



**Flooding on Meredith St.
November 2001**

Lake Austin – Meredith Storm Drain Improvement Project

**Public Meeting
May 07, 2018**



INTRODUCTIONS

Personnel:

Reem Zoun, P.E. –Supervising Engineer, WPD

Mike Personett –Interim Director, WPD

Marie Lancaster, EIT – Graduate Engineer, WPD

Stephanie Lott – Public Information Officer, WPD

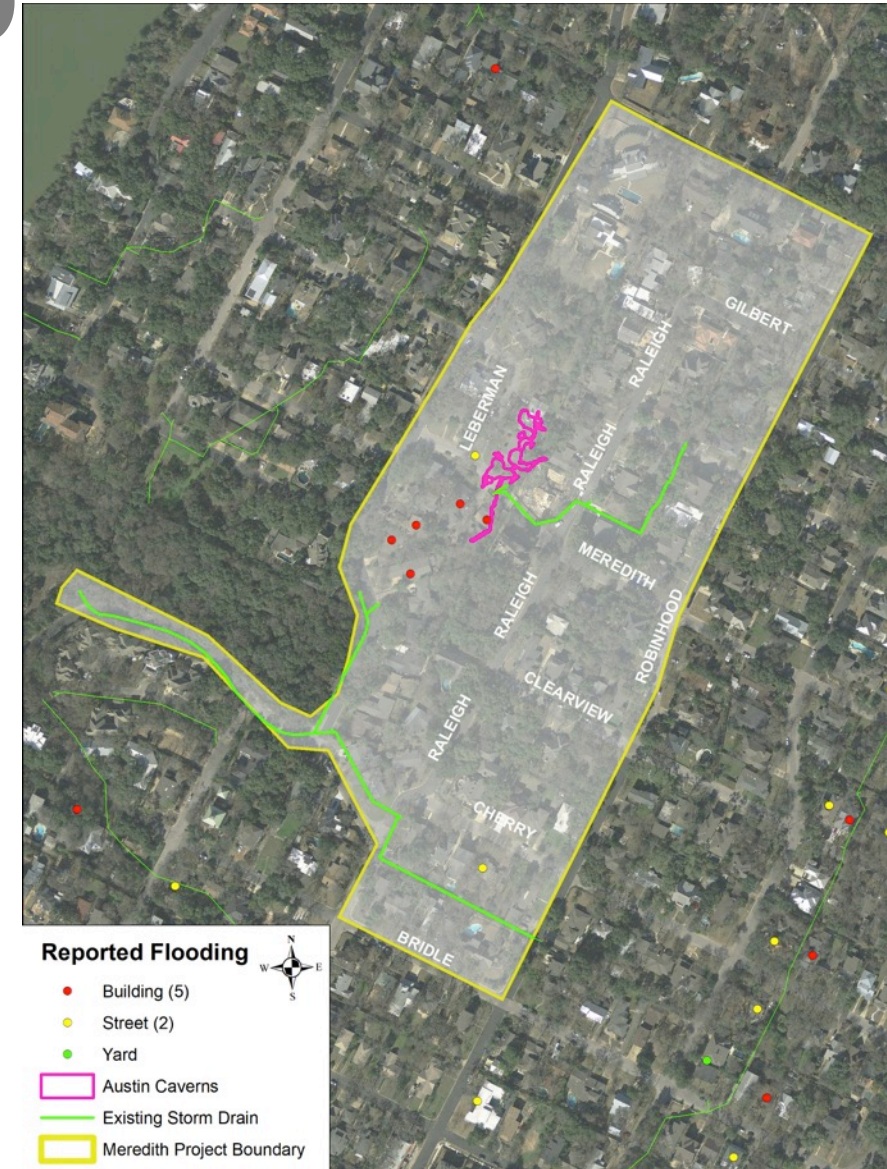
Robyn Smith, PMP – Project Manager, PWD

John Friedman, P.E. - RPS



PROJECT BACKGROUND

- **Meredith Storm Drain Improvement Project**
- **Local Flood Risk Reduction High Priority**
- **Flooding Complaints (7):**
 - 5 Buildings
 - 2 Streets
- **Flooding History**
 - 1995, 1996, 1998, 1999, Nov 2001, June 2004, Sept 2010, May 2011, Oct 2013, Jan 2015, May 2015, June 2015, 2016, May 2018
- **Purpose of this meeting**





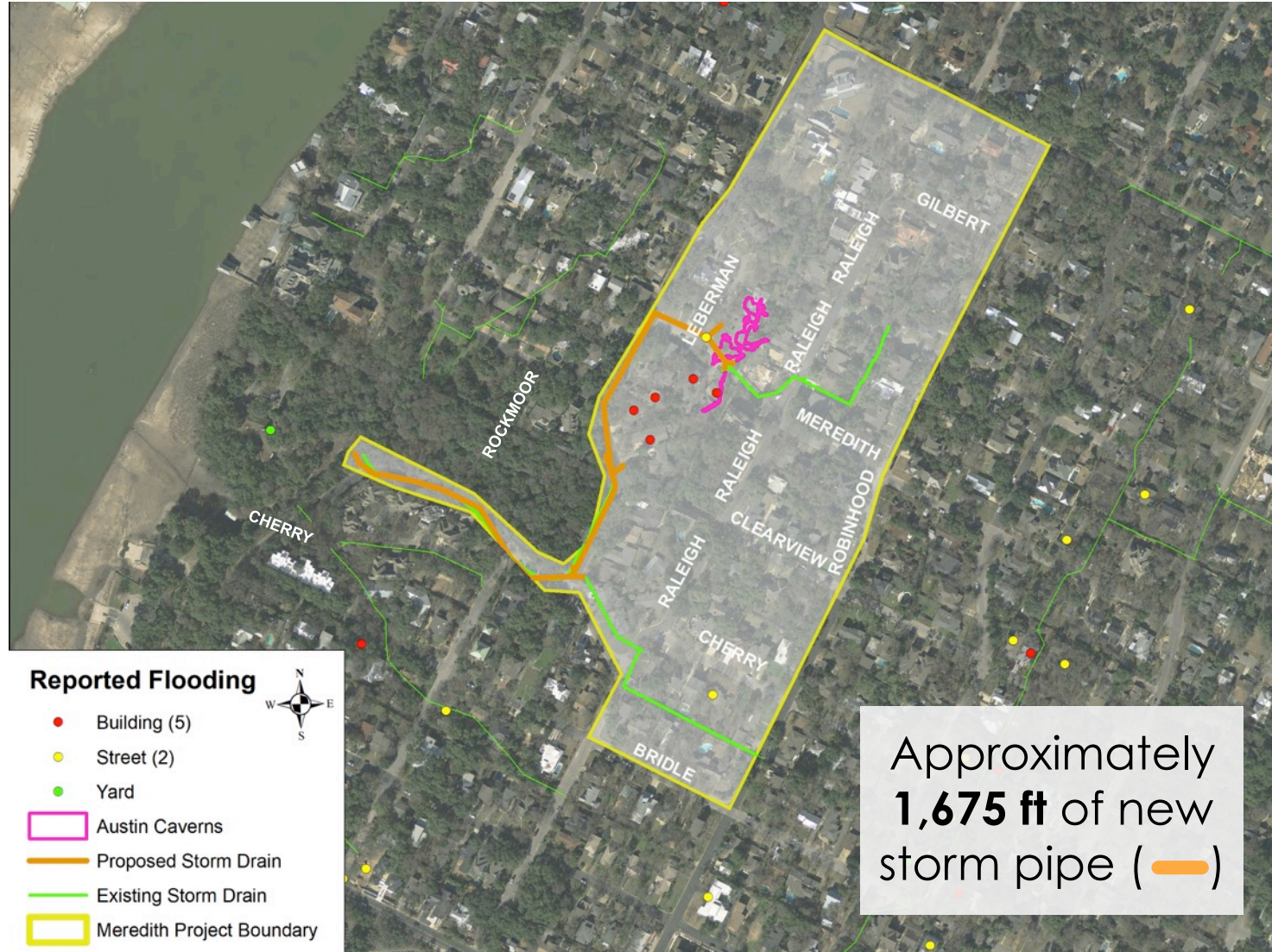
MEREDITH STORM DRAIN SYSTEM

- Built in 1960s under a different set of standards
- Is old, undersized and deteriorating
- Releases rain water into a cave
- Cave passage has changed over time



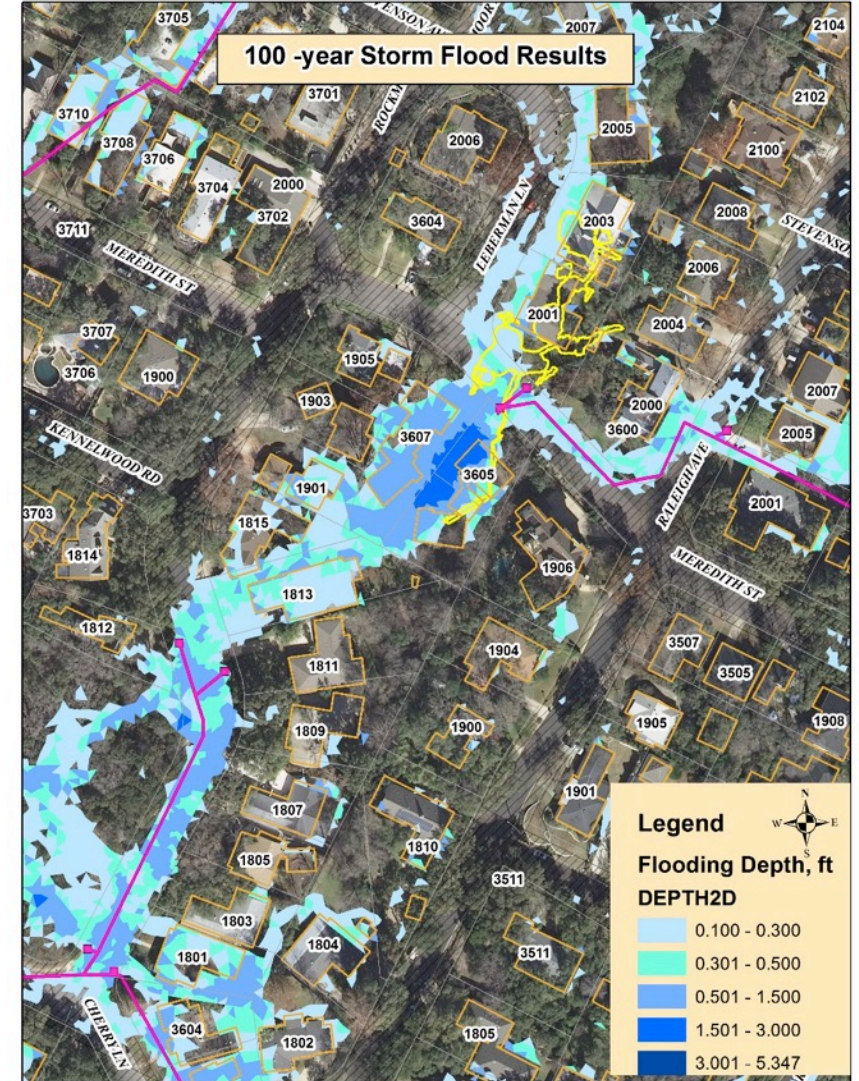


PROPOSED SYSTEM





FLOODING PROBLEMS





FLOODING PROBLEMS





TWO TYPES OF FLOODING

Flooding happens due to a combination of intense rainfall and inadequate capacity of our drainage system.

- **Creek Flooding: Occurs when a creek rises over its banks.**
- **Localized Flooding: Occurs away from creeks.**





Localized Flooding
Occurs away from creeks.

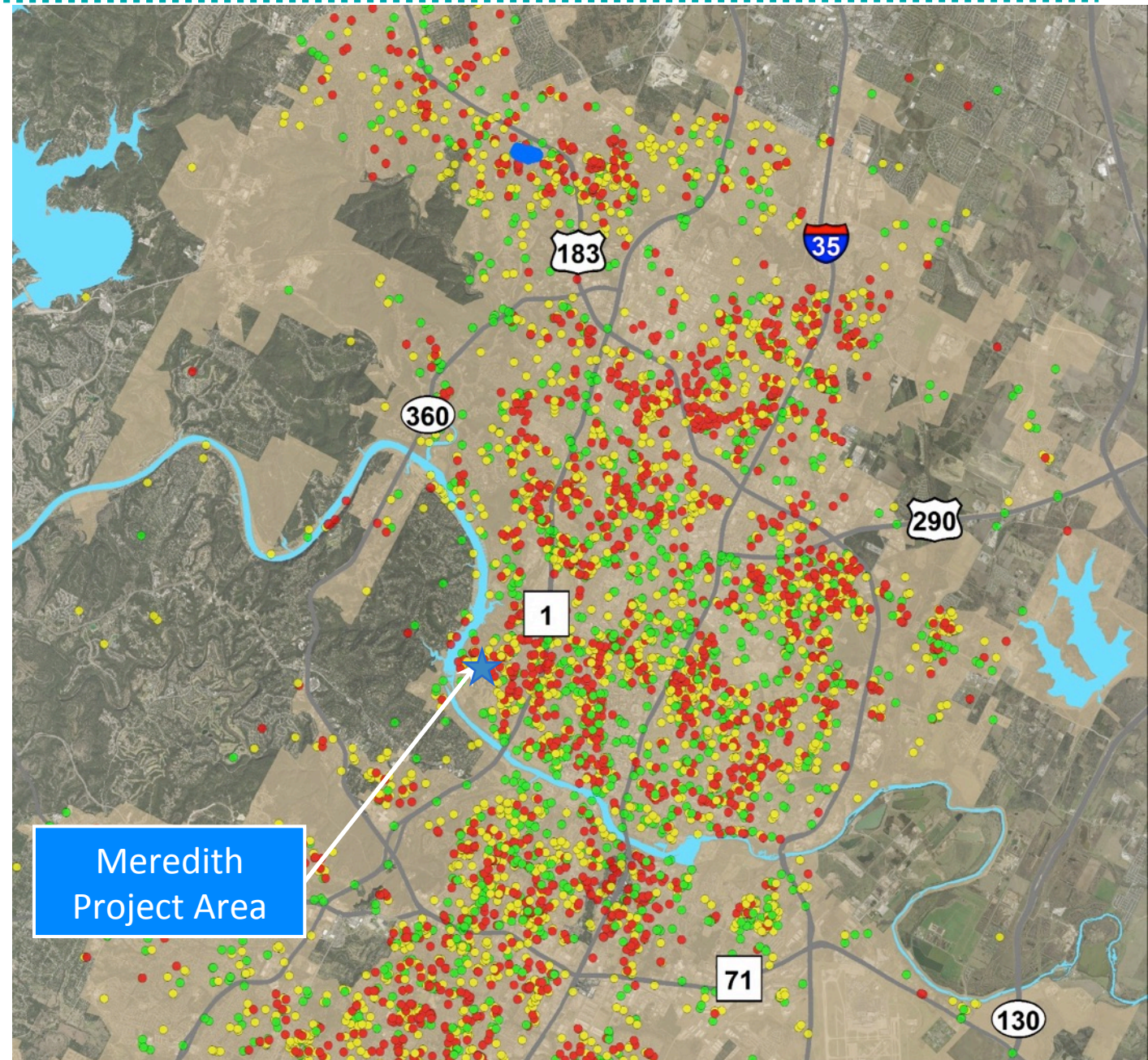
Creek Flooding
Occurs when a creek rises over its banks.





LOCALIZED FLOODING CITYWIDE

- **5,884 Total Complaints**
 - 1,995 Buildings
 - 2,409 Yards
 - 1,480 Streets
- **Neighborhoods built before the 1980s tend to have more drainage problems**
- **No quick or easy solution**
- **Meredith storm drain system is high priority**





WHAT IS A STORM DRAIN SYSTEM?

- **System of streets, ditches, pipes and culverts**
- **Drains rainfall from streets to nearby creek**
- **Inlets are placed along curb to catch rainfall**
- **Streets should drain in most storms**





COMPONENTS OF A STORM DRAIN SYSTEM

1. Inlets and curbs capture rainwater.



2. Underground pipes carry the water.

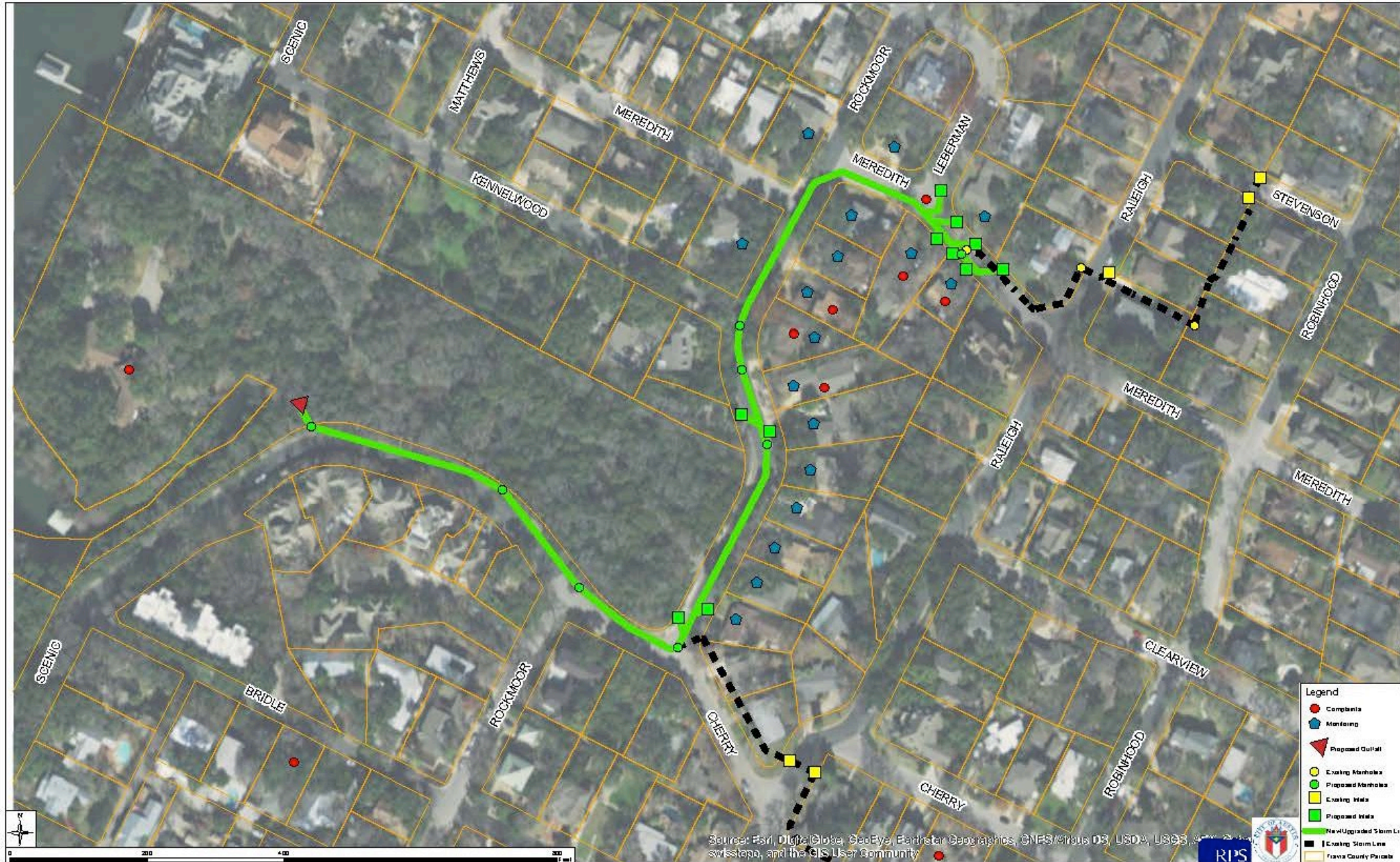


3. Rain water is released into a creek at the outfall. Sometimes it goes to a water quality or detention pond first.



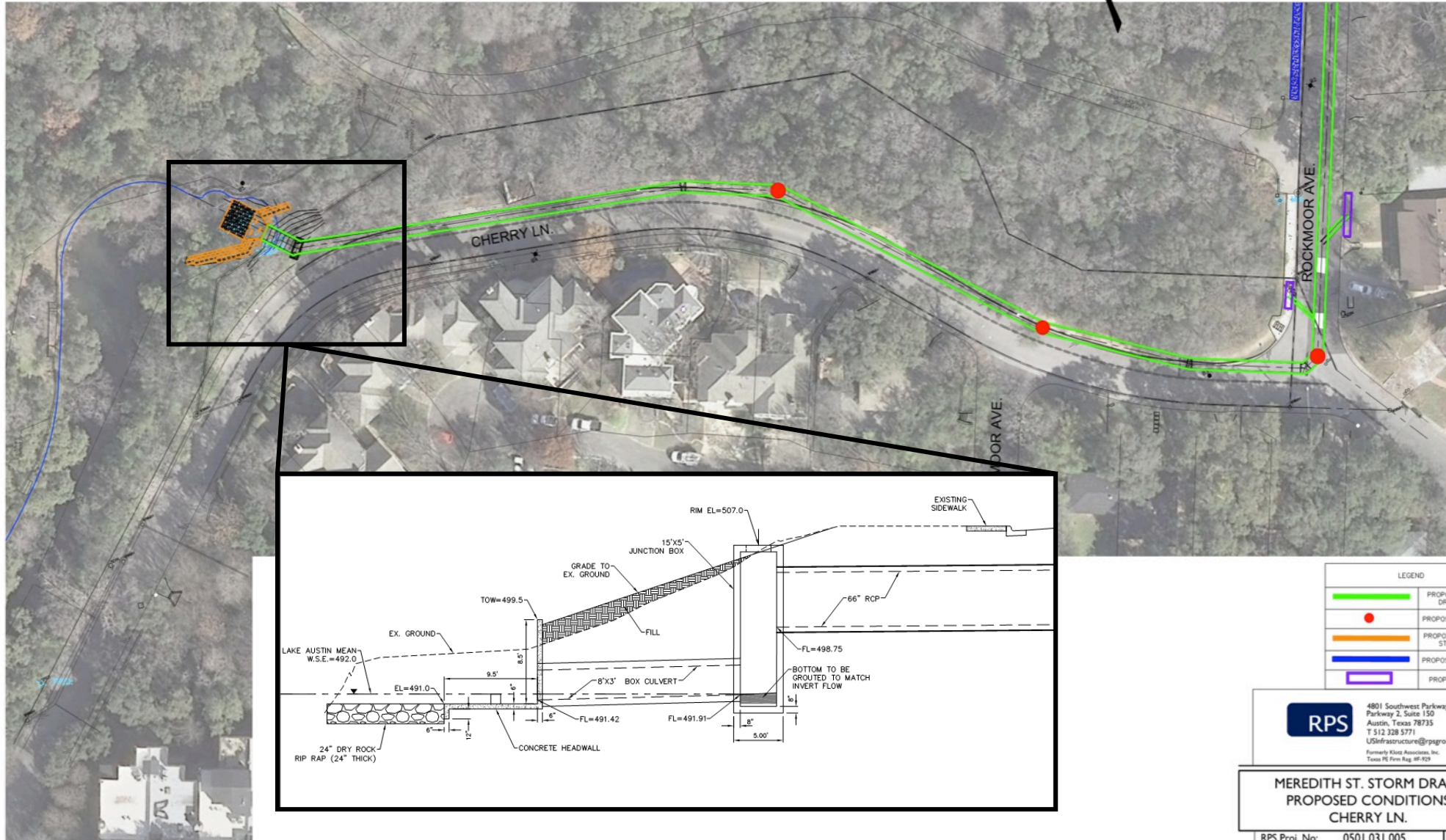
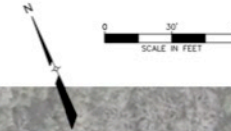


PROPOSED ALIGNMENT – OVERALL





PROPOSED ALIGNMENT – CHERRY LANE



LEGEND	
	PROPOSED STORM DRAIN PIPE
	PROPOSED MANHOLE
	PROPOSED OUTFALL STRUCTURE
	PROPOSED SIDEWALK
	PROPOSED INLET

RPS 4801 Southwest Parkway
 Parkway 2, Suite 150
 Austin, Texas 78735
 T 512.328.5771
 USInfrastructure@rpsgroup.com
 Formerly Klotz Associates, Inc.
 Texas PE Firm Reg. #P-929

**MEREDITH ST. STORM DRAIN
 PROPOSED CONDITIONS
 CHERRY LN.**

RPS Proj. No:	0501.031.005	Exhibit	2
Scale:	1"=30'		
Date:	May 2, 2018		

G:\0501.031.005\07.00 CAD\Exhibits\Meredith_Proposed.dwg May 03 2018



PROPOSED ALIGNMENT – ROCKMOOR AVE



0 30' 60'
SCALE IN FEET

LEGEND	
	PROPOSED STORM DRAIN PIPE
	PROPOSED MANHOLE
	PROPOSED OUTFALL STRUCTURE
	PROPOSED SIDEWALK
	PROPOSED INLET



4801 Southwest Parkway
 Parkway 2, Suite 150
 Austin, Texas 78735
 T 512 328 5771
 USinfrastructure@rpsgroup.com
 Formerly Klett Associates, Inc.
 Texas PE Firm Reg. #0-929

**MEREDITH ST. STORM DRAIN
 PROPOSED CONDITIONS
 ROCKMOOR AVE.**

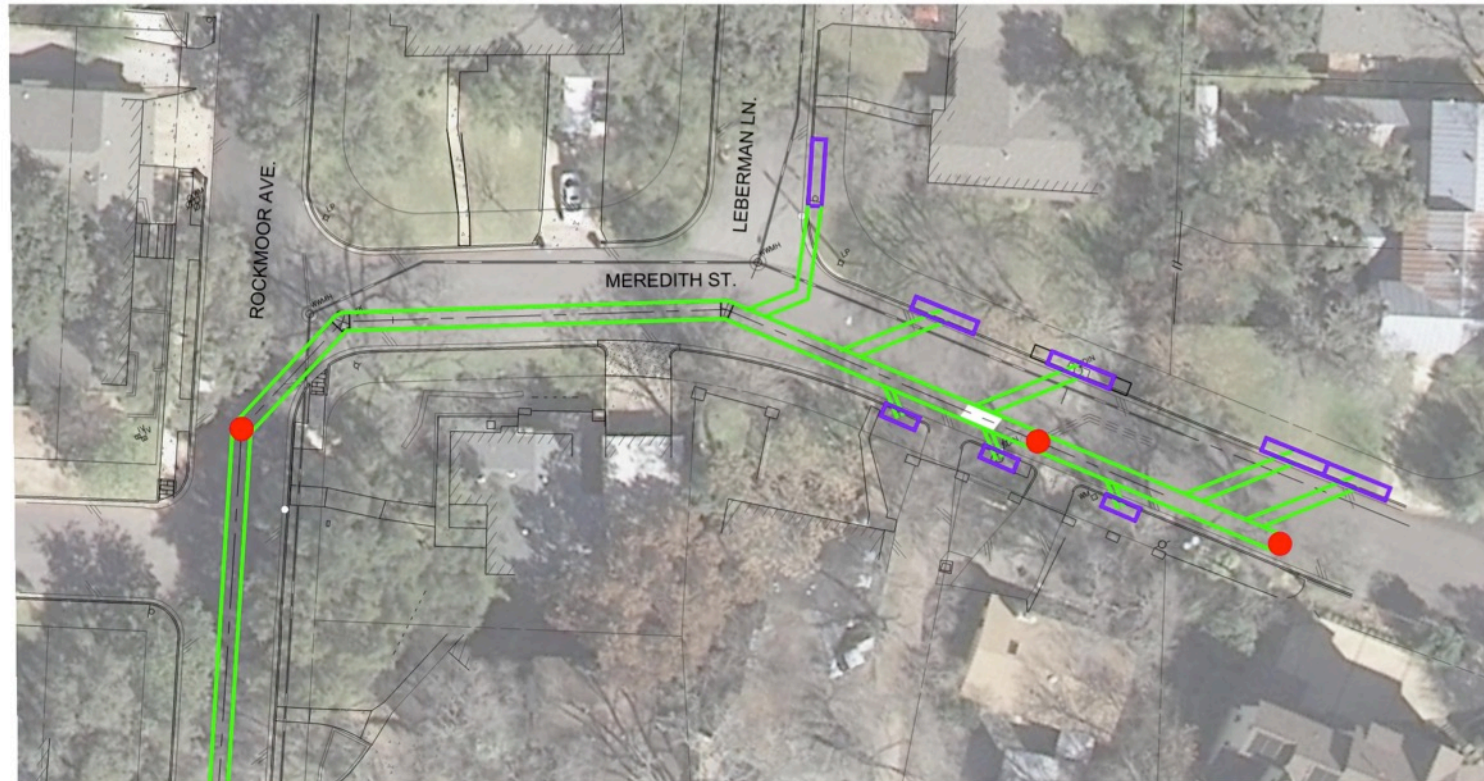
RPS Proj. No: 0501.031.005
 Scale: 1"=30'
 Date: May 2, 2018

Exhibit
 3

G:\0501.031.005\07.00 CAD\0501.031.005\Meredith_Proposed.dwg May 03 2018



PROPOSED ALIGNMENT – MEREDITH ST



LEGEND	
	PROPOSED STORM DRAIN PIPE
	PROPOSED MANHOLE
	PROPOSED OUTFALL STRUCTURE
	PROPOSED SIDEWALK
	PROPOSED INLET

G:\0501_031_005\07_00 CAD\05\Exhibits\Meredith_Proposed.dwg May 03, 2018

RPS 4801 Southwest Parkway
 Parkway 2, Suite 150
 Austin, Texas 78735
 T 512 328 5771
 USInfrastructure@rpsgroup.com
Formerly Klotz Associates, Inc.
 Texas PE Firm Reg. #01929

**MEREDITH ST. STORM DRAIN
 PROPOSED CONDITIONS
 MEREDITH ST.**

RPS Proj. No:	0501.031.005	Exhibit
Scale:	1"=30'	4
Date:	May 2, 2018	



TRAFFIC CONTROL

- **Phased construction**
- **Road closed to through traffic**
- **Detours**
- **Coordination with property owners for local access**



GEOTECHNICAL MONITORING SYSTEMS

- **Preconstruction Foundation Survey**
- **Settlement Monitors**
- **3rd Party Quality Control**
- **Post-construction Foundation Survey**



GEOTECHNICAL MONITORING EXAMPLES



• Inclinometer & Flush Mount Pad

• Prism on Concrete Slab





PAVEMENT MILL & OVERLAY

- **Final construction phase**
- **Full width road repaving**
- **Minor traffic interruptions**



PROPOSED DESIGN: TEMPORARY LOCAL IMPACTS

- **Road closures / detours**
- **Noise**
- **Dust**
- **Access to driveways**
- **Street parking**
- **Work in front yards for inlets and storm drains**
- **Possible disruption to water and wastewater service**





PROPOSED DESIGN: LONG TERM BENEFITS/IMPACTS

- **REDUCED FLOODING!**
- **Flow not directed to the cavern**





SCHEDULE

- **Currently in Design**
 - Drainage utility fee funded
 - Identified in Bond Recommendation
- **Public Meetings**
 - May 7th, 2018
 - April 21st, 2015
 - November 11th, 2014
- **Design and Permitting**
 - Late 2018
- **Easement Acquisition**
 - January 2018 to ~ April 2019
- **Construction Begin**
 - Spring 2019

The screenshot shows the AustinTexas.gov website. At the top, there is a search bar and navigation links for various city services. Below the navigation, there are tabs for Resident, Business, Development, Government, and Environment. The main content area is titled 'Department » Watershed Protection » Projects » Meredith Street Flood Risk Reduction'. On the left, there is a sidebar menu with links to Home, About, Services, Programs, Divisions, FAQ, Education, Projects, and Codes and Regulations. The main content area features a large image of a river with the text 'Watershed Protection Department' overlaid. Below the image, there is a section titled 'MEREDITH STREET FLOOD RISK REDUCTION' with a description of the project's goal. To the right of this section is a 'TOP CONTENT' list with links to 'Grow Green', 'Flood Safety', 'Floodplain Management and Regulations', 'Scoop the Poop', and 'Watershed Ordinance History'. Below the main content, there is a section titled 'Austin Caverns' with a description of the cave system and a list of concerns: 'Erosion and Safety', 'Water Quality', and 'Flooding'. To the left of the 'Austin Caverns' section is a smaller image of a car in a flooded area with the text 'Local Flooding'. Below the 'Austin Caverns' section is a 'Proposed Solution' section with a description of the preliminary engineering phase and a list of streets to be improved: 'Meredith Street, between 3605/3607 and Rockmoor Avenue' and 'Leberman Lane, near the intersection with Meredith Street'. On the right side of the page, there are three promotional boxes: 'FloodSmart.gov', 'Report Flooding' (with a 'Call 311 to Report Flooding' button), and 'Flood Safety and Preparedness' (with a 'Flood Safety and Preparedness' button).

AustinTexas.gov/Stormdrains

Meredith Storm Drain Improvements



RESOURCES

- Check ATXfloods.com for road closures
- Sign up for WarnCentralTexas.org
- Report flooding and drainage concerns to 3-1-1
- Consider purchasing flood insurance
- Avoid building in drainage easements
- Email floodpro@austintexas.gov for information about flood-proofing

The image shows a screenshot of the ATXfloods website and the Austin 3-1-1 mobile app. The website interface includes a navigation menu with options like Home, Communities, Twitter, Contact, Links, Open Data, Alerts, and Am I in a Floodplain?. Below the menu is a map of Austin, Texas, with a 'Low Water Crossing Status' overlay. A specific location is highlighted: 'Colton Rd @ Cottonmouth Creek, Travis County, TX'. The mobile app interface is shown on a smartphone, featuring a green header with 'austin 3-1-1' and a grid of icons for 'New Request', 'Recent', 'My Requests', 'Favorites', 'FAQ', and 'Reporter'. The app is set against a background of Austin city signs, including 'AUSTIN 512', 'DON'T MESS WITH Texas', 'MUSIC CAPITAL OF THE WORLD', and 'ORIGINAL SINCE 1839'. At the bottom, there are download instructions: 'GET IT FREE ON Google Play' and 'FREE DOWNLOAD App Store'. A large text overlay on the right side of the app interface reads: 'LET'S MAKE AUSTIN BETTER TOGETHER. austin 3-1-1 SM'.



QUESTIONS

Reem J. Zoun, P.E., CFM

Supervising Engineer

Watershed Protection Department

City of Austin

(512) 974-3354

Reem.Zoun@austintexas.gov

Robyn Smith, PMP

Project Manager

Public Works Department

City of Austin

(512) 974-2624

Robyn.Smith@austintexas.gov