,132	2,954,638	1,461,368	-50.5%
Grant Fund	1,416,576	195,000	58,780	-69.9%
<b>TOTAL EXPENSES</b>	<b>\$ 47,942,339</b>	<b>\$ 17,438,473</b>	<b>\$ 14,618,408</b>	<b>-16.2%</b>
Surplus/(Shortfall)	\$ (9,186,402)	\$ 316,924	\$ 3,331,320	951.1%

<b>POSITIVE</b>	= Negative variance or positive variance < 1% compared to forecast
<b>WARNING</b>	= Positive variance of 1-5% compared to forecast
<b>NEGATIVE</b>	= Positive variance of >5% compared to forecast

# BUDGET BOOK page 126

CITY OF BASTROP					
FUND	DEPARTMENT		DIVISION		
101 GENERAL FUND	02 ORGANIZATIONAL		00 NON-DIVISION		
SUMMARY					
CATEGORIES	ACTUAL 2017	BUDGET 2018	ESTIMATE 2018	PROPOSED 2019	PLANNING 2020
PERSONNEL COSTS	\$45,469	\$49,544	\$80,678	\$90,103	\$106,738
SUPPLIES AND MATERIALS	\$17,282	\$14,640	\$14,060	\$12,400	\$12,575
MAINTENANCE AND REPAIRS	\$25,235	\$1,700	\$750	\$1,000	\$1,000
OCCUPANCY	\$0	\$74,220	\$75,000	\$72,000	\$72,500
CONTRACTUAL SERVICES	\$475,394	\$417,811	\$424,836	\$437,957	\$442,170
OTHER CHARGES	\$564,443	(\$393,255)	(\$393,022)	(\$365,458)	(\$400,855)
CONTINGENCY*	\$0	\$35,000	\$18,000	(\$137,254)	(\$90,000)
CAPITAL OUTLAY	\$0	\$0	\$0	\$0	\$0
<b>TOTAL EXPENDITURES</b>	\$1,127,823	\$199,660	\$220,302	\$110,748	\$144,128
<b>OTHER USES</b>					
TRANSFERS OUT	\$525,000	\$0	\$1,000,000	\$266,084	\$280,257
<b>TOTAL EXPENDITURES &amp; TRANSFERS OUT</b>	\$1,652,823	\$199,660	\$1,220,302	\$376,832	\$424,385
*Contingency includes (\$100,000) projected salary savings					

Contingency	
Salary Savings	(\$172,254)
Contingency	<u>35,000</u>
<b>Total</b>	<b>(\$137,254)</b>



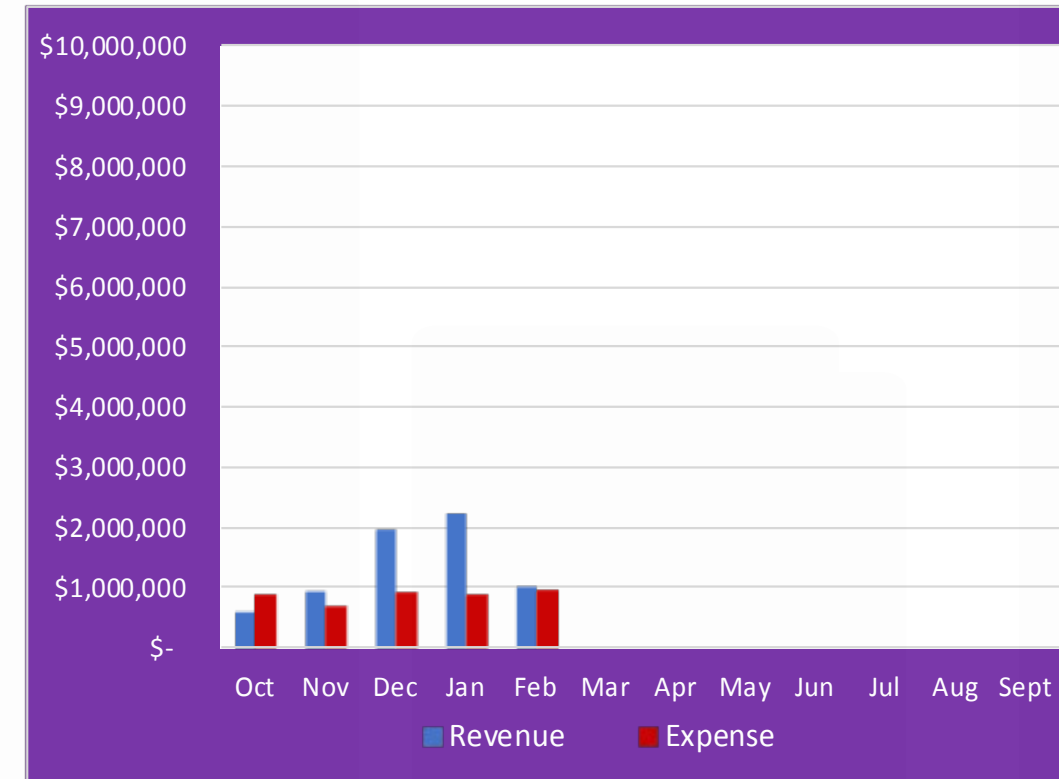
This note was not updated with the last revision of the budget. The amount approved in the budget is (\$172,254)

# Organizational

OVERALL FUND PERFORMANCE

GENERAL FUND REVENUES VS EXPENSES

Month	FY2019 Revenue	FY2019 Expense	Monthly Variance
Oct	\$ 579,372	\$ 860,860	\$ (281,488)
Nov	911,134	664,939	\$ 246,195
Dec	1,937,802	897,305	\$ 1,040,497
Jan	2,180,486	846,227	\$ 1,334,259
Feb	998,718	931,640	\$ 67,078
Mar			\$ -
Apr			\$ -
May			\$ -
Jun			\$ -
Jul			\$ -
Aug			\$ -
Sept			\$ -
<b>Total</b>	<b>\$ 6,607,512</b>	<b>\$ 4,200,971</b>	<b>\$ 2,406,541</b>
Cumulative Forecast	\$ 6,623,387	\$ 4,431,747	\$ 2,191,640
Actual to Forecast \$	\$ (15,875)	\$ 230,776	\$ 214,901
Actual to Forecast %	-0.24%	5.21%	4.97%



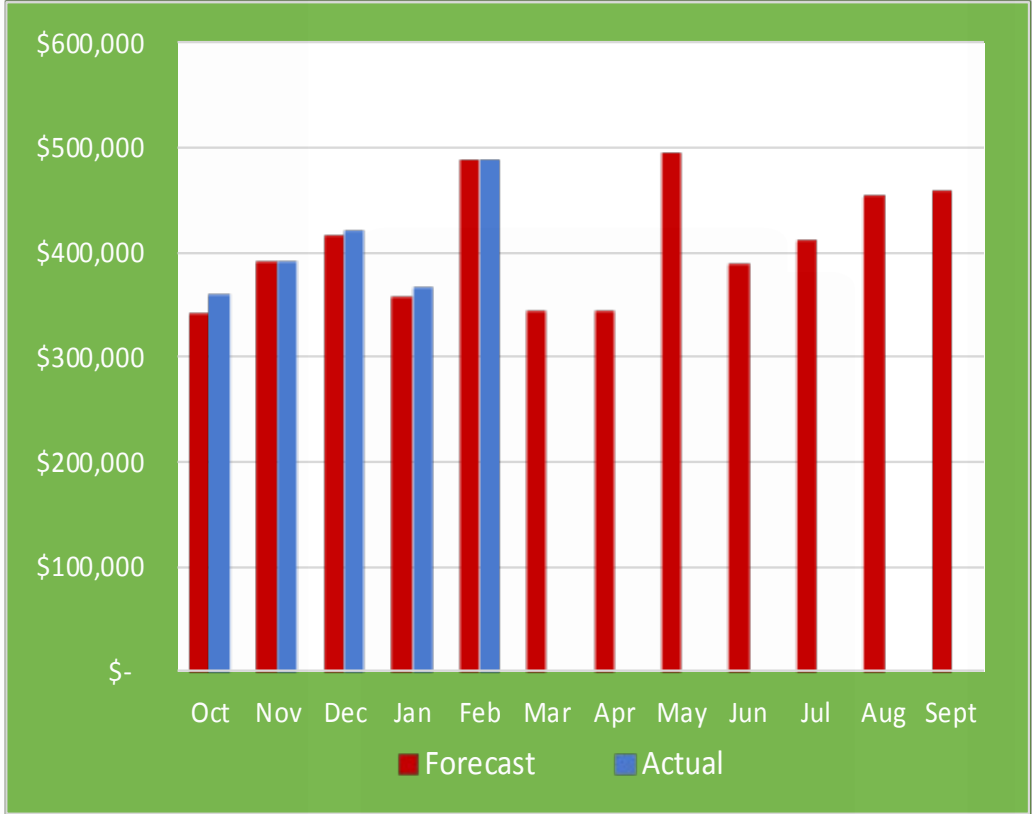
**POSITIVE**

Cumulatively overall, the General Fund is better than forecasted for this time of year. The fund is net positive 5%. The budget included a salary savings credit of \$172,000 anticipating that it would take time to fill the new budgeted positions and savings from turnover. We are currently at \$149,287 savings YTD not all attributable to new positions, some just from turnover. The positive variance between forecast and actual is timing of expense. Staff has spent significant time trying to anticipate when budgeted dollars will get spent but for some accounts this is an estimate.

REVENUE ANALYSIS

SALES TAX REVENUE

Month	FY2019 Forecast	FY2019 Actual	Monthly Variance
Oct	\$ 340,507	\$ 357,918	\$ 17,411
Nov	389,151	389,073	\$ (78)
Dec	413,473	417,882	\$ 4,409
Jan	356,548	364,452	\$ 7,904
Feb	485,934	485,877	\$ (57)
Mar	342,660		\$ -
Apr	341,233		\$ -
May	492,115		\$ -
Jun	385,827		\$ -
Jul	408,944		\$ -
Aug	452,076		\$ -
Sept	455,922		\$ -
<b>Total</b>	<b>\$ 4,864,390</b>	<b>\$ 2,015,202</b>	<b>\$ 29,589</b>
Cumulative Forecast	\$ 1,985,613		
Actual to Forecast	\$ 29,589	1.5%	

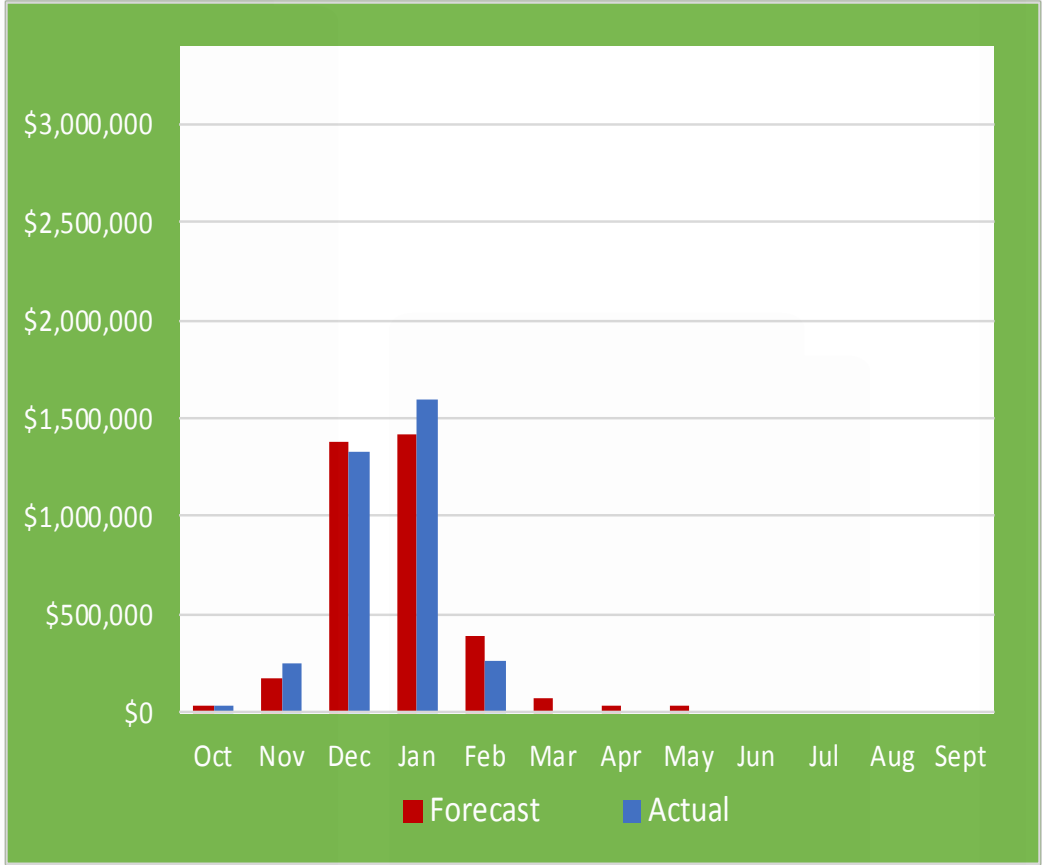


POSITIVE

Sales Tax is 42% of the total budgeted revenue for General Fund. The actual amounts for Oct. and Nov. are estimated due to the State Comptroller's two month lag in payment of these earned taxes. The actual is 1.5% greater than forecasted.

# PROPERTY TAX REVENUE

<u>Month</u>	<u>FY2019 Forecast</u>	<u>FY2019 Actual</u>	<u>Monthly Variance</u>
Oct	\$ 35,395	\$ 39,476	\$ 4,081
Nov	176,976	251,445	\$ 74,469
Dec	1,380,410	1,331,743	\$ (48,667)
Jan	1,415,806	1,601,144	\$ 185,338
Feb	389,347	261,204	\$ (128,143)
Mar	70,790		
Apr	35,395		
May	35,395		
Jun	-		
Jul	-		
Aug	-		
Sept	-		
<b>Total</b>	<b>\$ 3,539,514</b>	<b>\$ 3,485,012</b>	<b>\$ 87,078</b>
Cumulative Forecast	\$ 3,397,934		
Actual to Forecast	\$ 87,078	2.56%	



POSITIVE

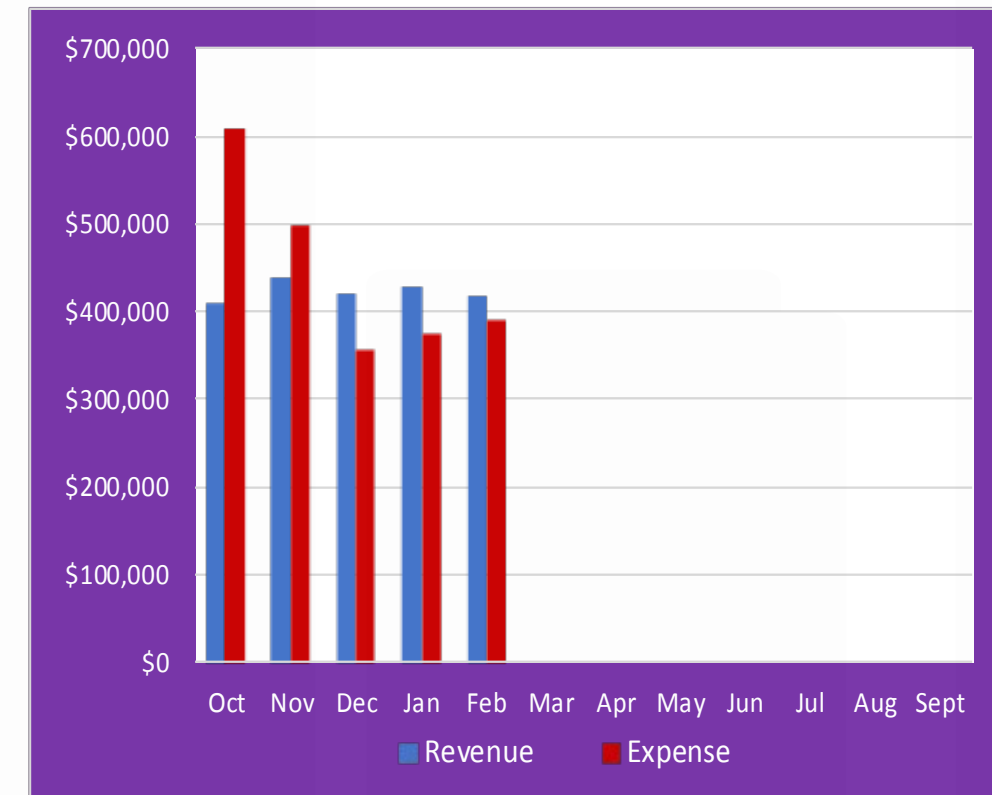
Property tax represents 31% of the total General Fund revenue budget. As you can see from the forecast, they are generally collected from December to February. The actual is exceeding the forecast by 2.5%.

# COMPREHENSIVE MONTHLY FINANCIAL REPORT –February 2019

## OVERALL FUND PERFORMANCE

### WATER/WASTEWATER FUND REVENUES VS EXPENSES

Month	FY2019 Revenue	FY2019 Expense	Monthly Variance
Oct	\$ 407,528	\$ 606,317	\$ (198,789)
Nov	436,189	495,625	\$ (59,436)
Dec	416,157	353,565	\$ 62,592
Jan	425,650	372,610	\$ 53,040
Feb	413,959	388,972	\$ 24,987
Mar			\$ -
Apr			\$ -
May			\$ -
Jun			\$ -
Jul			\$ -
Aug			\$ -
Sept			\$ -
<b>Total</b>	<b>\$ 2,099,483</b>	<b>\$ 2,217,089</b>	<b>\$ (117,606)</b>
Cumulative Forecast	\$ 2,076,413	\$ 2,367,243	\$ (290,830)
Actual to Forecast \$	\$ 23,070	\$ 150,154	\$ 173,224
Actual to Forecast %	1.11%	6.34%	7.45%



**POSITIVE**

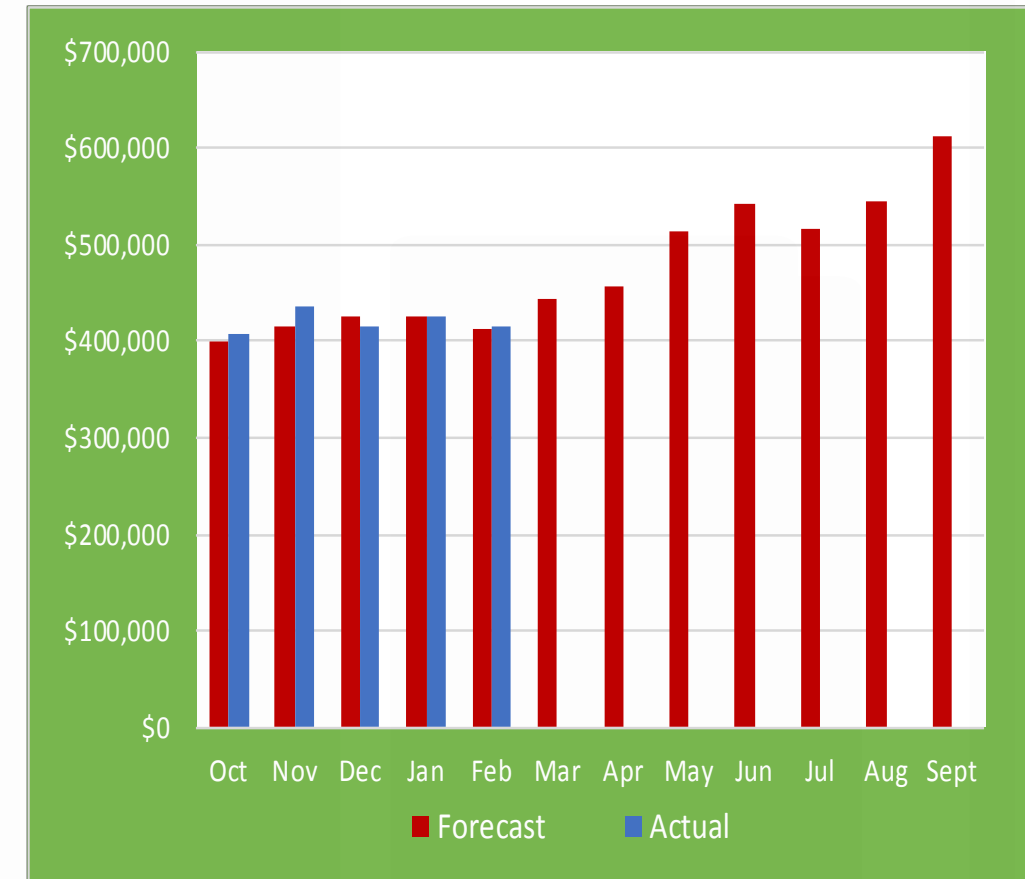
Water and wastewater fund is 7.5% net positive. The elevated expense we experienced in Oct. has leveled off over the last few months.



REVENUE ANALYSIS

**WATER/WASTEWATER REVENUE**

Month	FY2019 Forecast	FY2019 Actual	Monthly Variance
Oct	\$ 400,030	\$ 407,528	\$ 7,498
Nov	414,677	436,189	\$ 21,512
Dec	424,677	416,157	\$ (8,520)
Jan	424,677	425,650	\$ 973
Feb	412,353	413,959	\$ 1,606
Mar	444,384		
Apr	456,707		
May	513,384		
Jun	541,722		
Jul	517,076		
Aug	545,414		
Sept	612,091		
<b>Total</b>	<b>\$ 5,707,192</b>	<b>\$ 2,099,483</b>	<b>\$ 23,069</b>
Cumulative Forecast	\$ 2,076,414		
Actual to Forecast	\$ 23,069	1.11%	



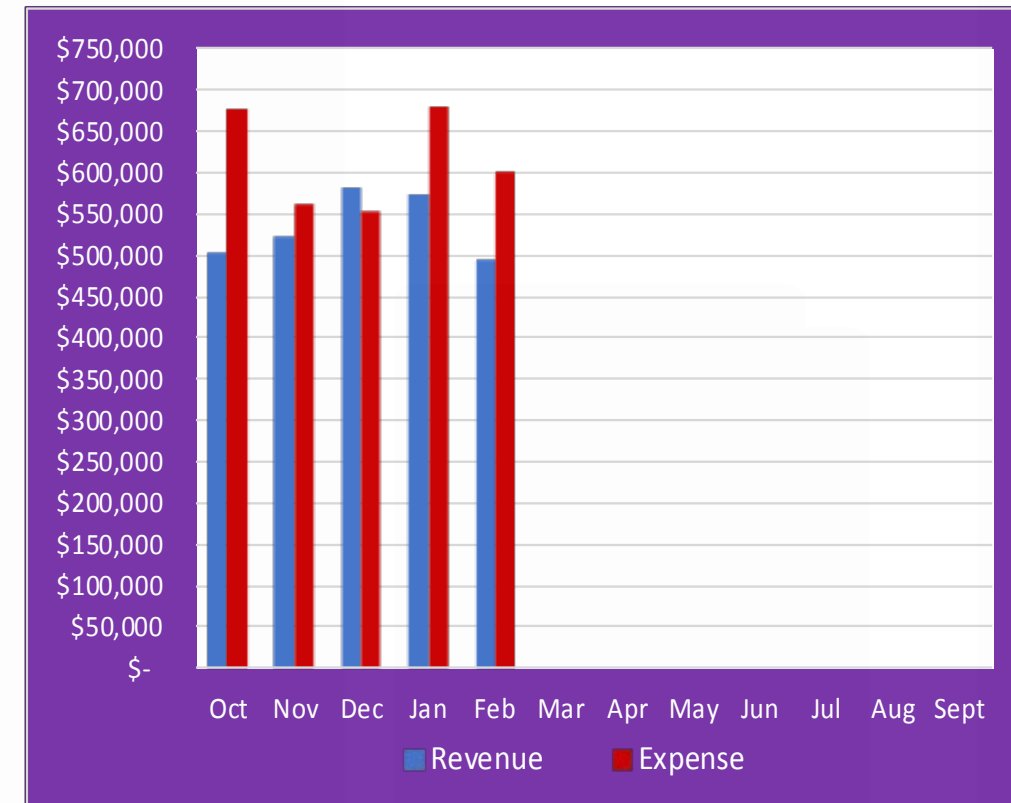
**POSITIVE**

The water and wastewater actual revenue is 1% net positive to forecast. There was 1 new residential meter set this month.

OVERALL FUND PERFORMANCE

ELECTRIC FUND REVENUES VS EXPENSES

Month	FY2019 Revenue	FY2019 Expense	Monthly Variance
Oct	\$ 501,810	\$ 675,329	\$ (173,519)
Nov	519,423	559,757	\$ (40,334)
Dec	578,558	550,649	\$ 27,909
Jan	571,345	676,791	\$ (105,446)
Feb	491,235	599,338	\$ (108,103)
Mar			\$ -
Apr			\$ -
May			\$ -
Jun			\$ -
Jul			\$ -
Aug			\$ -
Sept			\$ -
<b>Total</b>	<b>\$ 2,662,371</b>	<b>\$ 3,061,864</b>	<b>\$ (399,493)</b>
Cumulative Forecast	\$ 2,736,231	\$ 3,192,887	\$ (456,656)
Actual to Forecast \$	\$ (73,860)	\$ 131,023	\$ 57,163
Actual to Forecast %	-2.70%	4.10%	1.40%



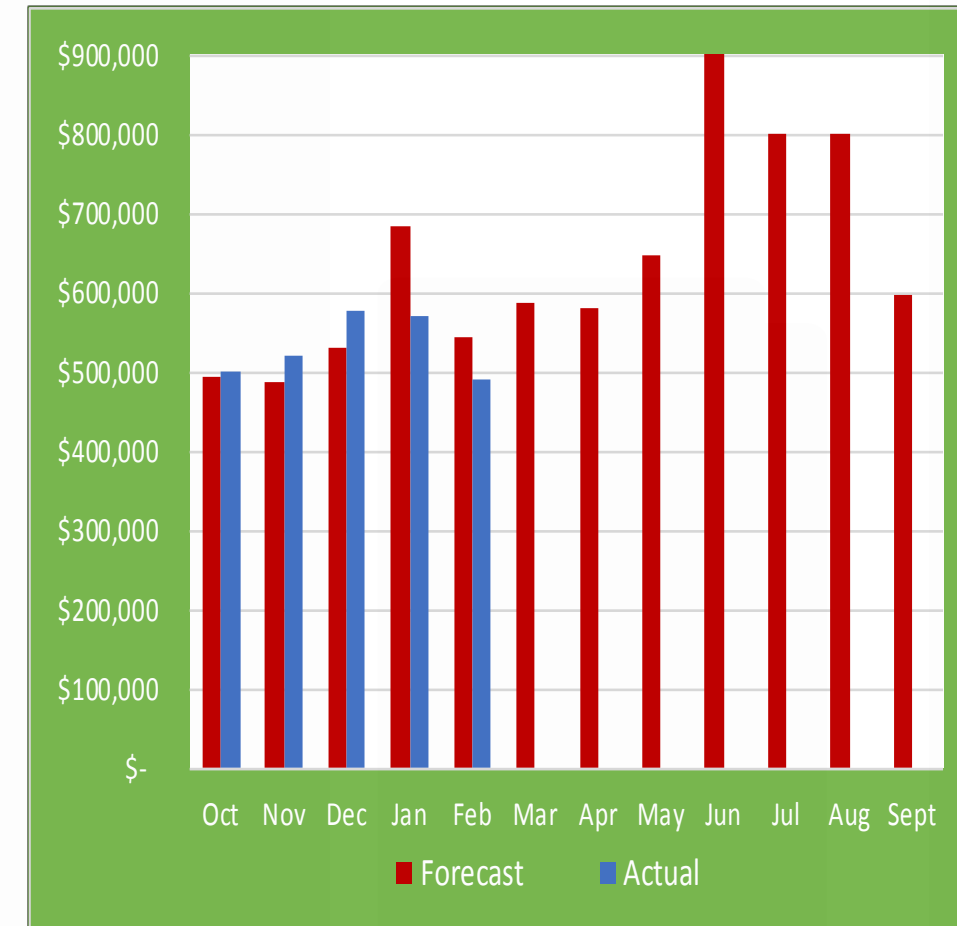
**POSITIVE**

The Electric utility fund is 1.4% net positive. The expense is higher in October due to budgeted annual transfers that were processed during this month.

REVENUE ANALYSIS

ELECTRIC FUND REVENUE

Month	FY2019 Forecast	FY2019 Actual	Monthly Variance
Oct	\$ 492,992	\$ 501,810	\$ 8,818
Nov	485,679	519,423	\$ 33,744
Dec	529,557	578,558	\$ 49,001
Jan	683,131	571,345	\$ (111,786)
Feb	544,870	491,235	\$ (53,635)
Mar	588,062		
Apr	580,749		
May	646,566		
Jun	973,778		
Jul	800,140		
Aug	800,140		
Sept	595,375		
<b>Total</b>	<b>\$ 7,721,039</b>	<b>\$ 2,662,371</b>	<b>\$ (73,858)</b>
Cumulative Forecast	\$ 2,736,229		
Actual to Forecast	\$ (73,858)	-2.70%	



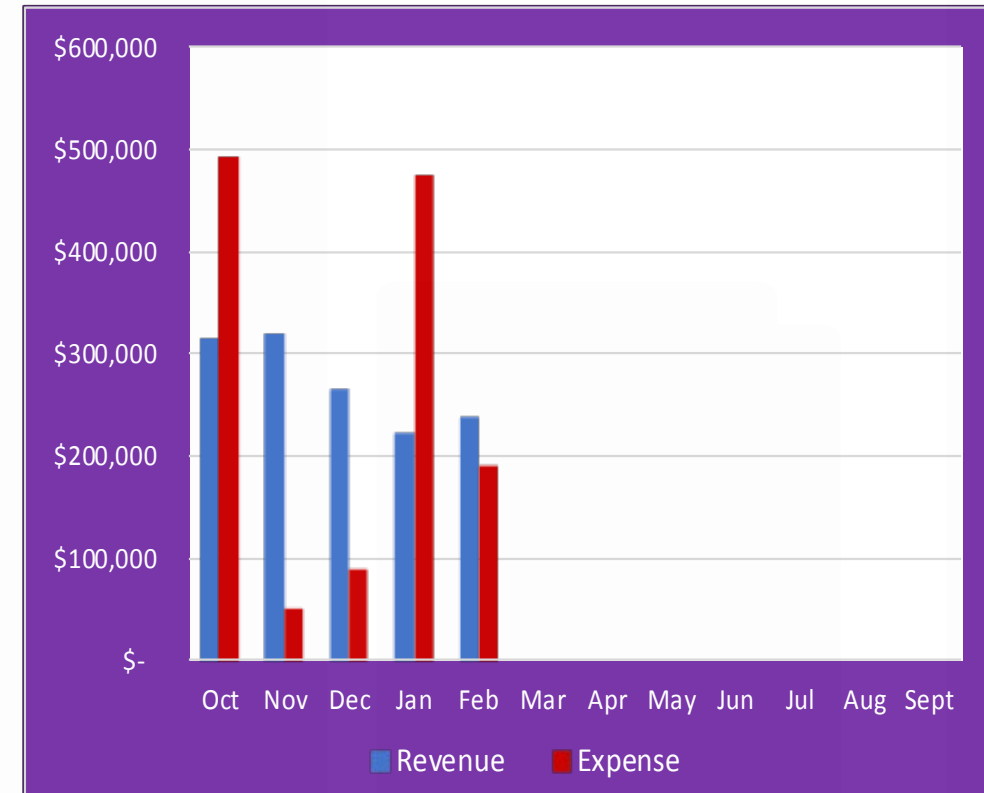
**WARNING**

The Electric utility revenue is 2.7% net negative to forecasted revenue. There was 1 new meter set and it was commercial. The consumption is down due to the mild winter we are experiencing.

OVERALL FUND PERFORMANCE

**HOT TAX FUND REVENUES VS EXPENSES**

<u>Month</u>	<u>FY2019 Revenue</u>	<u>FY2019 Expense</u>	<u>Monthly Variance</u>
Oct	\$ 313,999	\$ 489,369	\$ (175,370)
Nov	318,578	50,241	\$ 268,337
Dec	263,379	89,111	\$ 174,268
Jan	221,133	471,250	\$ (250,117)
Feb	235,767	189,604	\$ 46,163
Mar			
Apr			
May			
Jun			
Jul			
Aug			
Sept			
<b>Total</b>	<b>\$ 1,352,856</b>	<b>\$ 1,289,575</b>	<b>\$ 63,281</b>
Cumulative Forecast	\$ 1,292,161	\$ 1,571,131	\$ (278,970)
Actual to Forecast \$	\$ 60,695	\$ 281,556	\$ 342,251
Actual to Forecast %	4.70%	17.92%	22.62%



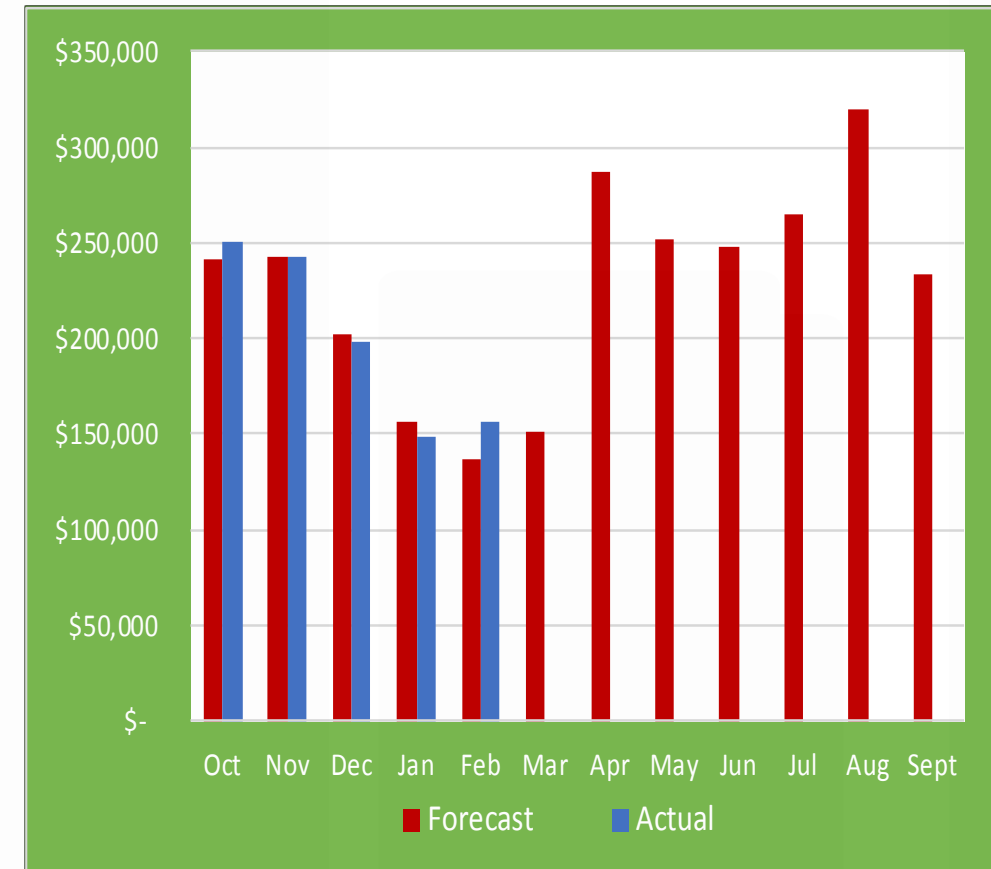
**POSITIVE**

The HOT Tax fund is 22.6% net positive. For FY2019, this fund is now a combined fund of all the HOT funded programs. Visit Bastrop is paid on a quarterly basis along with community asset organizations.

REVENUE ANALYSIS

# HOTEL OCCUPANCY TAX REVENUE

Month	FY2019 Forecast	FY2019 Actual	Monthly Variance
Oct	\$ 241,423	\$ 250,073	\$ 8,650
Nov	242,303	242,469	\$ 166
Dec	202,506	198,757	\$ (3,749)
Jan	156,454	148,141	\$ (8,313)
Feb	137,463	156,795	\$ 19,332
Mar	150,729		
Apr	286,784		
May	251,767		
Jun	247,863		
Jul	265,283		
Aug	319,298		
Sept	234,127		
<b>Total</b>	<b>\$ 2,736,000</b>	<b>\$ 996,235</b>	<b>\$ 16,086</b>
Cumulative Forecast	\$ 980,149		
Actual to Forecast %	\$ 16,086	1.6%	



**POSITIVE**

So far YTD we are 1.6% positive actual to forecast. **The Hotel Tax revenue YTD is \$6,691 less than same time last year.**

# Legal fees by Attorney/Category

COMPREHENSIVE MONTHLY FINANCIAL REPORT –February 2019

FIRM	CASE	FY16-17	FY17-18	FY18-19
<b>BUNDREN</b>				
	Pine Forest Interlocal	\$ 83,620	\$ 26,612	\$ 1,711
	Vandiver	\$ 2,343	\$ -	\$ -
	Aqua CCN	\$ 12,898	\$ -	\$ -
	Red Light Camera Suit	\$ -	\$ -	\$ -
<b>TERRELL LAW FIRM</b>				
	Water permit	\$ 37,630	\$ 135	\$ -
<b>DAVID BRAGG, P.C.</b>				
	General legal	\$ 48,215	\$ -	\$ -
	Vandiver	\$ 9,640	\$ -	\$ -
	Water Permit	\$ 3,120	\$ -	\$ -
	Pine Forest Interlocal	\$ 3,560	\$ -	\$ -
<b>BOJORQUEZ LAW FIRM</b>				
	General legal	\$ 3,299	\$ 245,168	\$ 111,656
	Vandiver	\$ 4,546	\$ 5,079	\$ 152
	Pine Forest Interlocal	\$ -	\$ 10,116	\$ -
	Prosecutor	\$ -	\$ 19,633	\$ 9,831
	Water/Wastewater	\$ -	\$ 18,425	\$ 8,055
<b>MULTIPLE FIRMS</b>				
	XS Ranch Bankruptcy	\$ 7,415	\$ 11,770	\$ -
<b>RUSSEL RODRIGUEZ HYDE</b>				
	XS Ranch Water Rights	\$ 7,607	\$ 27,965	\$ 4,788
	Hunters Crossing PID	\$ 17,927	\$ 83,524	\$ 25,130
	Water/Wastewater	\$ -	\$ 910	\$ -
<b>TAYLOR, OLSON, ADKINS, SRALLA &amp; ELAM, LLP</b>				
	Red Light Camera Suit	\$ 443	\$ 2,124	\$ 601
	<b>Total Legal</b>	\$ 242,263	\$ 451,460	\$ 161,923

## Summary by Case/Type

Row Labels	Sum of FY16-17	Sum of FY17-18	Sum of FY18-19
Aqua CCN	\$ 12,898	\$ -	\$ -
General legal	\$ 51,514	\$ 245,168	\$ 111,656
Hunters Crossing PID	\$ 17,927	\$ 83,524	\$ 25,130
Pine Forest Interlocal	\$ 87,180	\$ 36,728	\$ 1,711
Prosecutor	\$ -	\$ 19,633	\$ 9,831
Red Light Camera Suit	\$ 443	\$ 2,124	\$ 601
Vandiver	\$ 16,529	\$ 5,079	\$ 152
Water permit	\$ 40,750	\$ 135	\$ -
Water/Wastewater	\$ -	\$ 19,335	\$ 8,055
XS Ranch Bankruptcy	\$ 7,415	\$ 11,770	\$ -
XS Ranch Water Rights	\$ 7,607	\$ 27,965	\$ 4,788
<b>Grand Total</b>	<b>\$ 242,263</b>	<b>\$ 451,460</b>	<b>\$ 161,923</b>



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 9E

**TITLE:**

Receive Monthly Development Update.

**STAFF REPRESENTATIVE:**

Matt Jones, Director of Planning and Development

**BACKGROUND/HISTORY:**

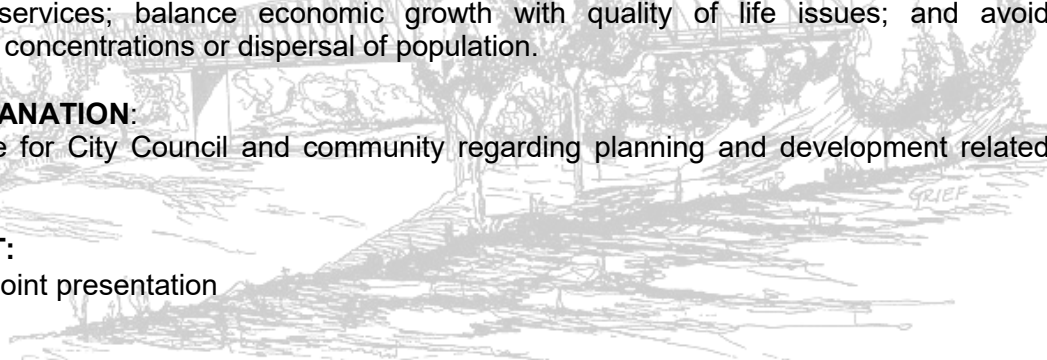
The Planning and Development Department's mission is preserving the past, while facilitating growth and quality of life in harmony with the vision for the City of Bastrop's future. The purpose of the department is to maximize community strengths and minimize weaknesses; protect property rights and enhance property values; anticipate growth and provide adequate public facilities and services; balance economic growth with quality of life issues; and avoid unmanageable concentrations or dispersal of population.

**POLICY EXPLANATION:**

Regular update for City Council and community regarding planning and development related items.

**ATTACHMENT:**

- PowerPoint presentation





# PLANNING & DEVELOPMENT



# Monthly Development Update





# Planning and Development

## Mission and Purpose

### **Mission:**

Preserving the past while facilitating growth and quality of life in harmony with the vision for the City of Bastrop's future.

### **Purpose:**

To maximize community strengths and minimize weaknesses; protect property rights and enhance property values; anticipate growth and provide adequate public facilities and services; balance economic growth with quality of life issues; and avoid unmanageable concentrations or dispersal of population.



# January – March 13<sup>th</sup> Activity Matrix

	January – March 13 <sup>th</sup>	FYTD
Counter Visits	333	933
Permits Issued	163	403
Pre-Application Meetings	32	78



# Moratorium Metrics

Total Permits Issued	551
Trade	416
Building (Residential & Commercial)	135
Exception Applications	19
Exception Letters Issued	20
Exemption Applications	34
Exemptions Approved	36
Pre-Submission Meetings Held	105
Pre-Submission Meetings Scheduled For Upcoming	3

*\*As of March 13, 2019*



# New Certificate of Occupancy

- **DeLeon Nail Studio – 201 Hunters Crossing Blvd, Suite 3.**
- **The Pit Stop – 1006 Main Street**
- **Home Well Hospice – 702 Main Street, Suite 102**



# Ongoing Commercial Projects

- **Stem and Stone – 1007 Chestnut**
  - **Estimated Completion May 2019 - 75% complete**



# Ongoing Commercial Projects

- **Home Goods – 753 C HWY 71 W**
- **Estimated Completion May 2019 – 60% complete**



# Ongoing Commercial Projects

- **Arby's – 711 HWY 71 W**
- **Now Open!**



# Ongoing Commercial Projects

- **Seton Hospital – 630 HWY 71 W**
- **Estimated Completion October 2019 – 40% complete**





# Ongoing Commercial Projects

- **365 Mini Storage – 510 HWY 71 W**
- **Estimated Completion December 2019 – 10% complete**



# Ongoing Commercial Projects

- **Lost Pines Professional Building – 711 Old Austin Highway**
- **Estimated Completion September 2019 – 25% complete**



# Residential Projects

- **Pecan Park**
  - **84 lots**
- **Piney Creek Bend**
  - **77 lots**
- **The Preserve at Hunter's Crossing**
  - **140 units**
- **The Villages at Hunter's Crossing**
  - **182 units**



# Training and Certifications

## Matt Jones

- **Attended Certified Public Manager Training**



## David Brasich

- **Completed Emergency Management Training**
  - **NIMS 100 and 200**



## Allison Land

- **Initiated studying for the AICP Exam**



# Events

- **Chamber of Commerce Luncheon**
- **Quarterly Employee Luncheon**
- **Employee Meeting with City Manager**





**BUILDING BASTROP**

HONORING OUR AUTHENTIC PAST.  
PLANNING FOR OUR SUSTAINABLE FUTURE.

# Questions or Comments?





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 10

**TITLE:**

## **CITIZEN COMMENTS**

*At this time, three (3) minute comments will be taken from the audience on any topic. To address the Council, please submit a fully completed request card to the City Secretary prior to the beginning of the Citizens' Comment portion of the Council meeting. In accordance with the Texas Open Meetings Act, if a citizen discusses any item not on the agenda, City Council cannot discuss issues raised or make any decision at this time. Instead, City Council is limited to making a statement of specific factual information or a recitation of existing policy in response to the inquiry. Issues may be referred to City Staff for research and possible future action.*

*To address the Council concerning any item on the agenda, please submit a fully completed request card to the City Secretary prior to the start of the meeting.*

*It is not the intention of the City of Bastrop to provide a public forum for the embarrassment or demeaning of any individual or group. Neither is it the intention of the Council to allow a member of the public to slur the performance, honesty and/or integrity of the Council, as a body, or any member or members of the Council individually or collectively, or members of the City's staff. Accordingly, profane, insulting or threatening language directed toward the Council and/or any person in the Council's presence will not be tolerated.*



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 11A

**TITLE:**

Consider action to approve City Council minutes from the March 12, 2019, regular meeting.

**STAFF REPRESENTATIVE:**

Lynda Humble, City Manager  
Ann Franklin, City Secretary

**BACKGROUND/HISTORY:**

N/A

**POLICY EXPLANATION:**

Section 551.021 of the Government Code provides as follows:

- (a) A governmental body shall prepare and keep minutes or make a tape recording of each open meeting of the body.
- (b) The minutes must:
  1. State the subject of each deliberation; and
  2. Indicate the vote, order, decision, or other action taken.

**FUNDING SOURCE:**

N/A

**RECOMMENDATION:**

Consider action to approve City Council minutes from the March 12, 2019, regular meeting.

**ATTACHMENTS:**

- March 12, 2019, DRAFT Regular Meeting Minutes.



**BASTROP CITY COUNCIL  
MARCH 12, 2019**

The Bastrop City Council met in a Regular Meeting on Tuesday, March 12, 2019, at 5:00 p.m. at the Bastrop City Hall Council Chambers, located at 1311 Chestnut Street, Bastrop, Texas. Members present were Mayor Schroeder, Mayor Pro Tem Nelson and Council Members Ennis, Rogers and Peterson. Ms. Jones arrived at 6:04 p.m. Officers present were City Manager Lynda Humble, Deputy City Secretary Traci Chavez and City Attorney Alan Bojorquez.

**EXECUTIVE SESSION – CALL TO ORDER**

At 5:00 p.m. Mayor Schroeder convened the City Council into a closed executive session pursuant to the Texas Government Code, Chapter 551, et seq, to discuss the following:

- 2A. City Council shall convene into closed executive session pursuant to Section 551.071 of the Texas Government Code to confer with City Attorney regarding status of Building Bastrop Codes.

The Bastrop City Council reconvened at 6:30 p.m. into open session to take any necessary or appropriate action on matters posed for consideration in closed/executive session.

**No action was taken.**

**REGULAR SESSION – CALL TO ORDER**

At 6:30 p.m. Mayor Schroeder called the regular session to order with a quorum being present.

**PLEDGE OF ALLEGIANCE**

Caitlin Guerra - Bastrop High School Student Council

**INVOCATION**

Cliff Sparks, Police Chaplain gave the invocation

**PRESENTATIONS**

- 7A. Mayor's Report  
7B. Councilmembers' Report  
7C. City Manager's Report

**ITEMS FOR INDIVIDUAL CONSIDERATION**

- 12A. Consider action and approve Resolution No. R-2019-27 of the City Council of the City of Bastrop, Texas, making determinations regarding certain project-specific Exceptions and/or Exemptions as provided by Emergency Ordinance 2018-1, Section 8 (Temporary Moratorium); and Emergency Ordinance 2018-2, Section 7 (Emergency Drainage Application Rules).

**Presentation was made by Assistant Director of Planning and Zoning, Jennifer Bills.**

**A motion was made by Council Member Jones to approve Resolution No. R-2019-27 for B J Mayes Road, seconded by Council Member Peterson, motion was approved on a 5-0 vote.**

**A motion was made by Council Member Jones to approve Resolution No. R-2019-27 for 202 W. SH 71, seconded by Council Member Ennis, motion was approved on a 5-0 vote.**

- 12B. Consider action to approve Resolution No. R-2019-22 of the City Council of the City of Bastrop, Texas approving a task order for additional design, bidding, and construction phase services for the Main Street Field Engineering Project to MWM DesignGroup in the amount of Seventy-eight Thousand Ten Dollars and Seventy-five Cents (\$78,010.75) as attached in Exhibit A , authorizing the City Manager to execute all necessary documents; providing for a repealing clause; and establishing an effective date.

**Presentation was made by Managing Director of Public Works and Utilities, Trey Job.**

**A motion was made by Council Member Peterson to approve Resolution No. R-2019-22, seconded by Council Member Jones, motion was approved on a 5-0 vote.**

- 12C. Consider action to approve Resolution No. R-2019-26 of the City Council of the City of Bastrop, Texas to approve a subdivision variance to allow the relocation of an overhead electric line to remain overhead when all utilities are required to go underground within the Pecan Park Residential Planned Development, located west of Sterling Drive and north of the Colorado River, as shown in Exhibit A; within the city limits of Bastrop, Texas; providing for a repealing clause; and establishing an effective date.

**Presentation was made by Assistant Director of Planning and Zoning, Jennifer Bills.**

**A motion was made by Council Member Rogers to approve Resolution No. R-2019-26, seconded by Council Member Ennis, motion was approved on a 4-1 vote with Council Member Jones voting nay.**

- 12D. Consider action to approve Resolution No. R-2019-28 of the City Council of the City of Bastrop, Texas approving a contract to provide services as Presiding Municipal Judge to Blas Coy, Jr.; attached as Exhibit A; authorize the City Manager to execute necessary documentation; providing for a repealing clause; and establishing an effective date.

**Presentation was made by Chief Finance Officer, Tracy Waldron.**

**A motion was made by Council Member Jones to approve Resolution No. R-2019-28, seconded by Council Member Peterson, motion was approved on a 5-0 vote.**

## **STAFF AND BOARD REPORTS – NONE**

## **CITIZEN COMMENTS**

10A. David Bryant Perkins  
1307 Church Street  
Bastrop, Texas 78602

M. Stephen Beard  
5408 Point Wood Circle  
Waco, Texas 76710

Glenn Johnson  
1109 Pecan Street  
Bastrop, Texas 78602

**CONSENT AGENDA**

**A motion was made by Mayor Pro Tem Nelson to approve item 11A, with correction to add the teachers name, 11B and 11C listed on the Consent Agenda after being read into the record by Deputy City Secretary, Traci Chavez. Seconded by Council Member Ennis, motion was approved on a 5-0 vote.**

- 11A. Consider action to approve City Council minutes from the February 26, 2019, regular meeting.
- 11B. Consider action to approve the second reading of Ordinance No. 2019-04 of the City Council of the City of Bastrop, Texas amending the Bylaws of the Youth Advisory Council; including a severability clause; and providing an effective date.
- 11C. Consider action to approve second reading of Ordinance No. 2019-02 of the City Council of the City of Bastrop, Texas amending the Bastrop City Code of Ordinances Chapter 13, Article 13.02, Section 13.02.002 "Wastewater Service Charge"; repealing conflicting provisions; providing for severability; proper notice and meeting; and establishing for an effective date.

**WORK SESSION/BRIEFINGS**

- 8D. Update and discussion of current Legislative Session and its impact on local municipalities.  
**Mayor Schroeder gave an update to Council.**
- 8A. Continue discussion from the February 26, 2019 City Council Meeting regarding the low impact development (geographically sensitive) design standards of the new proposed drainage code revisions.  
**City Manager, Lynda Humble shared a power point presentation and provided an update to Council.**

**Break – Mayor Schroeder recessed at 8:02 p.m. Mayor Schroeder called the meeting back into order at 8:12 p.m.**

- 8B. Receive presentation and hold discussion regarding the proposed framework and pattern book as part of the Bastrop Building Blocks code revisions (B<sup>3</sup>) with Matt Lewis at SimpleCity Design.  
**Mr. Lewis shared a power point presentation and provided an update to the Council.**
- 8C. Update and discussion regarding the Old Iron Bridge with Brian LaFoy of Kimley Horn.  
**City Manager, Lynda Humble provided some back-ground information to the Council. Mr. Brian LaFoy shared a power point and provided an update to Council.**

**ADJOURNMENT**

**Adjourned at 9:06 p.m. without objection.**

Approved:

Attest:

\_\_\_\_\_  
Mayor Connie Schroeder

\_\_\_\_\_  
Deputy City Secretary Traci Chavez

DRAFT



# STAFF REPORT

**MEETING DATE:** March 26, 2019

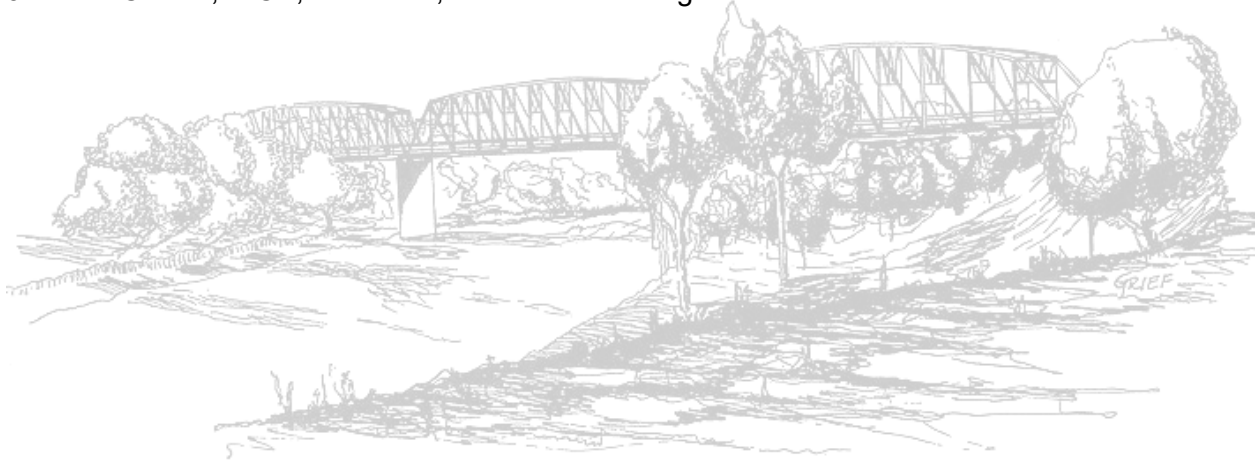
**AGENDA ITEM:** 12A

**TITLE:**

Consider action and approve Resolution No. R-2019-29 of the City Council of the City of Bastrop, Texas, making determinations regarding certain project-specific Exceptions and/or Exemptions as provided by Emergency Ordinance 2018-1, Section 8 (Temporary Moratorium); and Emergency Ordinance 2018-2, Section 7 (Emergency Drainage Application Rules).

**STAFF REPRESENTATIVE:**

Jennifer C. Bills, AICP, LEED AP, Assistant Planning Director





# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 12B

**TITLE:**

Consider action to approve first reading of Ordinance No. 2019-05 of the City Council of the City of Bastrop, Texas amending the City of Bastrop, Texas Code of Ordinances, Chapter 3 Building Regulations, Article 3.17 Flood Damage Prevention, Section 3.17.007 Administration to allow the City Manager to appoint a designee to serve as Floodplain Administrator; repealing conflicting provisions; providing for severability; proper notice and meeting; establishing for an effective date; and move to include on the April 9, 2019 consent agenda for second reading.

**STAFF REPRESENTATIVE:**

Matt Jones, Director of Planning and Development

**BACKGROUND/HISTORY:**

The Floodplain Administrator is responsible for administering the Flood Damage Prevention Ordinance. This Ordinance is designed to minimize flood losses in flood hazard areas by elevating, floodproofing, and otherwise protecting property from flood damage. Flood mitigation is accomplished by methods such as elevating structures, restricting or prohibiting uses, controlling the alteration of natural floodplains and streams, and regulating flood barriers. Technical training, knowledge, and skills are needed to adequately understand and administer the Flood Damage Prevention Ordinance. Currently, Section 3.17.007 appoints the City Manager as the Floodplain Administrator with no consideration to allow a designee.

**POLICY EXPLANATION:**

This ordinance amendment adds the text “or their designee” to allow the City Manager to appoint appropriate staff to serve as Floodplain Administrator and ensures that qualified personnel are administering the Flood Damage Prevention Ordinance. This change to the Code of Ordinances can only be made through an ordinance amendment approved by City Council. The proposed amendment would read as follows:

Section 3.17.007 Administration

- (a) *Designation of the Floodplain Administrator.* The City Manager, **or their designee**, is hereby appointed the Floodplain Administrator to administer and implement the provisions of this section and other appropriate sections of 44 CFR (Emergency Management and Assistance National Flood Insurance Program regulations) pertaining to floodplain management.

**FUNDING SOURCE:**

NA

**RECOMMENDATION:**

Consider action to approve first reading of Ordinance 2019-05 of the City Council of the City of Bastrop, Texas amending the City of Bastrop, Texas Code of Ordinances, Chapter 3 Building Regulations, Article 3.17 Flood Damage Prevention, Section 3.17.007 Administration to allow the City Manager to appoint a designee to serve as Floodplain Administrator; repealing conflicting provisions; providing for severability; proper notice and meeting; establishing for an effective date; and move to include on the April 9, 2019 consent agenda for second reading.

**ATTACHMENTS:**

- Ordinance 2019-05



**ORDINANCE NO. 2019-05**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS, AMENDING THE CITY OF BASTROP, TEXAS CODE OF ORDINANCES, CHAPTER 3 BUILDING REGULATIONS, ARTICLE 3.17 FLOOD DAMAGE PREVENTION, SECTION 3.17.007 ADMINISTRATION TO ALLOW THE CITY MANAGER TO APPOINT A DESIGNEE TO SERVE AS FLOODPLAIN ADMINISTRATOR; REPEALING CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; PROPER NOTICE AND MEETING; ESTABLISHING FOR AN EFFECTIVE DATE; AND MOVE TO INCLUDE ON THE APRIL 9, 2019 CONSENT AGENDA FOR SECOND READING.**

**WHEREAS**, the City Manager is the only person currently designated to serve as the Floodplain Administrator; and

**WHEREAS**, technical training, knowledge, and skills are required to adequately perform in the position of Floodplain Administrator; and

**WHEREAS**, the technical training, knowledge, and skills required for a Floodplain Administrator are separate from the training, knowledge, and skills of a City Manager; and

**WHEREAS**, the City Manager makes assignments, appointments, and staffing decisions based on the best qualified personnel.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS THAT:**

**Section 1:** That Chapter 3 of the City of Bastrop, Texas Code of Ordinances, entitled "Building Regulations", Article 3.17, entitled "Flood Damage Prevention", Section 3.17.007, entitled "Administration", shall be amended as follows:

**ARTICLE 3.17 - FLOOD DAMAGE PREVENTION**

**Section 3.17.007 Administration**

- (a) *Designation of the Floodplain Administrator.* The City Manager, or their designee, is hereby appointed the Floodplain Administrator to administer and implement the provisions of this section and other appropriate sections of 44 CFR (Emergency Management and Assistance National Flood Insurance Program regulations) pertaining to floodplain management.
- (b) *no change*
- (c) *no change*
- (d) *no change*

**Section 2:** In the case of any conflict between the other provisions of this Ordinance and any existing Ordinance of the City, the provisions of this Ordinance will control.



**Section 3:** If any provision of this Ordinance or the application thereof to any person or circumstances is held invalid, that invalidity or the unenforceability will not affect any other provisions or applications of this Ordinance that can be given effect without the invalid provision.

**Section 4:** This Ordinance shall be effective immediately after this ordinance is adopted (second reading April 9, 2019).

**Section 5:** It is hereby officially found and determined that the meeting at which this Ordinance was passed was open to the public, and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Texas Government Code, Chapter 551.

**READ and APPROVED** on First Reading on the 26<sup>th</sup> day of March 2019.

**READ and ADOPTED** on Second Reading on the 9<sup>th</sup> day of April 2019.

**APPROVED:**

\_\_\_\_\_  
Connie B. Schroeder, Mayor

**ATTEST:**

\_\_\_\_\_  
Ann Franklin, City Secretary

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Alan Bojorquez, City Attorney



# STAFF REPORT

**MEETING DATE:** March 26, 2019

**AGENDA ITEM:** 12C

**TITLE:**

Consider action to approve Resolution No. R-2019-30 of the City Council of the City of Bastrop, Texas approving a Professional Services Agreement between the City of Bastrop and SimpleCity Design, LLC dated February 6, 2019 to nullify the previous contract dated August 30, 2018 for Zoning and Sign Ordinances Update and replace those services with creation of the Bastrop Building Block (B<sup>3</sup>) Code, B<sup>3</sup> Pattern Book, and Technical Criteria Manual; and adding additional services for Urban Design Services for Thoroughfare Master Plan and Internal Development Process Alignment for B<sup>3</sup> Code in the amount of Two Hundred Fifty-Six Thousand Six-Hundred (\$256,600.00); authorizing the City Manager to execute all necessary documents; providing for a repealing clause; and establishing an effective date.

**STAFF REPRESENTATIVE:**

Lynda K. Humble, City Manager

**BACKGROUND/HISTORY:**

Included in this FY Year's Budget in the Innovation Fund, there was \$330,325 allocated for the update of the Zoning Ordinance, Sign Ordinance (Phase I - \$176,500 - by SimpleCity Design), and Updates to the International Code, Technical Manual, and Development Review Process (Phase II - \$153,825 - by SimpleCity Design).

Resolution R-2018-74 approved a professional services agreement for \$176,500 for Phase I. Phase I included assessing the City's current codes, which was presented to Council in October; Introduce the DNA Analysis, which was introduced during a Building Bastrop Open House, and to draft a Zoning Ordinance and Sign Code, including seeking public input, which was achieved through the Design Rodeo in November and the Code Rodeo in December.

Phase II has not yet been approved by the City Council. Phase II, as proposed, was to create a Technical Manual, Update the International Codes, and Create a Development Review Process.

Once the Design and Code Rodeos were completed, it became obvious that writing a "traditional" zoning ordinance would not achieve the Purpose Statement created by Council, which is:

***"To create a fiscally sustainable community through land-use regulations that are authentic Bastrop and geographically sensitive."***

It was also determined that it would also not resolved the conflicts that exists between Ordinances that regulate development in our existing Code of Ordinances.

It was determined that a Unified Development Code to be known as Bastrop Building Block (B<sup>3</sup>) Development Code, accompanied by a B<sup>3</sup> Pattern Book, and Technical Criteria Manual could be created that would ensure all aspects of the City's Purpose Statement would be achieved. This code is being developed to create a fiscally sustainable community, drafting regulations that are specifically geographically sensitive without having a one-size-fits-all approach, and ensuring that the end-result is Authentic Bastrop using the DNA analysis extracted from Downtown as its foundation. Staff will complete the International Code Updates in-house.

As a part of the Policy Statement adopted by Council, it recognizes that the single most important element of achieving fiscal sustainability is having a gridded street network. Updating the Transportation Master Plan, Chapter 5 – Thoroughfare Plan was not contemplated during the budget process, which will be led by Kimley-Horn from an engineering perspective. SimpleCity Design will handle the urban design aspects of the street network by providing proposed street classifications and street designs to Kimley-Horn and ensuring a cohesive integration of these designs into the Development Code and Thoroughfare Plan. In addition, there is a need to internally align of our Internal Development Review Process to accommodate the changes that will come with the B<sup>3</sup> Codes. These additional services will cost \$45,200. In the Innovation Fund, there was \$75,000 allocated for the Fire Feasibility Study. We will not be conducting that study in FY 2019, which will discuss in more detail during the April 24<sup>th</sup> Mid-Year Budget Review. Therefore, there is money available to cover the costs of these new services in this year's budget.

A summary of all changes is outlined below:

	Phase Description	Budgeted Amount	R-2018-74 Amount Spent To Date	R-2018-30 Amount Remaining to be Spent
<b>Phase I:</b> (Approved R-2018-74)	<b>Assess Current Codes; Introduce DNA Analysis; Write Zoning Ordinance &amp; Sign Ordinance; Hold Public Input Process</b>	<b>\$176,500</b>	<b>\$118,925</b>	<b>\$57,575**</b>
<b>Phase II:</b> (Revised from Original Submittal – Budgeted but not yet approved - Will be approved with adoption of R-2019-30)	<b>Remove requirement to write Zoning Ordinance from Phase II - Replace with creation of Bastrop Building Block (B3) Code, B3 Pattern Book, and Technical Manual; Remove requirement to update International Codes – to be updated by Staff.</b>	<b>\$153,825</b>	<b>\$0</b>	<b>\$156,825</b>
<b>Phase III:</b> (New Services Not contemplated during Budget – Will be approved with adoption of R-2019-30)	<b>Urban Design of the Street Aspects to inform Transportation – Work with Kimley-Horn (Will provide proposed Street Classifications &amp; Street Designs) and assist Internal Alignment of Development Review Process</b>	<b>\$45,200</b>	<b>\$0</b>	<b>\$42,200</b>
<b>TOTAL</b>		<b>\$375,525</b>	<b>\$118,295</b>	<b>\$256,600</b>

\*\* The remaining \$57,575 of August 30, 2018 Agreement, approved by R-2018-74, will be reallocated to the March 15, 2019 Professional Services Agreement.

**POLICY EXPLANATION:**

The City's Financial Policy, Section VII – Expenditure Control, Item F – Professional Services requires all professional services contracts \$50,000 or more to be approved by City Council.

**FUNDING SOURCE:**

Innovation Fund – FY 2019 Budget

**RECOMMENDATION:**

Consider action to approve Resolution No. R-2019-30 of the City Council of the City of Bastrop, Texas approving a Professional Services Agreement between the City of Bastrop and SimpleCity Design, LLC dated February 6, 2019 to nullify the previous contract dated August 30, 2018 for Zoning and Sign Ordinances Update and replace those services with creation of the Bastrop Building Block (B<sup>3</sup>) Code, B<sup>3</sup> Pattern Book, and Technical Criteria Manual; and adding additional services for Urban Design Services for Thoroughfare Master Plan and Internal Development Process Alignment for B<sup>3</sup> Code in the amount of Two Hundred Fifty-Six Thousand Six-Hundred (\$256,600.00); authorizing the City Manager to execute all necessary documents; providing for a repealing clause; and establishing an effective date.

**ATTACHMENTS:**

- Resolution
- Professional Services Agreement – SimpleCity Design



**RESOLUTION NO. R-2019-30**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS APPROVING A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF BASTROP AND SIMPLECITY DESIGN, LLC DATED FEBRUARY 6, 2019 TO NULLIFY THE PREVIOUS CONTRACT DATED AUGUST 30, 2018 FOR ZONING AND SIGN ORDINANCES UPDATE AND REPLACE THOSE SERVICES WITH CREATION OF THE BASTROP BUILDING BLOCK (B<sup>3</sup>) CODE, B<sup>3</sup> PATTERN BOOK, AND TECHNICAL CRITERIA MANUAL; AND ADDING ADDITIONAL SERVICES FOR URBAN DESIGN SERVICES FOR THOROUGHFARE MASTER PLAN AND INTERNAL DEVELOPMENT PROCESS ALIGNMENT FOR B<sup>3</sup> CODE IN THE AMOUNT OF TWO HUNDRED FIFTY-SIX THOUSAND SIX-HUNDRED (\$256,600.00); AUTHORIZING THE CITY MANAGER TO EXECUTE ALL NECESSARY DOCUMENTS; PROVIDING FOR A REPEALING CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.**

**WHEREAS**, Included in this FY Year's Budget in the Innovation Fund, there was \$330,325 allocated for the update of the Zoning Ordinance, Sign Ordinance (Phase I - \$176,500 - by SimpleCity Design), and Updates to the International Code, Technical Manual, and Development Review Process (Phase II - \$153,825 - by SimpleCity Design); and

**WHEREAS**, Resolution R-2018-74 approved a professional services agreement for \$176,500 for Phase I. Phase I included assessing the City's current codes, which was presented to Council in October; Introduce the DNA Analysis, which was introduced during a Building Bastrop Open House, and to draft a Zoning Ordinance and Sign Code, including seeking public input, which was achieved through the Design Rodeo in November and the Code Rodeo in December; and

**WHEREAS**, Phase II has not yet been approved by the City Council. Phase II, as proposed, was to create a Technical Manual, Update the International Codes, and Create a Development Review Process; and

**WHEREAS**, once the Design and Code Rodeos were completed, it became obvious that writing a "traditional" zoning ordinance would not achieve the Purpose Statement created by Council, which is ***"to create a fiscally sustainable community through land-use regulations that are authentic Bastrop and geographically sensitive;"*** and

**WHEREAS**, it was also determined that it would also not resolved the conflicts that exists between Ordinances that regulate development in our existing Code of Ordinances; and

**WHEREAS**, it was determined that a Unified Development Code to be known as Bastrop Building Block (B<sup>3</sup>) Development Code, accompanied by a B<sup>3</sup> Pattern Book, and Technical Criteria Manual could be created that would ensure all aspects of the City's Purpose Statement would be achieved; and

**WHEREAS**, B<sup>3</sup> Development Code is being developed to create a fiscally sustainable community, drafting regulations that are specifically geographically sensitive without having a one-size-fits-all approach, and ensuring that the end-result is Authentic Bastrop using the DNA

analysis extracted from Downtown as its foundation. Staff will complete the International Code Updates in-house; and

**WHEREAS**, as a part of the Policy Statement adopted by Council, it recognizes that the single most important element of achieving fiscal sustainability is having a gridded street network. Updating the Transportation Master Plan, Chapter 5 – Thoroughfare Plan was not contemplated during the budget process, which will be led by Kimley-Horn from an engineering perspective; and

**WHEREAS**, SimpleCity Design will handle the urban design aspects of the street network by providing proposed street classifications and street designs to Kimley-Horn and ensuring a cohesive integration of these designs into the Development Code and Thoroughfare Plan; and

**WHEREAS**, in addition, there is a need to internally align of our Internal Development Review Process to accommodate the changes that will come with the B<sup>3</sup> Codes.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS:**

**Section 1:** That the City Manager is hereby authorized to execute a Contract with Simplecity Design, LLC in the amount of Two Hundred Fifty-Six Thousand Six Hundred and 00/100 Dollars (\$256,600.00), which is attached as Exhibit A.

**Section 2:** All orders, ordinances, and resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

**Section 3:** That this Resolution shall take effect immediately upon its passage, and it is so resolved.

**DULY RESOLVED AND ADOPTED** by the City Council of the City of Bastrop this 26<sup>th</sup>, day of March 2018.

**APPROVED:**

---

Connie B. Schroeder, Mayor

**ATTEST:**

---

Ann Franklin, City Secretary

**APPROVED AS TO FORM:**

---

Alan Bojorquez, City Attorney

February 6, 2019

Lynda Humble, City Manager  
City of Bastrop  
1311 Chestnut  
Bastrop, Texas 78602

Per your request, I am pleased to submit this proposal for Simplecity Design to provide professional consulting services to the City of Bastrop to create the Bastrop Building Block, B<sup>3</sup> Code, including zoning, neighborhood configurations and platting, signs and associated development standards to guide the future of the City to a fiscally sustainable, walkable and geographically sensitive City; as defined by the Council Policy Statement.

REVISED PROFESSIONAL SERVICES CONTRACT AMENDING AND NULLIFYING THE PREVIOUS CONTRACT "ZONING & SIGN ORDINANCE UPDATE AND ASSOCIATED SERVICES" AND REPLACING WITH THE SCOPE OF THIS CONTRACT" THE BASTROP BUILDING BLOCK(B<sup>3</sup>) CODE, B<sup>3</sup> PATTERN BOOK, DEVELOPMENT PROCESS, TECHNICAL CRITERIA MANUAL AND ADD ALTERNATIVE URBAN DESIGN STREET REVIEW AND ASSOCIATED STANDARDS AND DEVELOPMENT ASSISTANCE.

## **SCOPE OF SERVICES- APPENDIX "A"**

The following tasks will be completed as part of the contract:

### **TASK 1 BASTROP BUILDING BLOCK B<sup>3</sup> CODE**

1. Create a local, geographically sensitive, and fiscally sustainable development code
2. Attend regular meetings with City Staff on to updates as determined by project need
3. Provide City Council, and boards and commissions updates as determined by project need
4. Host public comment sessions at City Council and Planning Commission meetings and workshops
5. The Final B<sup>3</sup> documents will be prepared for adoption and presentations for the Planning & Zoning Commission and City Council will be created



6. Attend and present at the public hearings for the Planning Commission and City Council thought the entire adoption Process

### **Deliverables**

B<sup>3</sup> Document Framework

B<sup>3</sup> Draft Documents and B<sup>3</sup> Map

B<sup>3</sup> Review Workshop

Community Forums (Up to 3)

Final B<sup>3</sup> Outline and B<sup>3</sup> Map

B<sup>3</sup> Review Workshop

Final Draft Document and B<sup>3</sup> Map

Review Session with City Staff

Pop Up Street Project Collaboration

Adoption Attendance and Presentations

### **TASK 1: \$116,650**

### **Task 2: B<sup>3</sup> PATTERN BOOK**

1. Create a Pattern Book with architectural guidelines or ordinances which will accompany the B<sup>3</sup> Code
2. Attend regular meetings with City Staff on to updates as determined by project need
3. Provide City Council, and boards and commissions updates as determined by project need
4. Host public comment sessions at City Council and Planning Commission meetings and workshops
5. The Final B<sup>3</sup> Pattern Book will be prepared for adoption and presentations for the Planning & Zoning Commission and City Council will be created

6. Attend and present at the public hearings for the Planning Commission and City Council thought the entire adoption Process

### **Deliverables**

Pattern Book Framework

Draft Pattern Book

B<sup>3</sup> Review Workshop

(2) Community Forums

Final B<sup>3</sup> Pattern Book Outline

B<sup>3</sup> Review Workshop

Final B<sup>3</sup> Pattern Book

Adoption Attendance and Presentations for hearings

**TASK 2 : \$40,150**

### **TASK 3 DEVELOPMENT PROCESS**

1. Assist staff in reviewing existing process, determining the framework for the new process and reviewing updated process
2. Assist staff in testing, refining the process alignment with the B<sup>3</sup> Code
3. Host public comment sessions at City Council and Planning Commission meetings and workshops

### **Deliverables**

Integration of Development Process into B<sup>3</sup> Code

**TASK 3: \$19,500**

### **TASK 4 TECHNICAL CRITERIA MANUAL (TCM)**

1. Create a TCM with local standards aligned with the purpose and intent of the B<sup>3</sup> Code

2. Attend regular meetings with City Staff on to updates as determined by project need
3. Provide City Council, and boards and commissions updates as determined by project need
4. Host public comment sessions at City Council and Planning Commission meetings and workshops

### **Deliverables**

TCM Framework

Preliminary Draft TCM

Review Workshop

Final Draft TCM

Review Workshop

Final TCM Document

Adoption Attendance and Presentations

**TASK 4: \$57,300**

### **City Responsibilities**

- Assist in scheduling, preparation and providing for the review workshops, forums and popup
- Review draft materials and provide a single, consolidated set of review comments
- Distribute information for citizen review and comment; collect and consolidate comments from stakeholders, citizens, P&Z and Council

**TOTAL CONTRACT**

**\$233,600**

**(OPTIONAL) ADD ALTERNATE URBAN DESIGN STREET ASSISTANCE AND STANDARDS CREATION**

**TASK 5 URBAN DESIGN ASSISTANCE, REVIEW AND RECOMMENDATIONS AND STREET STANDARDS**

1. Collaborate with Master Transportation Plan (MTP) Consultant to ensure the recommendations align with the B3 Code intent, designs, and requirements
2. Attend meetings with City Staff and MTP Consultant on to updates as determined by project need, (4 Meetings Budgeted)
3. Assist in creating, reviewing and making recommendations on terminology, standards, placement, grid structure, geographic grid interruptions, cross sections, and functional classifications (if used)
4. Integration of updates into the B3 Code to ensure regulatory alignment

**TASK 5 COST: \$23,000**

**(OPTIONAL) ADD ALTERNATE**

**TASK 6 DEVELOPMENT REVIEW, STAFF ASSISTANCE, PROJECT SPECIFIC WORK, & CODE ADMINISTRATION ASSISTANCE**

**COST: NOT TO EXCEED \$50,000 WITHIN THE YEAR.**

We look forward to ensuring the City of Bastrop has the development tools which reflect its heritage and lead the city to a resilient future.

Sincerely,

A handwritten signature in black ink, appearing to read "M H / -" with a small superscript "a" above the second vertical stroke.

Matt Lewis, CNUa

President

Simplecity Design, LLC

CITY OF BASTROP, TEXAS "BASTROP BUILDING BLOCK(B<sup>3</sup>) CODE, B<sup>3</sup> PATTERN BOOK, DEVELOPMENT PROCESS, TECHNICAL CRITERIA MANUAL AND ADD ALTERNATIVE URBAN DESIGN STREET REIVEW AND ASSOCIATED STANDARDS AND DEVELOPMENT ASSISTANCE" CONTRACT AGREEMENT

THIS CONSULTING AGREEMENT (the "Agreement") dated this 6th day of February, 2019

Between:

City of Bastrop, Texas at 1311 Chestnut St., Bastrop, Texas 78602 (the "Client")

- AND -

simplecitydesign, llc. at 704 W. Crestland, Austin, Texas, 78752 (the "Contractor").

- A. The Client is of the opinion that the Contractor has the necessary qualifications, experience and abilities to provide services to the Client.
- B. The Contractor is agreeable to providing such services to the Client on the terms and conditions set out in this Agreement.

IN CONSIDERATION OF the matters described above and of the mutual benefits and obligations set forth in this Agreement, the receipt and sufficiency of which consideration is hereby acknowledged, the Client and the Contractor (individually the "Party" and collectively the "Parties" to this Agreement) agree as follows:

#### Services Provided

1. The Client hereby agrees to engage the Contractor to provide the Client with services (the "Services") consisting of:

Services Described in Appendix "A".

2. The Services will also include any other tasks which the Parties may agree on. The Contractor hereby agrees to provide such Services to the Client.

## Term of Agreement

3. The term of this Agreement (the "Term") will begin on the date of this Agreement and will remain in full force and effect until the completion of the Services, subject to earlier termination as provided in this Agreement. The Term of this Agreement may be extended with the written consent of the Parties.
4. In the event that either Party wishes to terminate this Agreement prior to the completion of the Services, that Party will be required to provide 30 days' written notice to the other Party.

## Performance

5. The Parties agree to do everything necessary to ensure that the terms of this Agreement take effect.

## Currency

6. Except as otherwise provided in this Agreement, all monetary amounts referred to in this Agreement are in USD (US Dollars).

## Compensation

7. For the services rendered by the Contractor as required by this Agreement, the Client will provide compensation (the "Compensation") to the Contractor at the completion for each Tasks as described in Appendix "A".
8. The Client will be invoiced monthly, bi-monthly in this fixed fee contract as described in Appendix "A".
9. Invoices submitted by the Contractor to the Client are due upon of receipt.
10. The Compensation as stated in this Agreement does include sales tax, or other applicable duties as may be required by law.

## Reimbursement of Expenses

11. The Contractor's expenses incurred in connection with providing the Services of this Agreement will be invoiced to the client with associated tasks.

## Ownership of Intellectual Property

12. All intellectual property and related material, including any trade secrets, moral rights, goodwill, relevant registrations or applications for registration, and rights in any patent, copyright, trademark, trade dress, industrial design and trade name (the "Intellectual Property") that is developed or produced under this Agreement, is a "work made for hire" and will be the property of the Client. The use of the Intellectual Property by the Client will not be restricted in any manner.
13. The Contractor may use the Intellectual Property for promotion of work and past examples of work performed.

## Return of Property

14. Upon the expiry or termination of this Agreement, the Contractor will return to the Client any property, documentation, records, or confidential information which is the property of the Client.

## Capacity/Independent Contractor

15. In providing the Services under this Agreement it is expressly agreed that the Contractor is acting as an independent contractor and not as an employee. The Contractor and the Client acknowledge that this Agreement does not create a partnership or joint venture between them, and is exclusively a contract for service. The Client is not required to pay, or make any contributions to, any social security, local, state or federal tax, unemployment compensation, workers' compensation, insurance premium, profit-sharing, pension or any other employee benefit for the Contractor during the Term. The Contractor is responsible for paying, and complying with reporting requirements for, all local, state and federal taxes related to payments made to the Contractor under this Agreement.

## Notice

16. All written notices, requests, or other communications required or permitted by the terms of this Agreement will be given in writing and delivered to the Parties of this Agreement as follows:

- a. City of Bastrop

1311 Chestnut St., Bastrop, Texas 78602

- b. simplecitydesign, llc.

704 W. Crestland, Austin, Texas 78752

or to such other address as any Party may from time to time notify the other, and will be deemed to be properly delivered (a) immediately upon being served personally, (b) two days after being deposited with the postal service if served by registered mail, or (c) the following day after being deposited with an overnight courier.

## Indemnification

17. Except to the extent paid in settlement from any applicable insurance policies, and to the extent permitted by applicable law, each Party agrees to indemnify and hold harmless the other Party, and its respective directors, stockholders, affiliates, officers, agents, employees, and permitted successors and assigns against any and all claims, losses, damages, liabilities, penalties, punitive damages, expenses, reasonable legal fees and costs of any kind or amount whatsoever, which result from or arise out of any act or omission of the indemnifying party, its respective directors, stockholders, affiliates, officers, agents, employees, and permitted successors and assigns that occurs in connection with this Agreement. This indemnification will survive the termination of this Agreement.

## Modification of Agreement

18. Any amendment or modification of this Agreement or additional obligation assumed by either Party in connection with this Agreement will only be binding if evidenced in writing signed by each Party or an authorized representative of each Party.



### Time of the Essence

19. Time is of the essence in this Agreement. No extension or variation of this Agreement will operate as a waiver of this provision.

### Assignment

20. The Contractor will not voluntarily, or by operation of law, assign or otherwise transfer its obligations under this Agreement without the prior written consent of the Client, unless otherwise noted in "Exhibit A".

### Entire Agreement

21. It is agreed that there is no representation, warranty, collateral agreement or condition affecting this Agreement except as expressly provided in this Agreement.

### Enurement

22. This Agreement will enure to the benefit of and be binding on the Parties and their respective heirs, executors, administrators and permitted successors and assigns.

### Titles/Headings

23. Headings are inserted for the convenience of the Parties only and are not to be considered when interpreting this Agreement.

### Governing Law

24. It is the intention of the Parties to this Agreement that this Agreement and the performance under this Agreement, and all suits and special proceedings under this Agreement, be construed in accordance with and governed, to the exclusion

of the law of any other forum, by the laws of the State of Texas, without regard to the jurisdiction in which any action or special proceeding may be instituted.

Severability

25. In the event that any of the provisions of this Agreement are held to be invalid or unenforceable in whole or in part, all other provisions will nevertheless continue to be valid and enforceable with the invalid or unenforceable parts severed from the remainder of this Agreement.

Waiver

26. The waiver by either Party of a breach, default, delay or omission of any of the provisions of this Agreement by the other Party will not be construed as a waiver of any subsequent breach of the same or other provisions.

**IN WITNESS WHEREOF** the Parties have duly affixed their signatures under hand and seal on this February 6th, 2019

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Lynda Humble, City Manager

City of Bastrop, Texas (Client)



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Matthew Lewis, President

simplecitydesign,llc (Contractor)