



Williamson Creek Interceptor

Parks and Recreation Board

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Austin Water

Monday, November 25, 2024

Project Overview

- The Williamson Creek Wastewater Interceptor project consists of over 18,800 linear feet of 72-inch diameter gravity wastewater interceptor installed using a two-pass tunneling method.
- Project drivers:
 - increase capacity
 - replace aging infrastructure
 - reduce the potential for future sanitary sewer overflows to protect the environment

LEGEND

- Existing Wastewater Interceptor
- Existing 72" Interceptor (will be rehabilitated through Cured In-Place-Pipe)
- New Wastewater Tunnel Alignment (about 40-60 feet underground)
- Construction Access Areas
- Construction Workspace Areas
- Construction Workspace: Cured In-Place-Pipe
- ⚠ Shaft for Cutover Connections
- ⊕ Shaft for Connecting Existing Collection System to Tunnel



Challenges with the Current Interceptor



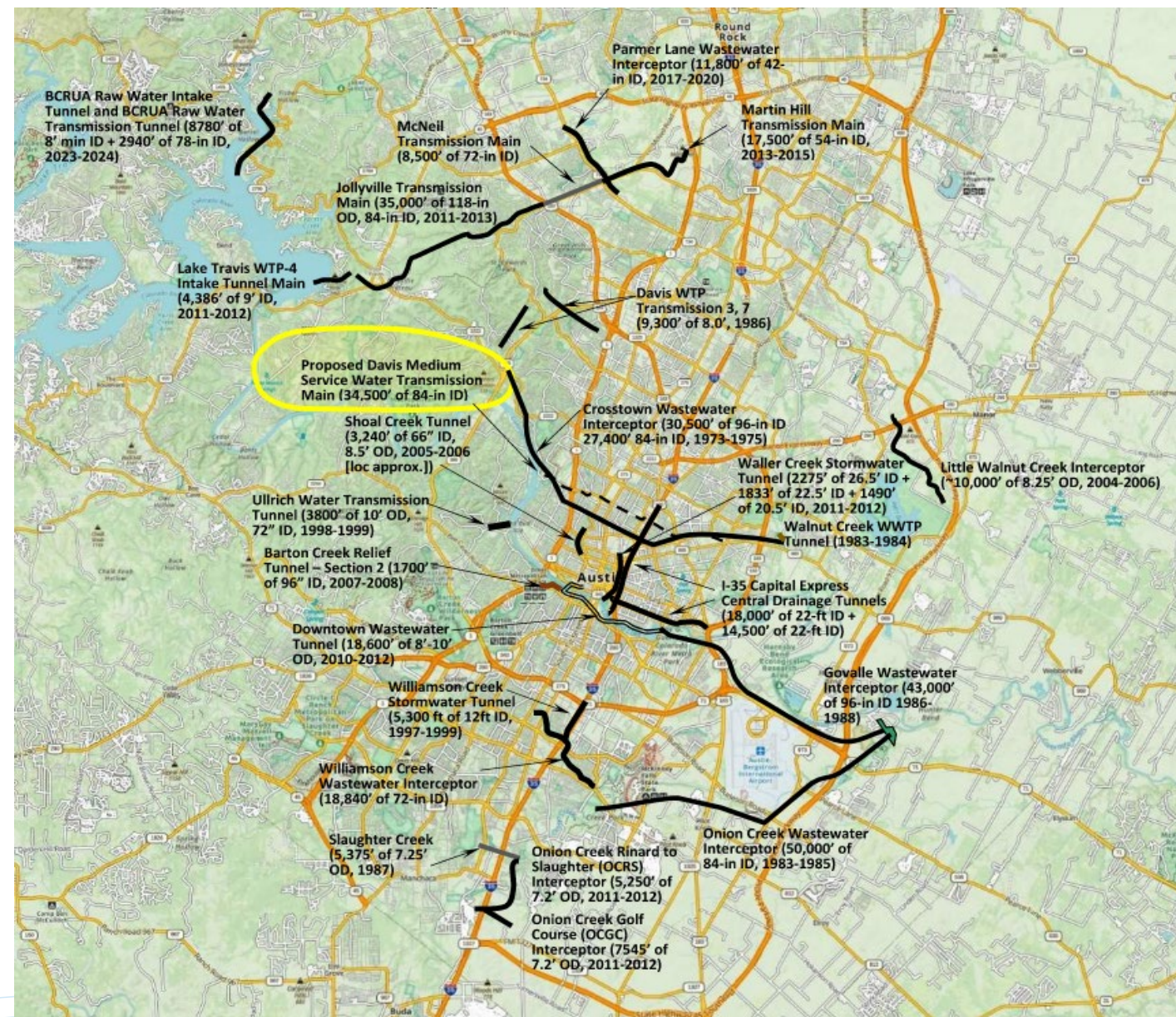
- ◆ Size, age, and condition of the existing pipelines make the system susceptible to sewer overflows, particularly during rain events
- ◆ No existing odor control along interceptor



Major Project Components



- Excavation of 18,800 LF of tunnel, ranging from 20 to 90 ft below grade, entirely outside of the Erosion Hazard Zone
- Installation of 18,600 LF of 72-inch and 200 LF of 84-inch corrosion resistant fiberglass pipe with grouted annulus
- 6 Operations and Maintenance (O&M) Shafts
- 10 connection shafts to allow for connections of the existing collection system to the tunnel
- 1 downstream connection shaft on the existing 84-inch Williamson Creek Tunnel near the intersection of William Cannon Dr & S Pleasant Valley Rd



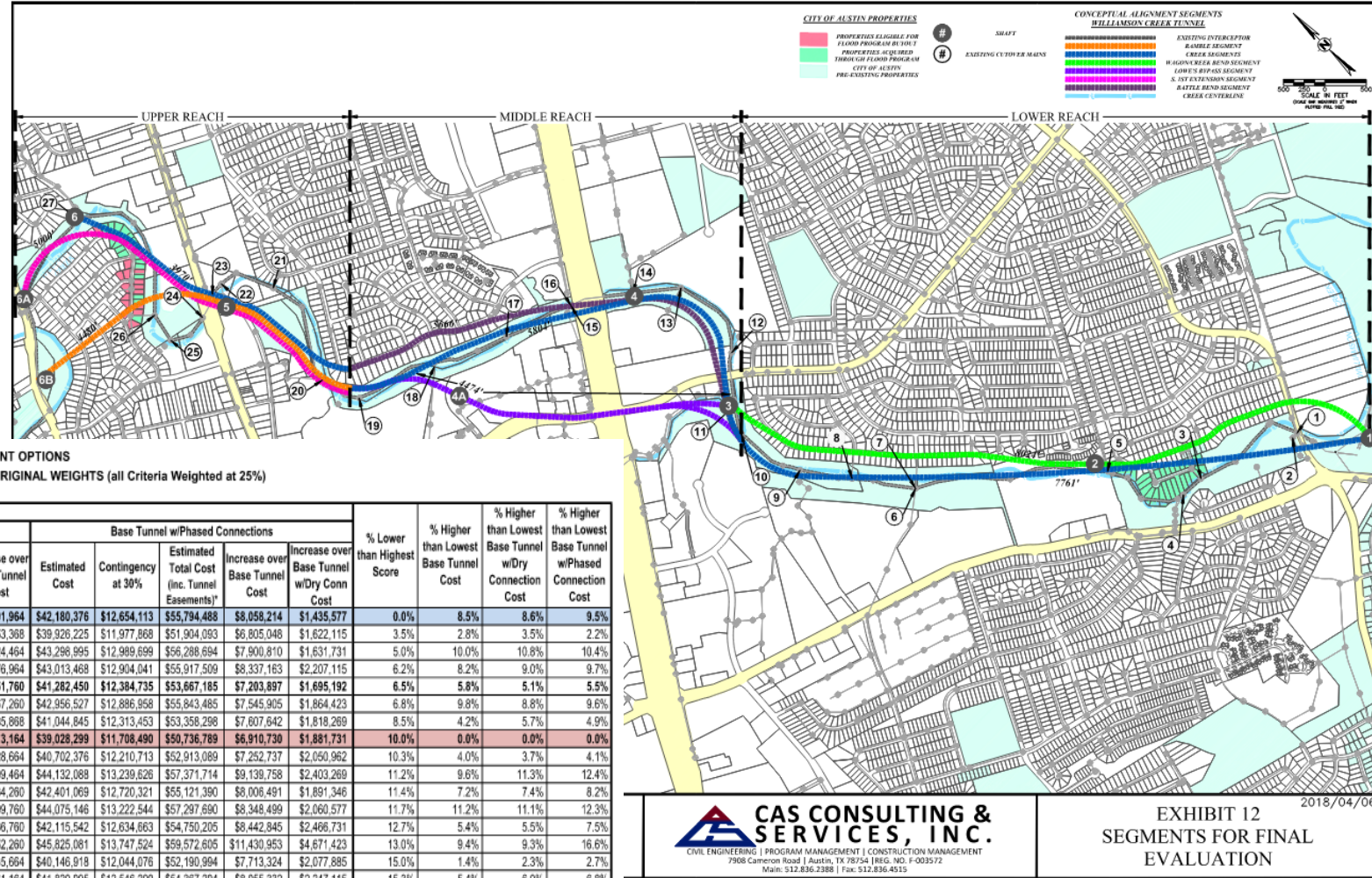
Additional Project Components

- ◆ Installation of 22 local pipeline reconnections via open cut (5,400 LF of 8" to 48") and jack and bore (2,500 LF of 12" to 54") construction methods
- ◆ Removal and abandonment of existing wastewater pipelines and manholes in the creek
- ◆ New biological odor control facility and associated rain gardens designed for future trailhead parking lot
- ◆ Cured-in-Place (CIPP) pipeline rehabilitation of 2,700 LF of existing 36" diameter concrete pipe
- ◆ Extensive environmental site restoration (native seeding, tree plantings, etc.)



Routing Requirements

- 18 different alignments evaluated via scoring matrix
- 22 environmental constraints considered



CITY OF AUSTIN PROPERTIES

- PROPERTIES ELIGIBLE FOR FLOOD PROGRAM BY 2011
- PROPERTIES ACQUIRED THROUGH FLOOD PROGRAM
- CITY OF AUSTIN PRE-EXISTING PROPERTIES



SHAFT



EXISTING CUTOVER MAINS

CONCEPTUAL ALIGNMENT SEGMENTS WILLIAMSON CREEK TUNNEL

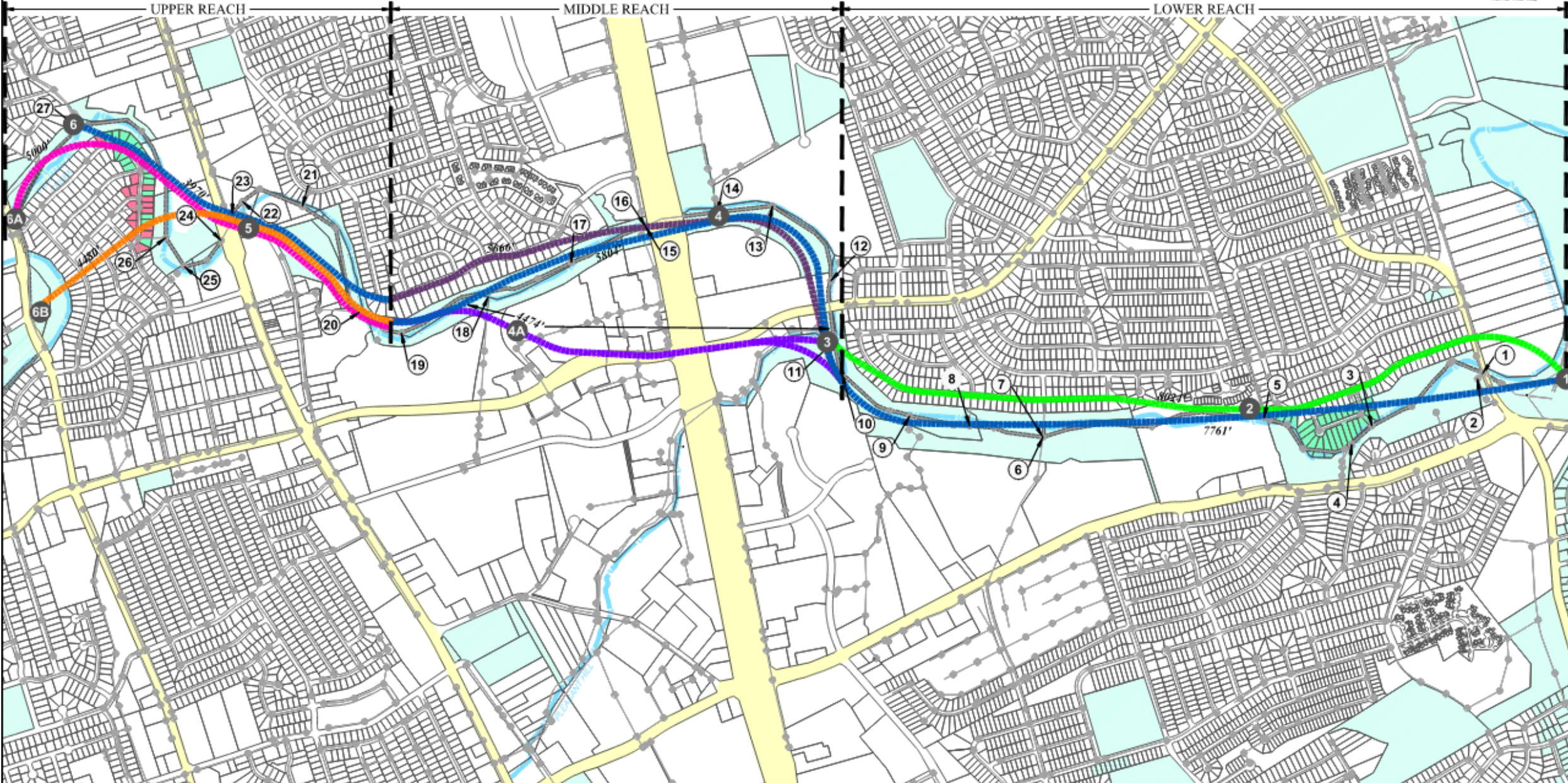
- EXISTING INTERCEPTION
- RATTLE REND SEGMENT
- CREEK SEGMENTS
- WAGONCREEK REND SEGMENT
- LOWE'S BYPASS SEGMENT
- S. INT. EXTENSION SEGMENT
- RATTLE REND SEGMENT
- CREEK CENTERLINE



UPPER REACH

MIDDLE REACH

LOWER REACH



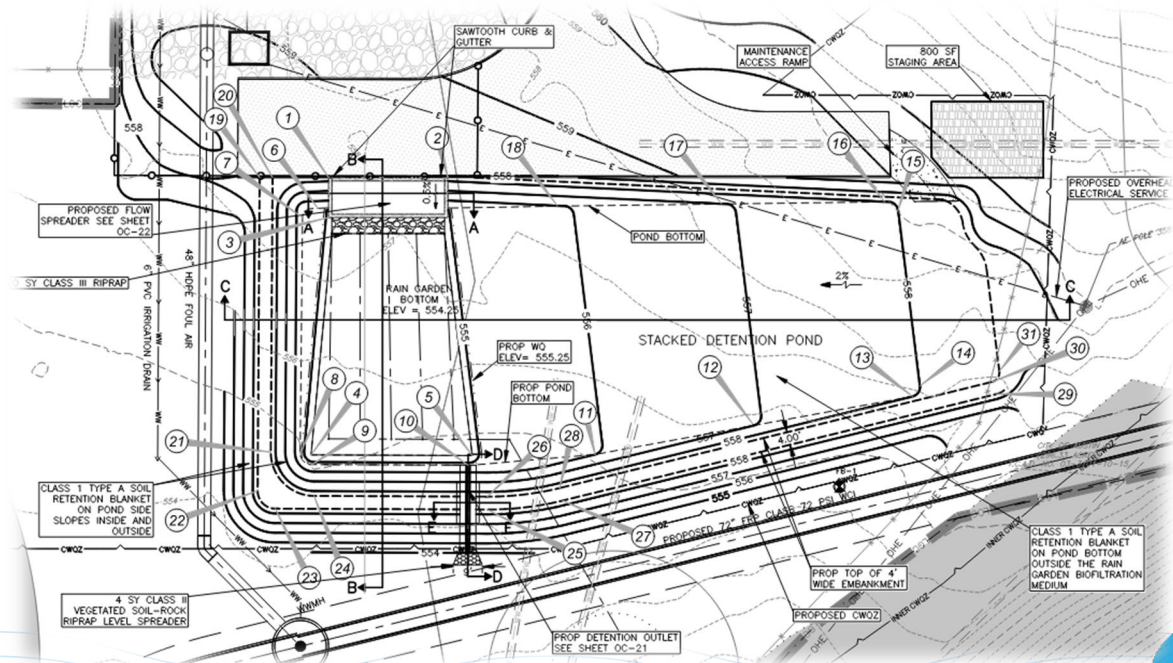
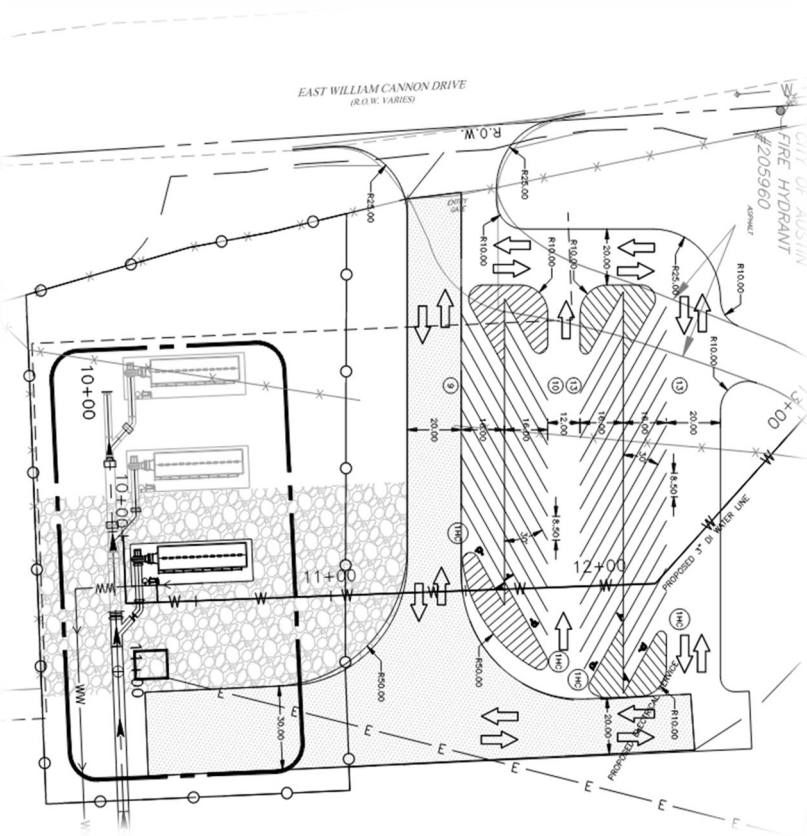
Creek Restoration – WPD Partner

- ◆ Project received Environmental Commission approval on September 18, 2024
- ◆ Exposed manholes and encased pipe in creek to be abandoned and removed
- ◆ Locations individually evaluated for least environmental impact and most creek stabilization



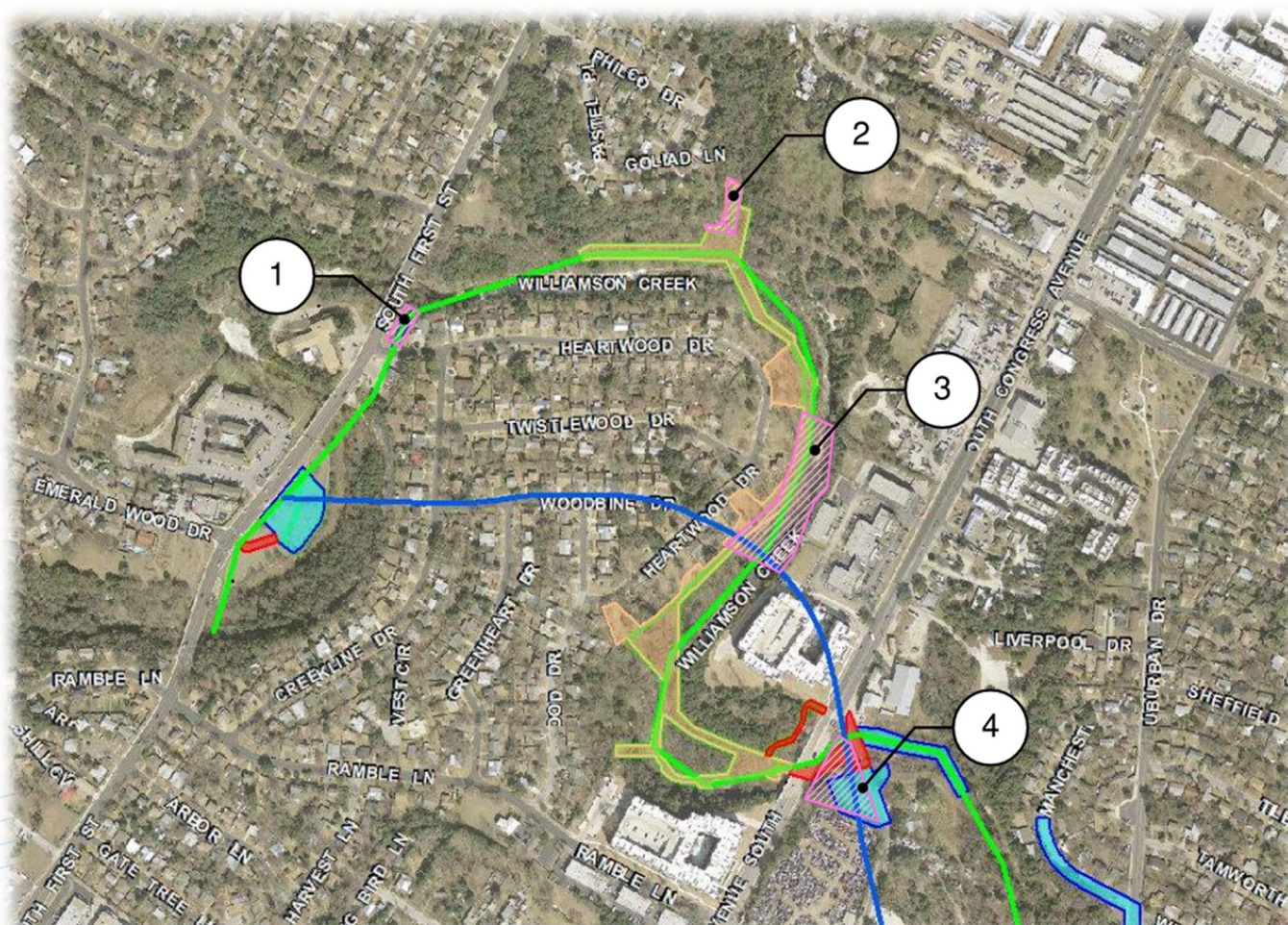
Odor Control and Trailhead Access – PARD Partner

- Odor control facility to reduce odors
- Oversized rain gardens for future trailhead parking and access
- Concrete paved access instead of gravel



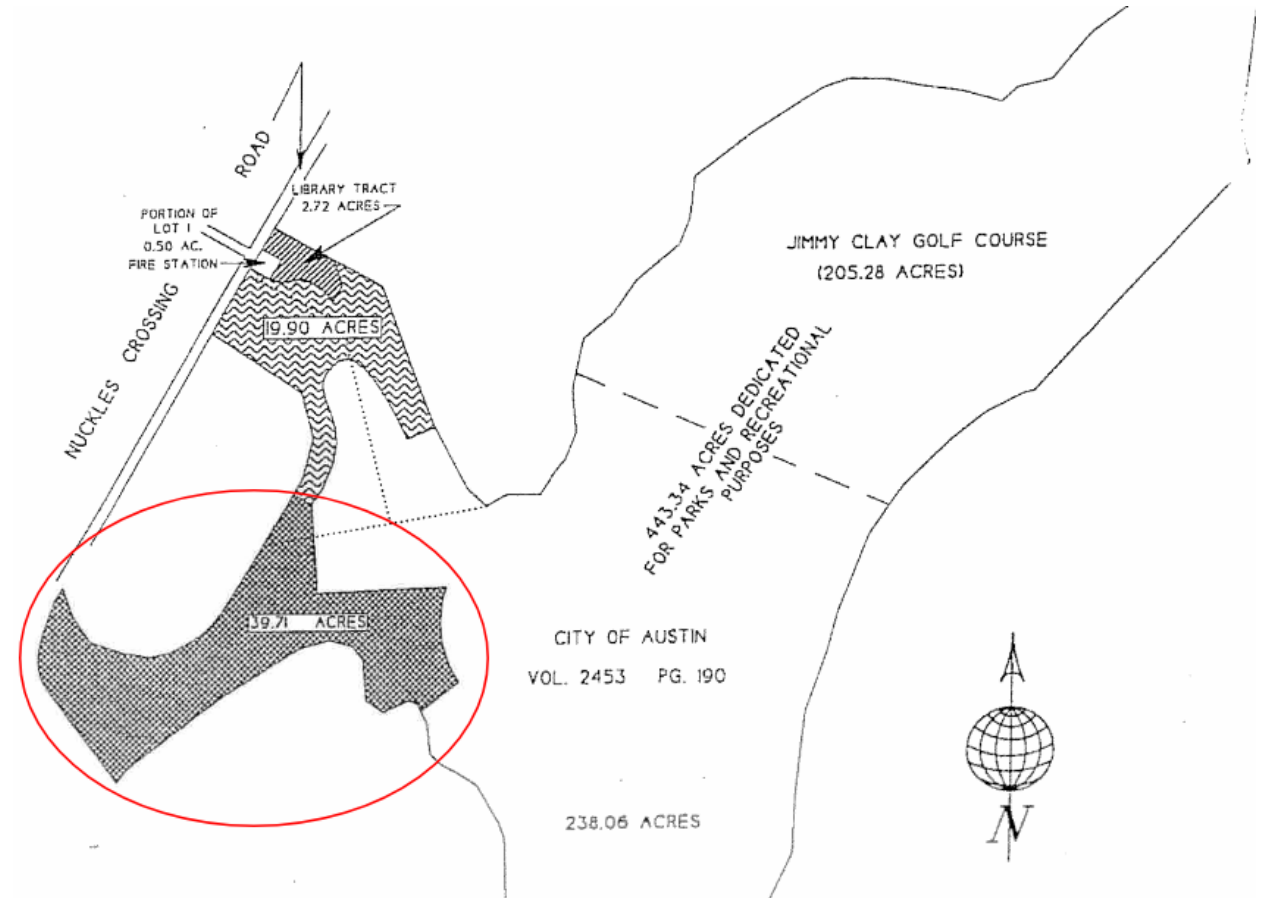
Expanding Greenbelt and Trails Access – PARD Partner

- 3 acres of acquired properties necessary for temporary workspace areas, to be transferred to PARD after construction is completed. PARD will compensate AW for the full appraised value.



Expanding Greenbelt and Trail Access – PARD Partner

- Transfer of up to **39.71 acres** to PARD for future trailhead and Jimmy Clay Golf Course access
- PARD will acquire the 39.71-acre property at full appraised value
- Oversized rain gardens for future trailhead parking



Expanding Greenbelt and Trail Access – PARD Partner

- 💧 Rain gardens and driveway for future trailhead parking
- 💧 Total: **43 acres** of additional parkland for future trail access and public benefit



Community Involvement – Neighborhood Partner



- Community Open Houses – June 2024
 - Positive feedback received
 - Comments were evaluated and incorporated into the project if possible
- Coordinated with nearby public projects (storm improvements, trails, etc.)
- Coordination with Homeless Strategy Office and Austin Police Department to address relocations of homeless groups within the creek

WILLIAMSON CREEK WASTEWATER INTERCEPTOR

Make a recommendation to City Council for approval of Permanent Wastewater Use (9.3 acres) and Temporary Work Area (8.9 acres), for a period not to exceed a total of 1,735 Calendar Days on parkland located at Williamson Creek Central and East Greenbelts. Total Mitigation to be paid by Austin Water is \$2,287,068.



THANK YOU



Austin
WATER

