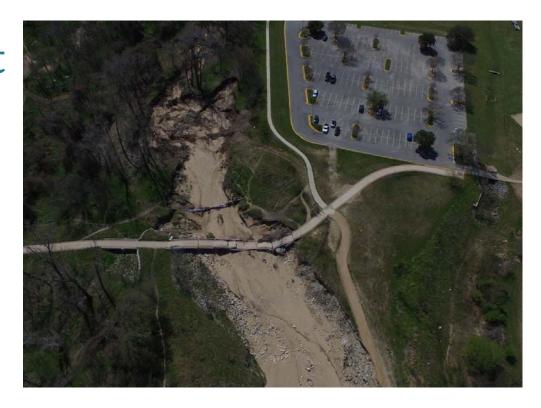
Country Club Creek West at Roy G Guerrero Park

Environmental Commission November 4, 2020

Janna Renfro, P.E.
Project Sponsor
Watershed Protection Department



Roy G. Guerrero Colorado River Metro Park

- 363 acres
- Constructed drainage channel
 Country Club West
- Original drainage channel – Country Club East
- Improvements constructed in 2010





Erosion Damage

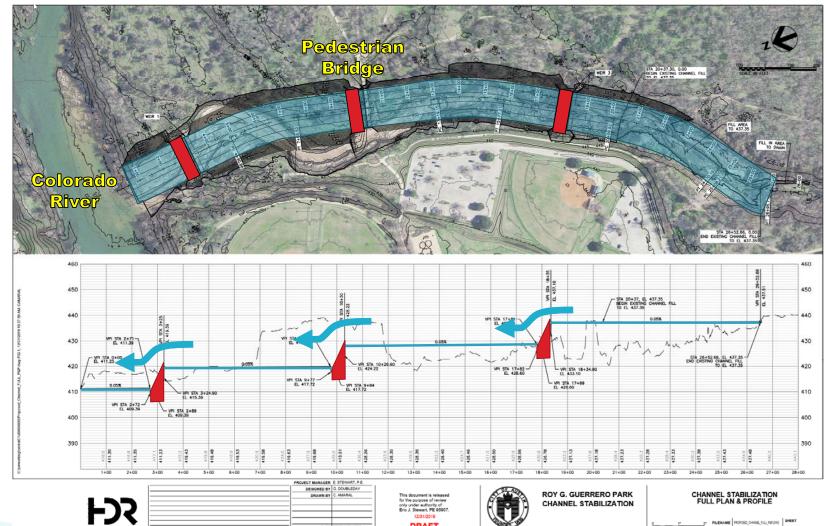
- 2015 Floods
- Severe erosion created a shorter path to the river.
- Pedestrian bridge collapsed
- May 2015 December 2017:
 Erosion damaged
 ~1500 feet (5 acres)
 of drainage channel
- 100s of trees lost
- 2500 dump truck loads of sand and soil (~37,000 cubic yards)





Permanent Solution

- ~2,000 linear feet of channel stabilization
- Three concrete "drop structures"
- Natural channel between structures
- Bridge over middle structure above 500year flood elevation







- Project No. 1
- 2017
- Protect Ballfields









- Project No. 2:
- 2018
- Stop headcut from moving upstream









2019 - 2020 Update Items

- Erosion Progresses
- Three New Temporary Repair Projects
- Emergency Affidavit
- 60% Design Deliverable
- Updated Construction Cost Estimate
- Schedule



- Project No. 3:
- 2019-20
- Protect 54" Active
 Wastewater Line









- Project No. 4:
- 2020
- Protect Park Road







- Project No. 5:
- 2020
- Repair failed temporary headcut stabilization









Emergency Affidavit

Summer 2019:

- New LiDAR
- Progression of erosion
- Continuing vulnerability of temporary repairs
- Need for additional temporary measures

• Fall 2019

- Emergency affidavit
- Expedited bid process



60% Design & Cost Estimate

- 60% Design Received Spring 2020
- Construction Cost Estimate \$25M
 - Why?
 - How?



Project Schedule

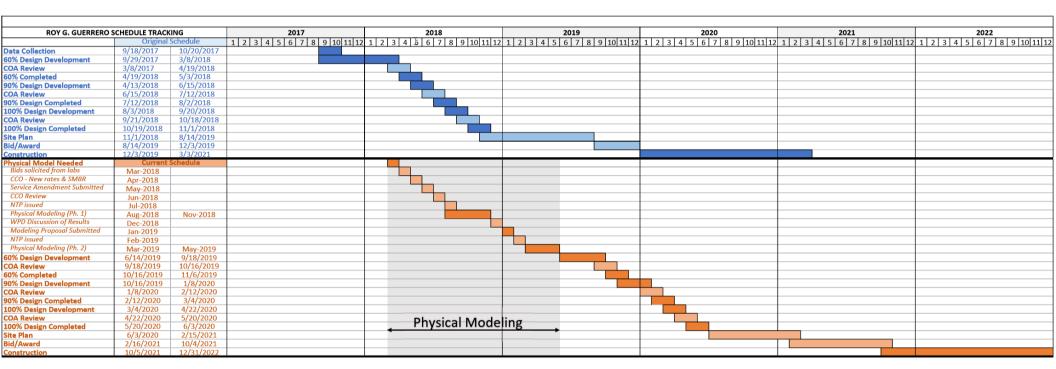
Early 2021 Complete Design

Summer 2021 Bid

Early 2022 Begin Construction

Early 2024 Complete Construction

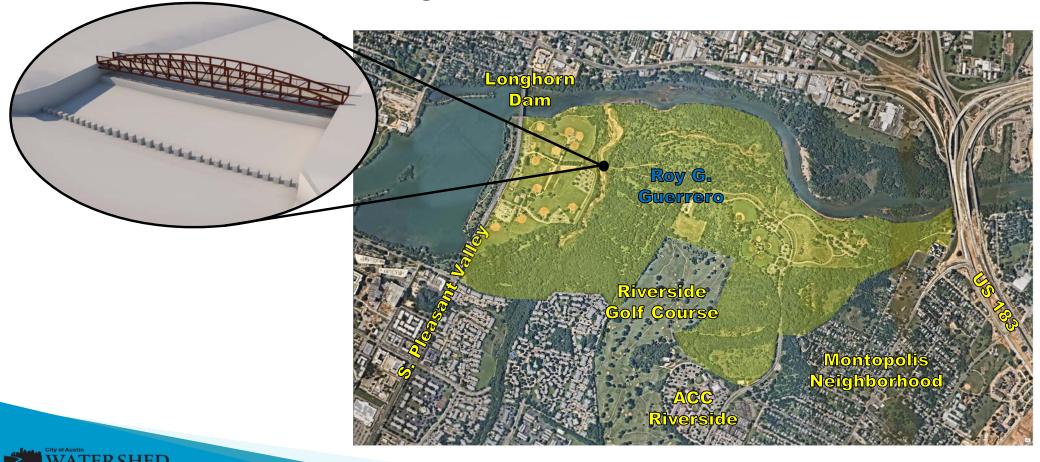








Trail Connectivity



Physical Modeling

- Conditions are unique and challenging
- High consequence of failure requires more certainty
- Improve drop structure design
- Determine stable channel configuration



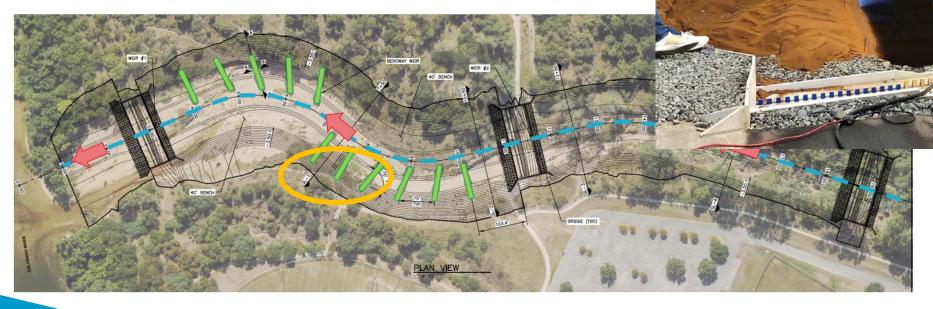


Model Findings

Revise channel alignment

Maximize width

Structure modifications





Do nothing?

- Headcut will continue to move upstream.
- High confidence of threats upstream
- Increasingly expensive project



