# Discussion Huebner Creek Channel Improvements Project Segment 1 Tree Mitigation

Melinda Moritz
Public Works Director
City Council Meeting
November 21, 2023



## Purpose

- To inform the City Council of the number and types of trees to be removed during the Huebner Creek Channel Improvements Project
- To determine project scope going forward
- Current scope of project is from the Bandera Road bridge to Poss Rd at Cherryleaf St with revised creek alignment



# Background

- City Council approved a budget adjustment in the amount of \$633,167 to engineer and design channel improvements to widen Huebner Creek to reduce the threat of flooding and erosion
  - Bandera Road bridge to Poss at Cherryleaf
  - Length of project is 2,730 linear feet
- City Engineer has completed the hydrologic analysis, preliminary design, all surveying and utility locates, and is now at the stage of finalizing the drainage design
- The tree survey that was performed indicates that a large number of trees must be removed should the project move forward



# Aerial View of Project

Project Limits





# Tree Mitigation Plan



# Tree Mitigation Plan

#### SUMMARY OF TREE REMOVAL (INCHES)

TREE STATUS	TREES (IN INCHES)				
REMAIN	1272				
REMOVE	5429				
TOTAL	6701				

#### SUMMARY OF TREE REMOVAL (NUMBER)

TREE STATUS	TREES (NUMBER)			
REMAIN	83			
REMOVE	403			
TOTAL	486			

TREE SLAMMARY (INCHES)										
6 -	CANT TREE 23.5" , PALM, LIVE OAK)	5		HERITAGE 3:1 >23.5* (OAK, ELM, PECAN, PALM, L[VE OAK)		HERITAGE 1:1 >23.5" (MESQUITE, HACKBERRY, CEDAR, ASH, UNKNOWN)		OTHER TREES (CHINABERRY, HUISACHE, MULBERRY, TALLOW)		DEAD TREES
REMOVE	REMAIN	REMOVE	REMAIN	REMOVE	REMAIN	REMOVE	REMA1N	REMOVE	REMAIN	REMOVE
1841	294	2971	575	218	166	141	140	176	97	82
TOTAL										
2135 3546		384		281		273		82		

TREE SUMMARY (NUMBERS)										
SIGNIFIC 6 - (OAK, ELM, PECAN	CANT TREE 23.5' , PALM, LIVE OAK)	SJONIFICANT TREE** 10.0" - 23.5" (MESQUITE, HACKBERRY, CEDAR, ASH, UNKNOWN)		HERITAGE 3:1 >23.5' (OAK, ELM, PECAN, PALM, LIVE OAK)		HERITAGE 1-1 >23.5" (MESQUITE, HACKBERRY, CEDAR, ASH, UNKNOWN)		OTHER TREES (CHINABERRY, HUISACHE, MULBERRY, TALLOW)		DEAD TREES
REMOVE	REMAIN	REMOVE	REMAIN	REMOVE	REMAIN	REMOVE	REMA1N	REMOVE	REMAIN	REMOVE
133	21	239	44	8	5	5	5	13	8	5
TOTAL										
154 283		13		10		21		5		



## Tree Removal Plan

Heritage: Number: 8 Inches: 218

Oak, Elm, Pecan, Palm, Live Oak

Heritage: Number: 5 Inches: 141

Mesquite, Hackberry, Cedar, Ash, Unknown

Medium/Large: Number: 133 Inches: 1841

Oak, Elm, Palm, Live Oak

Medium/Large: Number: 239 Inches: 2971

Mesquite, Hackberry, Cedar, Ash, Unknown

Non-native/invasive: Number: 13 Inches: 176

Chinaberry, Huisache, Mulberry, Tallow

Dead trees: Number: 5 Inches: 82



## Purpose

Summary tree removal in project area:

Trees / remain: Number: 83 Inches: 1272

• Trees / remove: Number: 403 Inches: 5429

- Previous Huebner-Onion Natural Park Master Plan advised removing any non-native & invasive trees
- Can replant new trees in other areas that are native using Tree Mitigation Funds



### Discussion

- Continue with design and engineering?
- Abandon project and perform bank stabilization only, from Poss at entrance to small pavilion to Bandera Road bridge



# Fiscal Impact

- Council approved \$633,167 for design and engineering
- Spent \$162,000 so far
- Waiting on estimate from Engineer to just engineer bank stabilization project



# S.E.E. Statement

Social Equity – Reducing flood hazards benefits all citizens by reducing remediation funds after a flood event

Economic Development – Reducing the footprint of the floodplain reclaims properties and increases their overall value

Environmental Stewardship – Reducing the floodplain reduces the amount of erosion entering our waterways, which improves the quality of the water

