

# Little Walnut Creek Flood Risk Reduction Project: Metric to Rutland

Presentation to LF&P Committee  
and to Parks and Recreation Board



WATERSHED PROTECTION



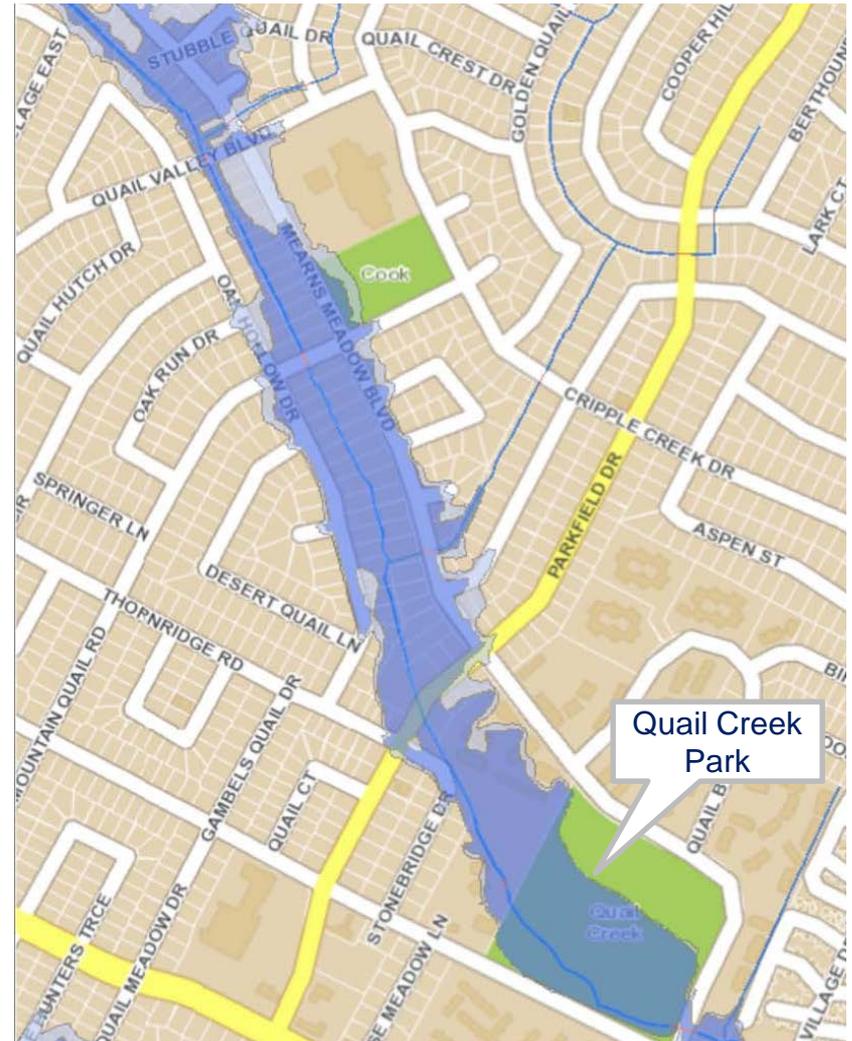
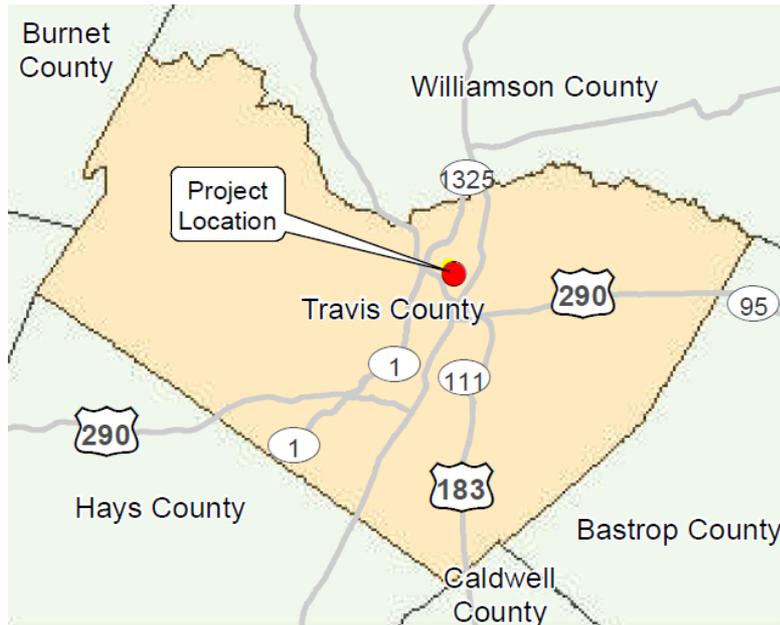
AUSTIN WATER



BGE, Inc

# Project Location

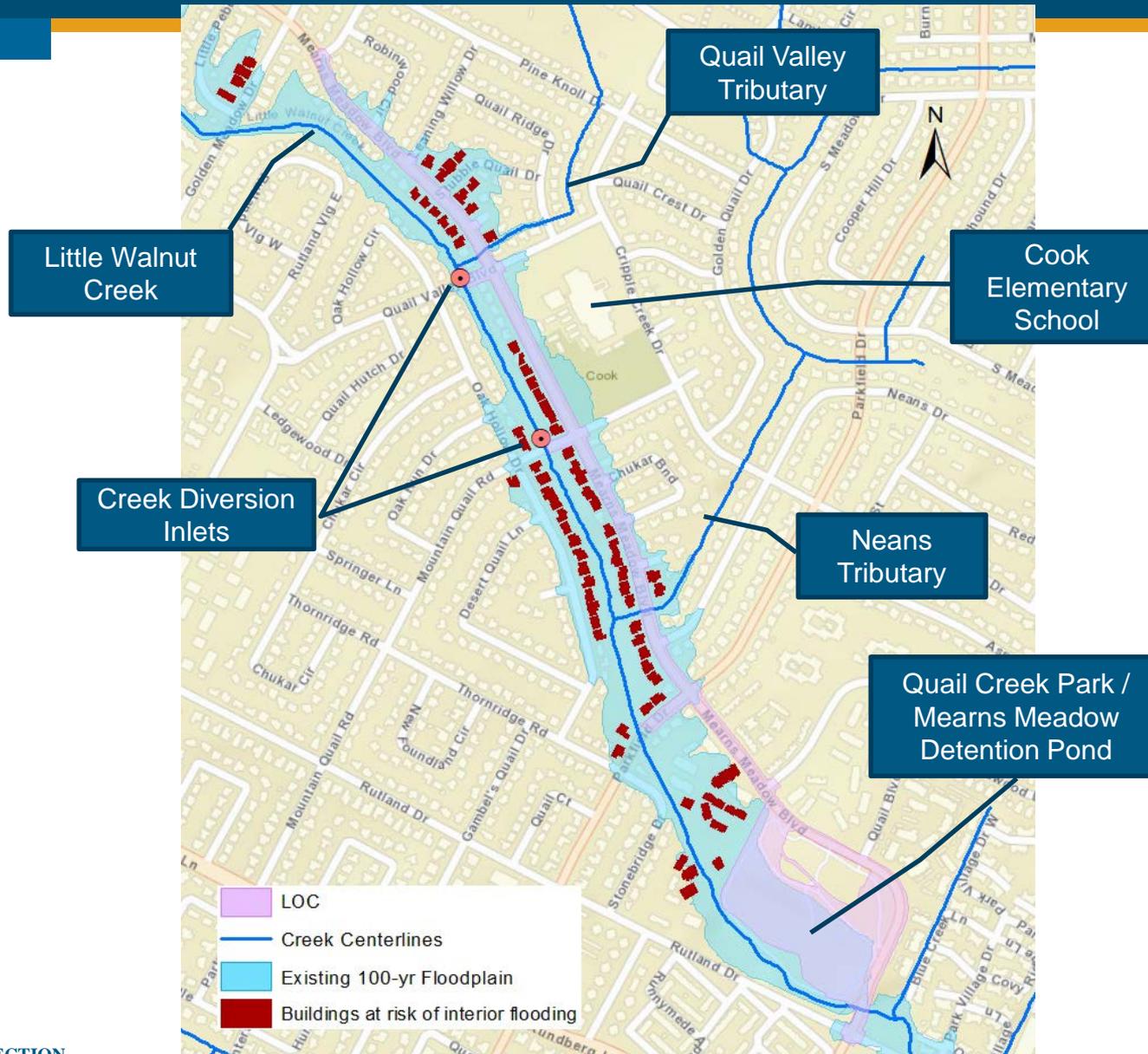
- Project located along Little Walnut Creek in north Austin.
- High Priority Creek Flood Risk Reduction Project.



# Project Goals

- Reduce flood risk to **75 homes** and along Mearns Meadow Boulevard.
- Reduce floodplain footprint.
- Upgrade water and wastewater lines.
- Repave Mearns Meadow Boulevard in project area.
- Shared use path on Mearns Meadow Boulevard.
- **Pond expansion required to prevent flooding impacts downstream.**
- Improvements to Quail Creek Park.
  - New grass.
  - ADA path.
  - Limestone block benches.
  - Additional 4300+ft<sup>2</sup> flat field area.
  - Preservation and relocation of exercise equipment.

# Project Elements



# Downstream Impacts – Mitigation Required

- **Downstream Impacts**

- Diversion takes water downstream faster.
- Changes in flow rate and maximum water surface elevations downstream of the project.
- Mitigation is required to prevent adverse flooding impacts.

- **Mitigation Measures**

- Mearns Meadow Detention Pond expansion. Additional 37 acre-feet of storage during the 100-yr storm.
- Low flow outlet modified.
- Primary pond outfall culverts and spillways unaffected.

# Request

- Expand the existing drainage easement located within Quail Creek Park by an additional 69,970 ft<sup>2</sup> for the proposed detention pond expansion.
- Use additional 20,083 ft<sup>2</sup> of parkland for staging/spoils storage.
- The total proposed work area is 10.18 acres (including existing easement, additional easement and staging/spoils areas).

# Quail Creek Park



## Relocation Notes (Items to be relocated at PARD's discretion)

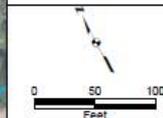
- 1 BENCH (2 TOTAL)
- 2 EXERCISE BARS (6 TOTAL)
- 3 PARK SIGN (3 TOTAL)
- 4 PARALLEL BARS (1 TOTAL)

## Tree Removals

- SURVEYED TREE (>8") TO BE REMOVED (33 TOTAL)
- UNSURVEYED TREE (<8") TO BE REMOVED (22 TOTAL)

## Key to Features

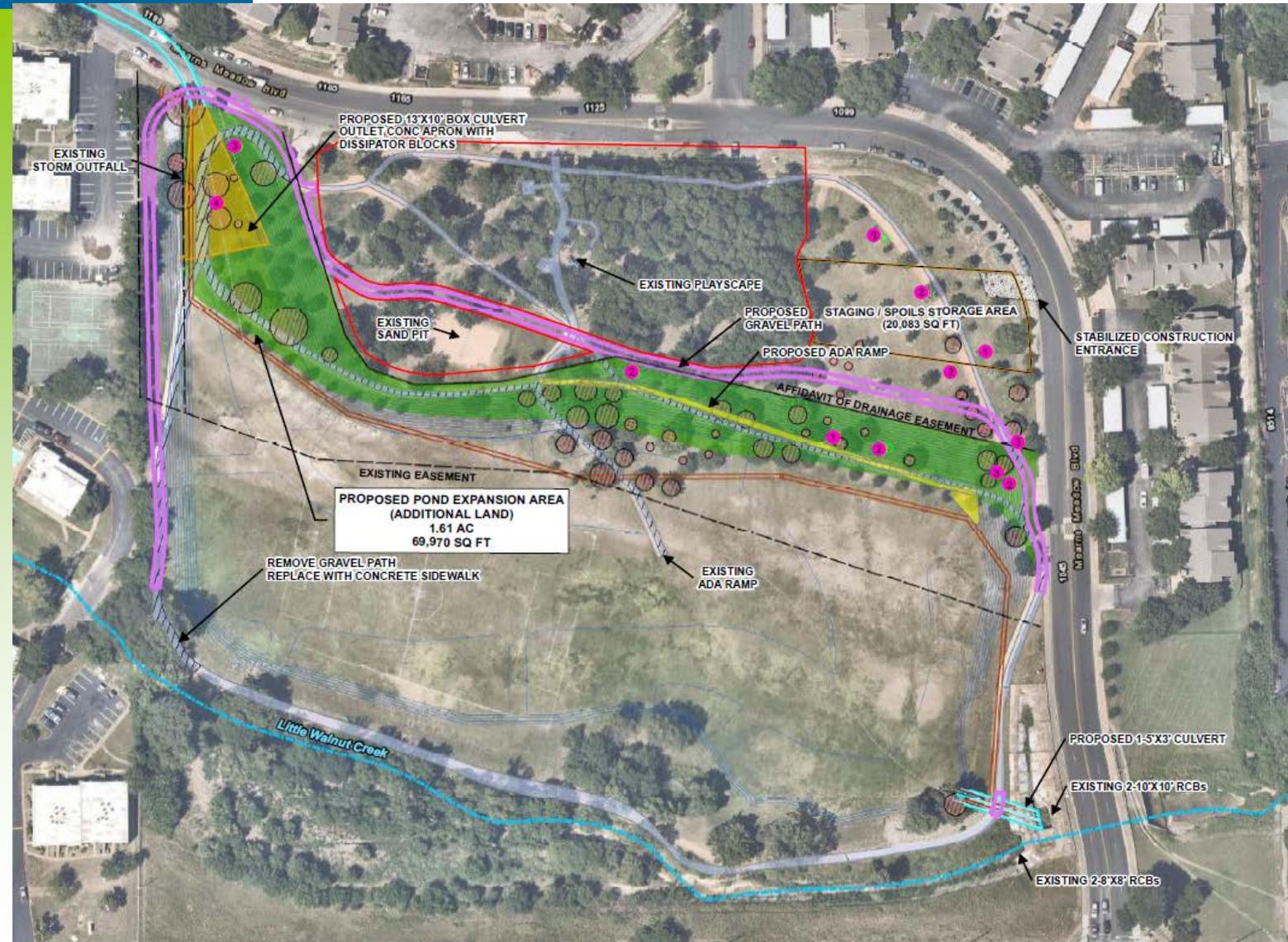
- PROPOSED CONTOUR (1' INTERVAL)
- EXISTING STORM DRAIN
- TO BE REMOVED
- EXISTING PEDESTRIAN PATHWAY
- PROPOSED DISSIPATOR
- PROPOSED DETENTION POND EXTENSION
- AREA TO REMAIN OPEN



Disclaimer:  
Every effort has been made to ensure the accuracy of the base map data. BGE, Inc. assumes no liability or damages due to errors or omissions.

Little Walnut Creek  
Proposed Changes at Quail Creek Park

Date: August 2018 Job No: 881-06



# Quail Creek Park closures

- The Mearns Meadow Detention Pond area will be closed for 3-6 months (weather dependent).
- The staging/spoils storage area will be closed for the duration of the project (approximately 3 years).
- A section of the park including the playground area to be fenced and will remain open through the duration of the project.

# Quail Creek Park Improvements

- **Trails**

- New granite gravel and concrete trail to reconnect the looped trail around the pond.
- Add ADA compliant trail.

- **Play Fields**

- Increase of flat, open mowed area (4300+ft<sup>2</sup>).

- **Park Exercise Equipment**

- Park equipment to be relocated, preserved where possible, and replaced if needed.

- **Trees**

- Removed trees will be replaced – with as many planted on site as possible.

# Quail Creek Park – Existing



# Quail Creek Park – Proposed



# Project Timeline – Next Steps

- **Next Steps**

- Final Design & Permitting: Now – Spring 2019.
- Bid: Spring – Fall 2019.
- Construction: ~3 years (Fall 2019 – Fall 2022).
  - Phasing Plan.
  - Neighborhood Access.
  - Temporary Park Closure.

# Thank you

- **Project Sponsors**

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- **Project Engineer**

- Francisco Arce, P.E. (BGE, Inc.)

<http://austintexas.gov/littlewalnuttunnel>