

Onion Creek Reclaimed Water Main Phase 1 (South Austin PARD areas)

Parks & Recreation Board | June 27, 2022



Brent Crawford, EIT
Austin Water



What is Reclaimed Water?

Benefits

- ◆ Reduces potable water demand
- ◆ Increases potable water savings
- ◆ Enhances water quality downstream of treatment plants

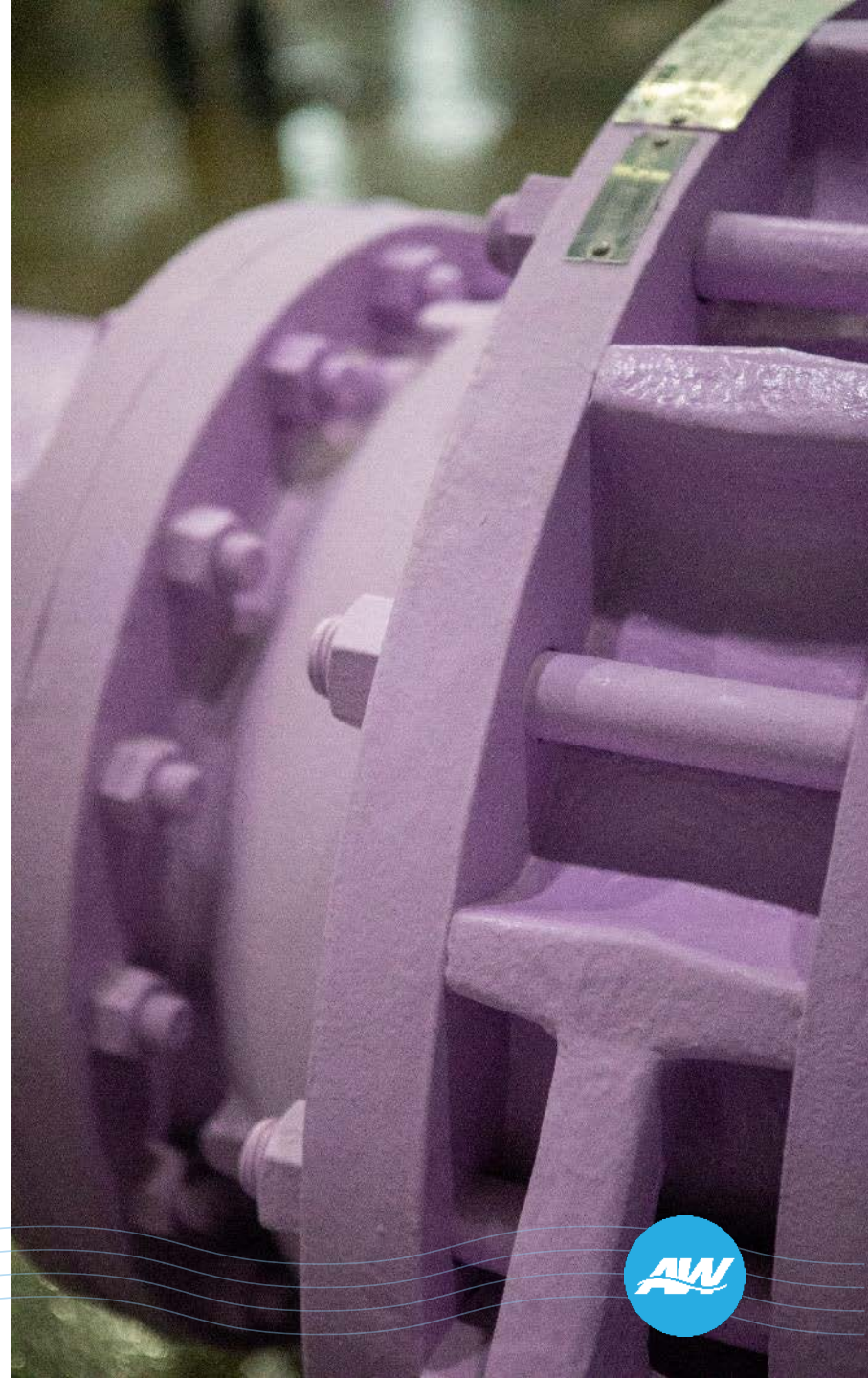
Usage

- ◆ Irrigation
- ◆ Water Tower Cooling
- ◆ Manufacturing
- ◆ Toilet Flushing



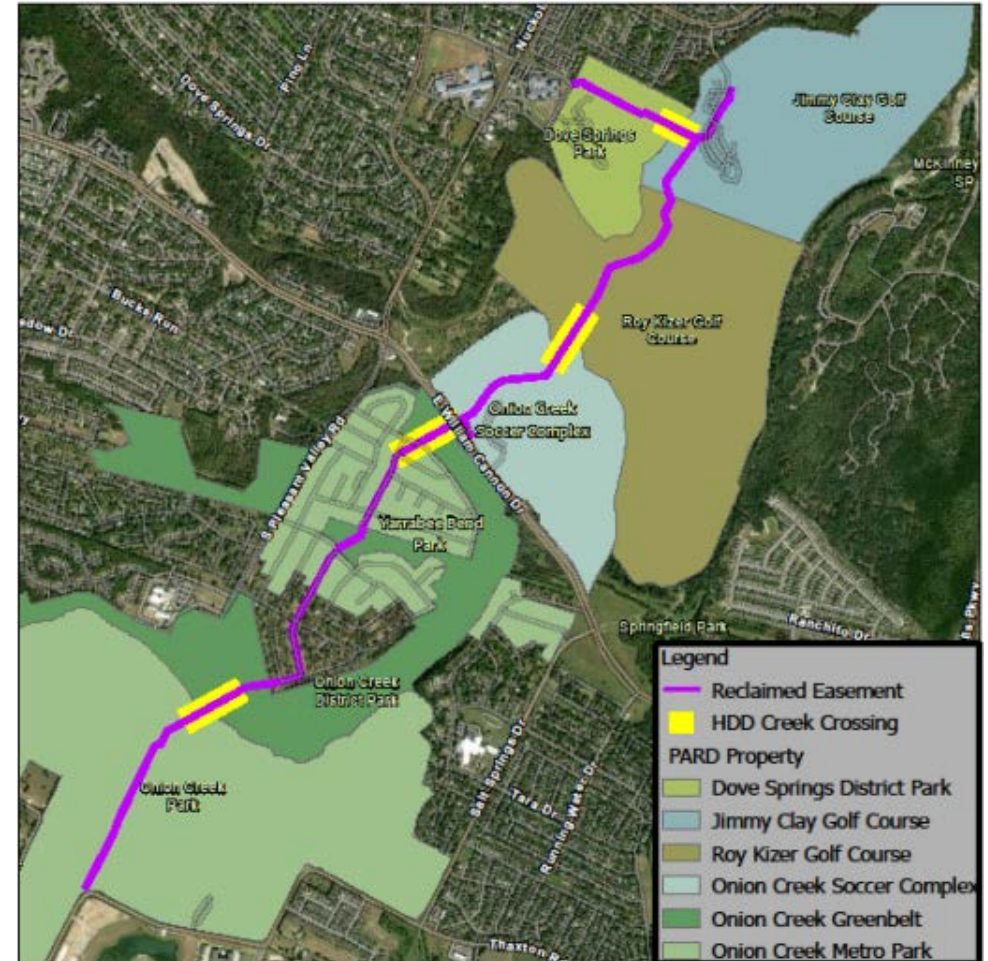
PARD Annual Irrigation Savings \$1.44 million / 406 million gallons water saved

- ◆ Bartholomew District Park
- ◆ Jimmy Clay Golf Course
- ◆ Govalle Neighborhood Park
- ◆ Roy G. Guerrero Metro Park
- ◆ Hancock Golf Course
- ◆ Morris Williams Golf Course
- ◆ Onion Creek Metro Park
- ◆ Republic Square
- ◆ Roy Kizer Golf Course
- ◆ Wooldridge Square



Onion Creek Reclaimed Main Phase 1

- Nearly 3.5 miles of new reclaimed water main
- Sponsored by Austin Water, managed by Public Works
- \$140,000 additional irrigation savings
 - Dove Springs ball and soccer fields
 - Onion Creek soccer complex
 - Onion Creek Metro Park
- Also serves public & private customers
 - Goodnight Ranch
 - Widen Elementary
 - Mendez Middle School



Parkland Easements and Impacts Mitigation



Overview

- ◆ **Project Location:**

5400 Jimmy Clay Drive thru 8652 Nuckols Crossing Road
Austin, TX 78744

- ◆ Easements needed in 5 parks

*1.) Dove Springs Soccer Fields 2.) Clay- Kizer Golf Course 3.) Onion Creek Soccer Fields
4.) Onion Creek Metro Park (N. Entrance) 5.) Onion Creek Metro Park (S. Entrance)*

- ◆ Construction duration = September 2022 to July 2024

- ◆ Horizontal Directional Drilling (HDD) to be used for creek crossings (trenchless)

- ◆ Plans in place to mitigate impacts to park visitors

- ◆ All parkland will be restored to existing condition or better



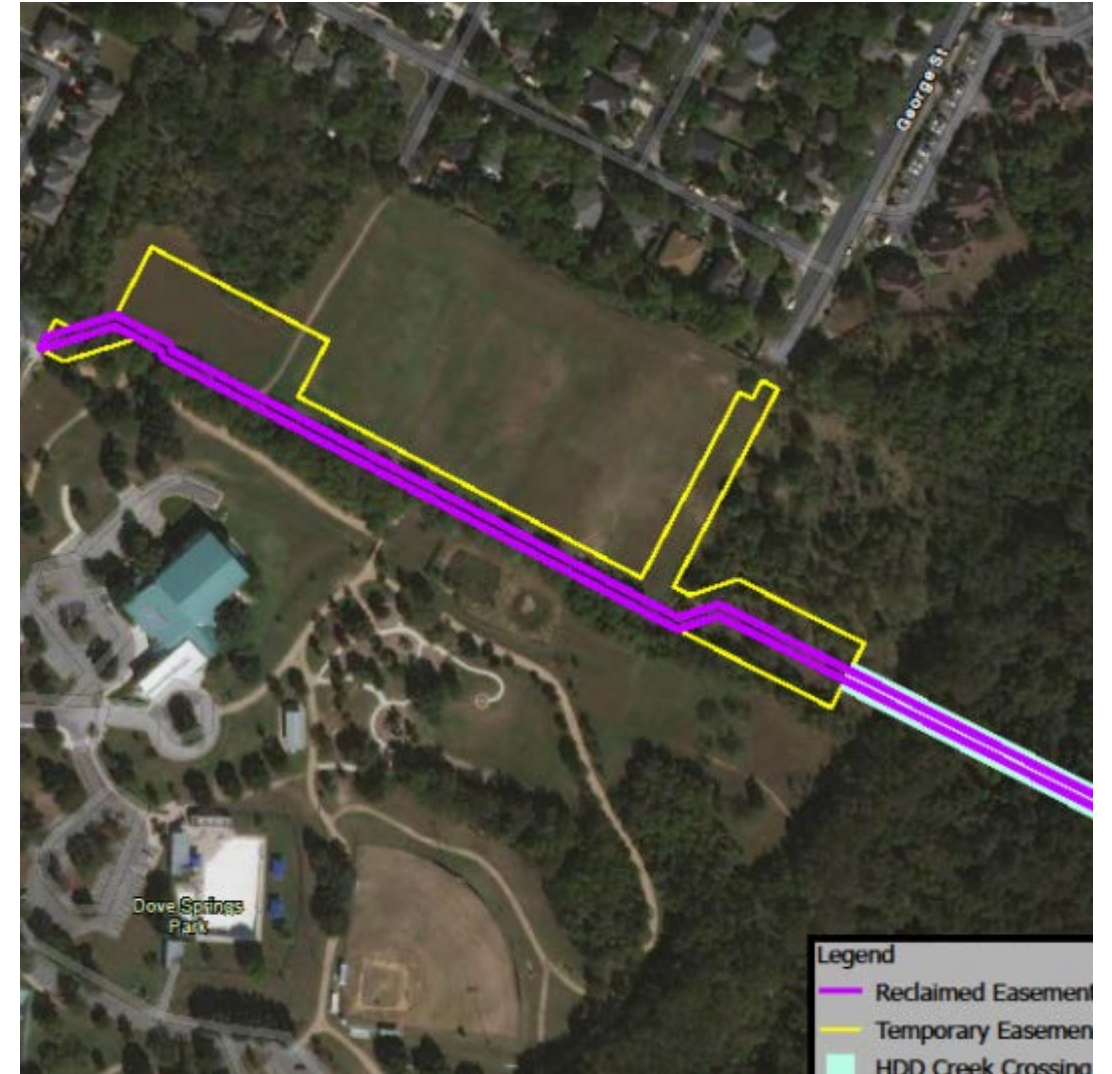
Dove Springs

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 0.610 acres
- ◆ Temporary Construction: 2.366 acres
- ◆ Usage
 - Staging Area (90 ft X 277 ft)
 - Access from George St. (45 ft X 300 ft)
 - HDD Staging Area (100 ft X 200 ft)

IMPACTS MITIGATION:

- ◆ Pathway to be maintained to Recreation Center
- ◆ Permanent & Temporary Use Mitigation will not apply per PARD service request (No Ch.26)



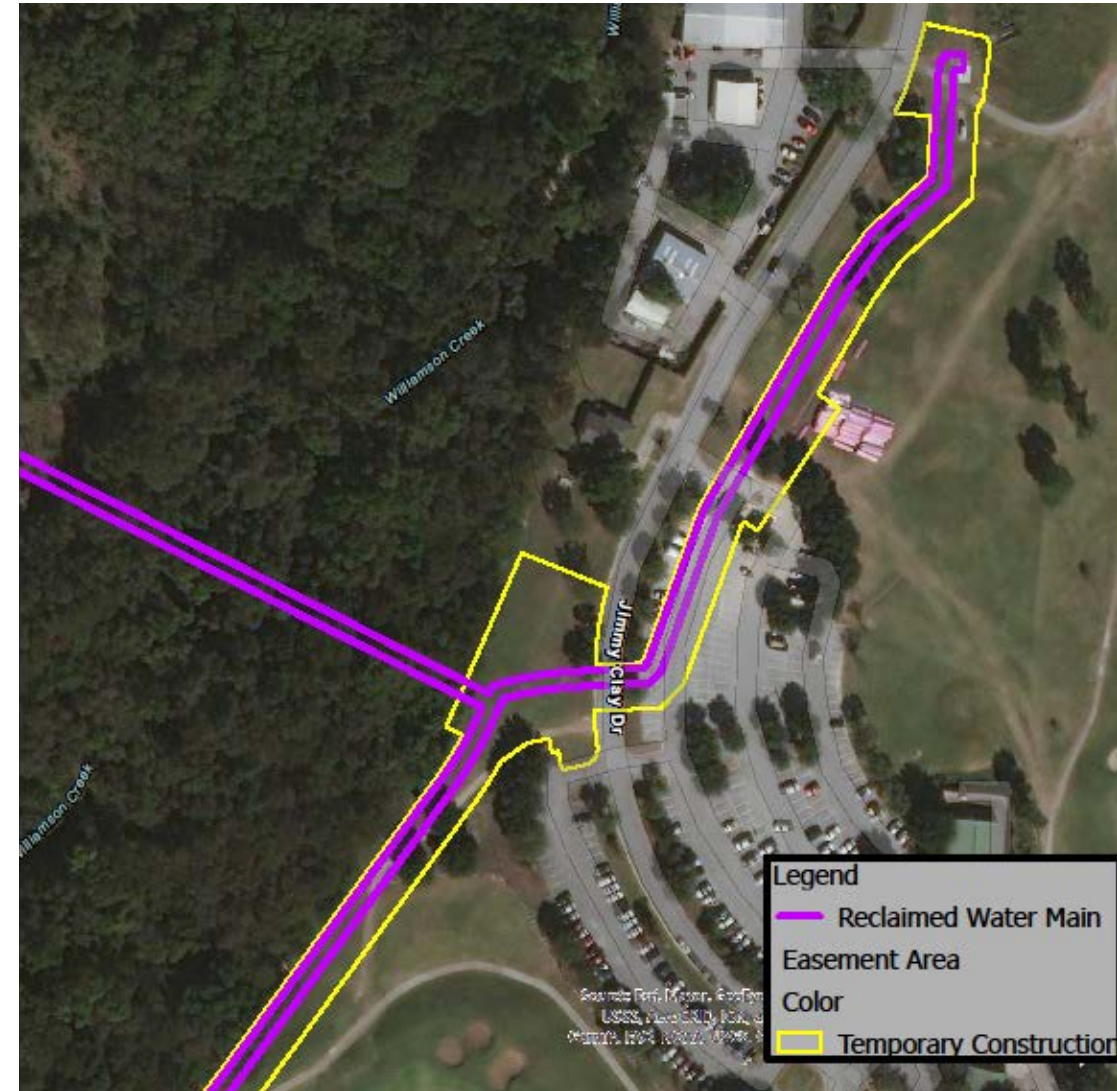
Jimmy Clay

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 0.909 acres
- ◆ Temporary Construction: 2.250 acres
- ◆ Usage:
 - Access from Jimmy Clay Dr. / HDD Staging Area (90 ft X 180 ft)

IMPACTS MITIGATION:

- ◆ Traffic Control for Jimmy Clay Parking Lot
- ◆ Golf Cart Paths, Asphalt, Curb & Gutter of parking lot to be restored after construction
- ◆ Parking Lot and Club-House access will be maintained at all times



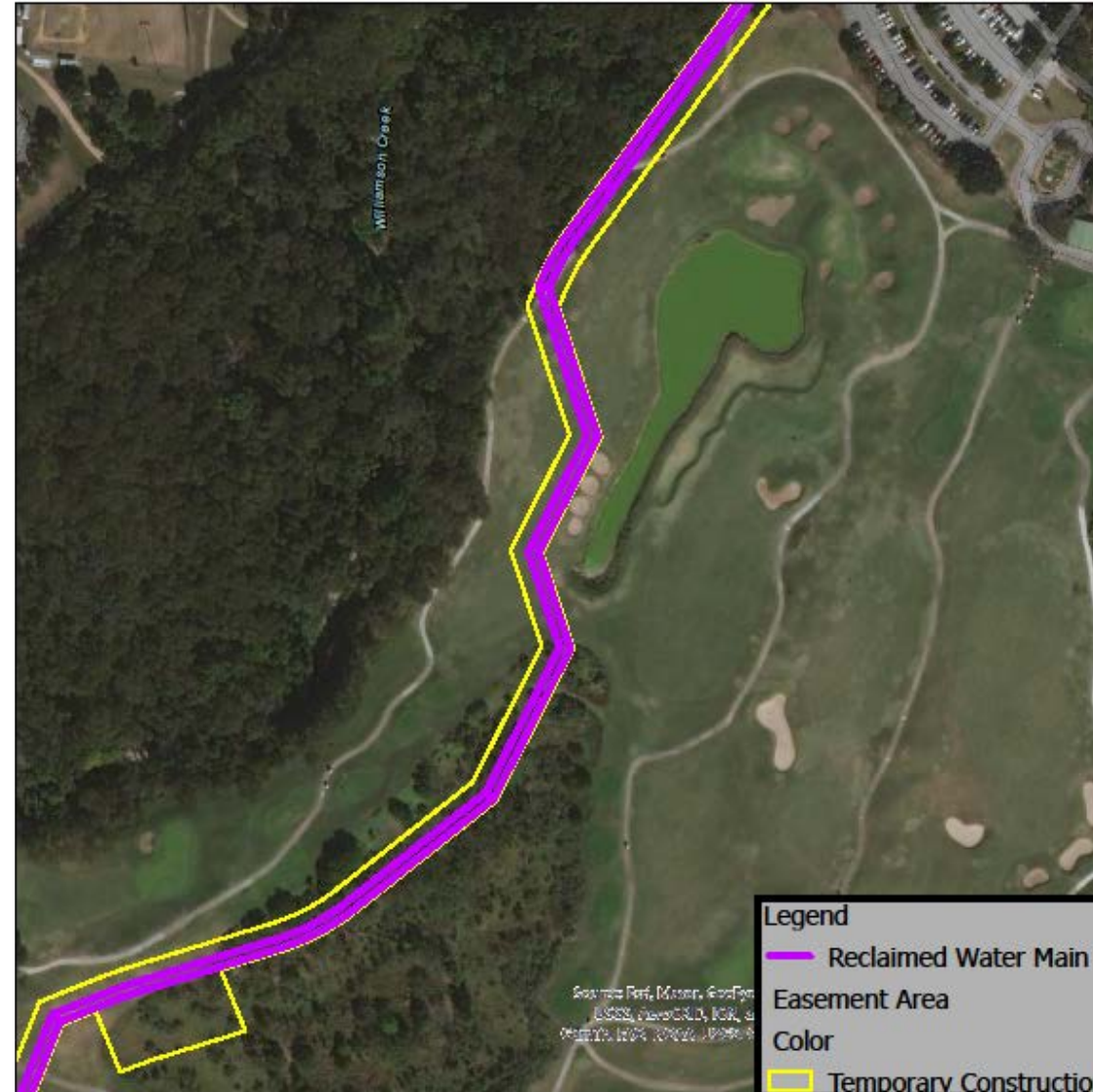
Roy Kizer

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 0.710 acres
- ◆ Temporary Construction: 2.892 acres
- ◆ Temporary Access: 2.916 acres
- ◆ Usage:
 - Access from Jimmy Clay Dr. / HDD Staging Area (90 ft X 180 ft)
 - Dry Pond Staging (100 ft X 200 ft)
 - Access from William Cannon / HDD Staging Area (100 ft X 200 ft)

IMPACTS MITIGATION:

- ◆ 18TH Fairway closed (est. mitigation of \$68,640/30D)
- ◆ 14TH Fairway shortened without mitigation



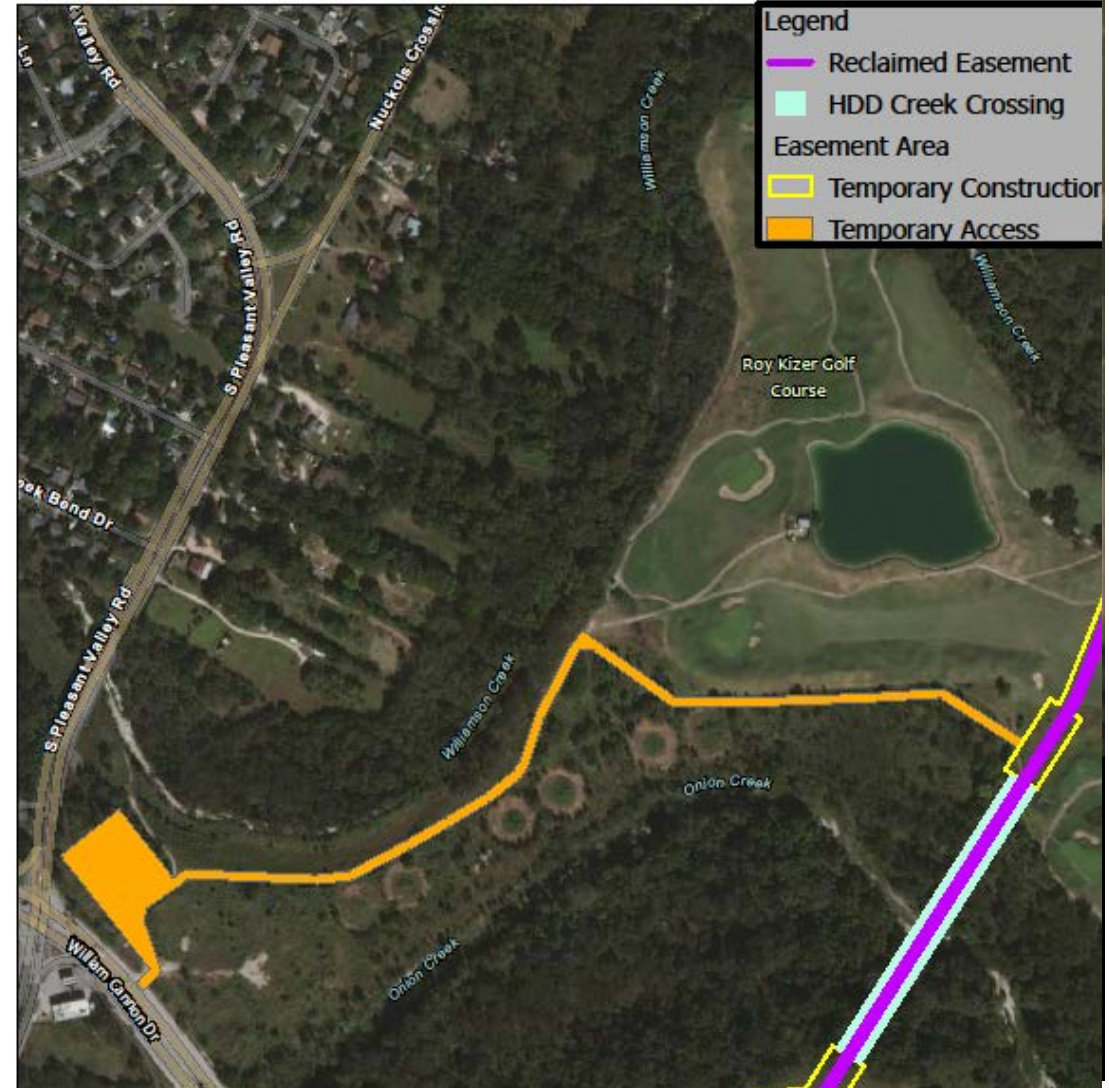
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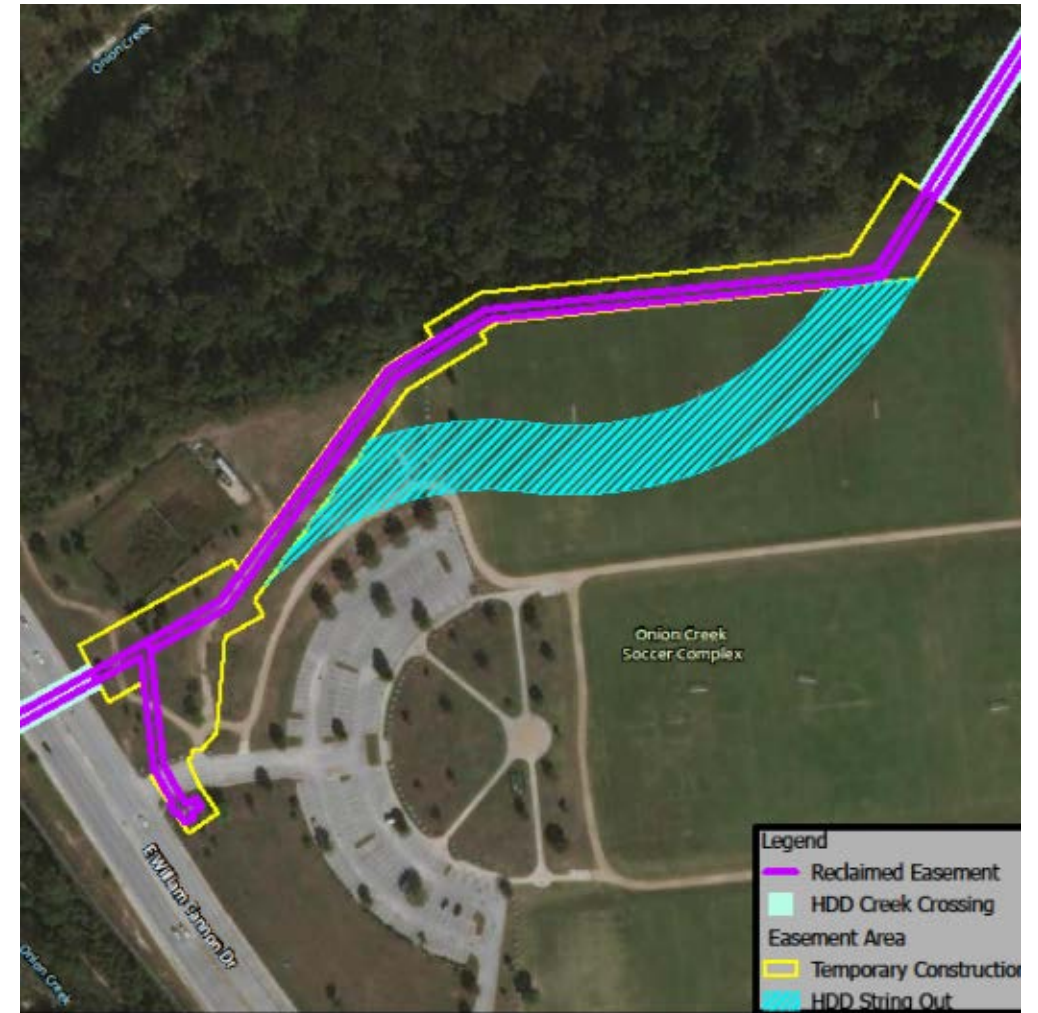
Onion Creek Soccer Fields

EASEMENTS NEEDED:

- Permanent Reclaimed Waterline: 0.678 acres
- Temporary Construction: 2.461 acres
- Usage:
 - HDD String Out Area: 2.051 acres
 - Access from Onion Creek / HDD Staging Area (100 ft X 120 ft)
 - Access from William Cannon / HDD Staging Area (90 ft X 250 ft)

IMPACTS MITIGATION:

- Soccer Complex access will be maintained at all times



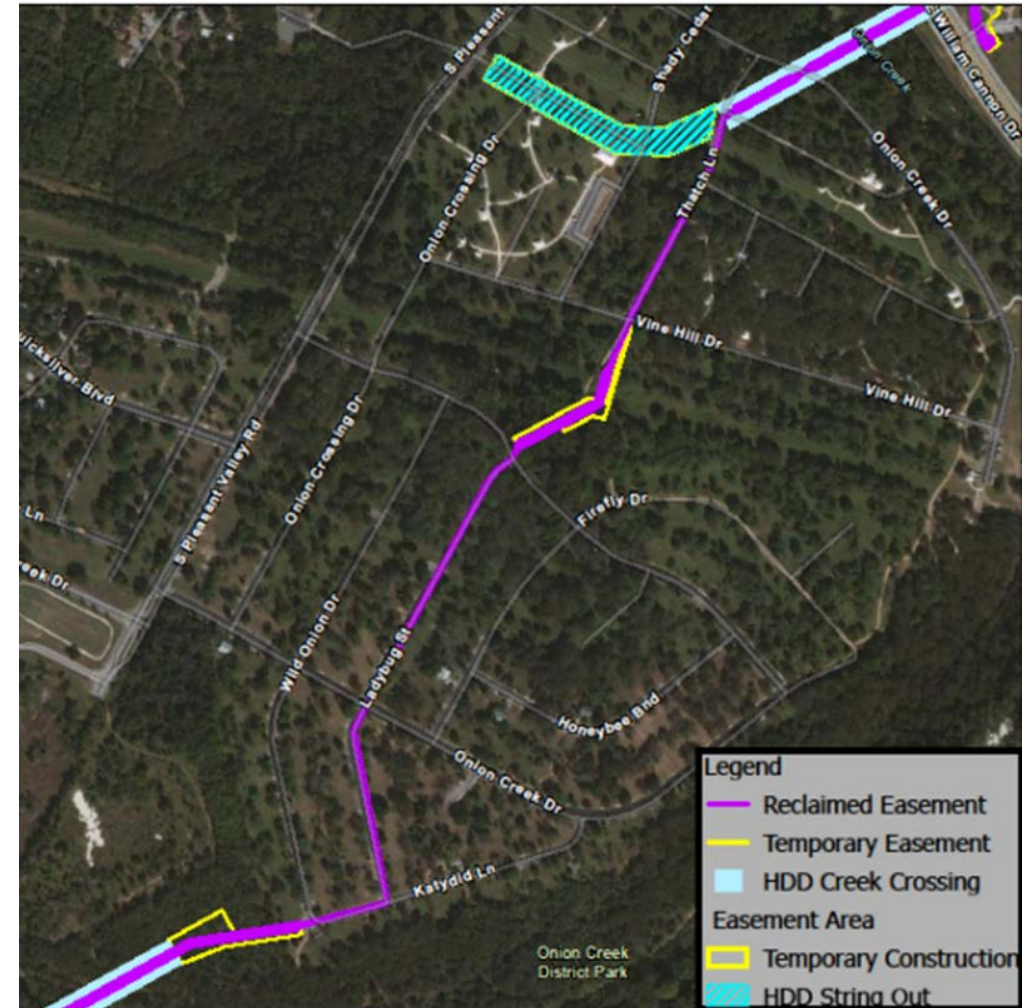
Onion Creek Metro Park (N. Entrance)

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 0.533 acres
- ◆ Temporary Construction: 1.363 acres
- ◆ Usage:
 - Onion Creek Crossing No. 3
 - HDD String Out Area: 2.066 acres
 - HDD Staging Area (100 ft X 125 ft)
 - Jack and Bore

IMPACTS MITIGATION:

- ◆ Temporary granite trail and all-weather access road
- ◆ Traffic control for street closures



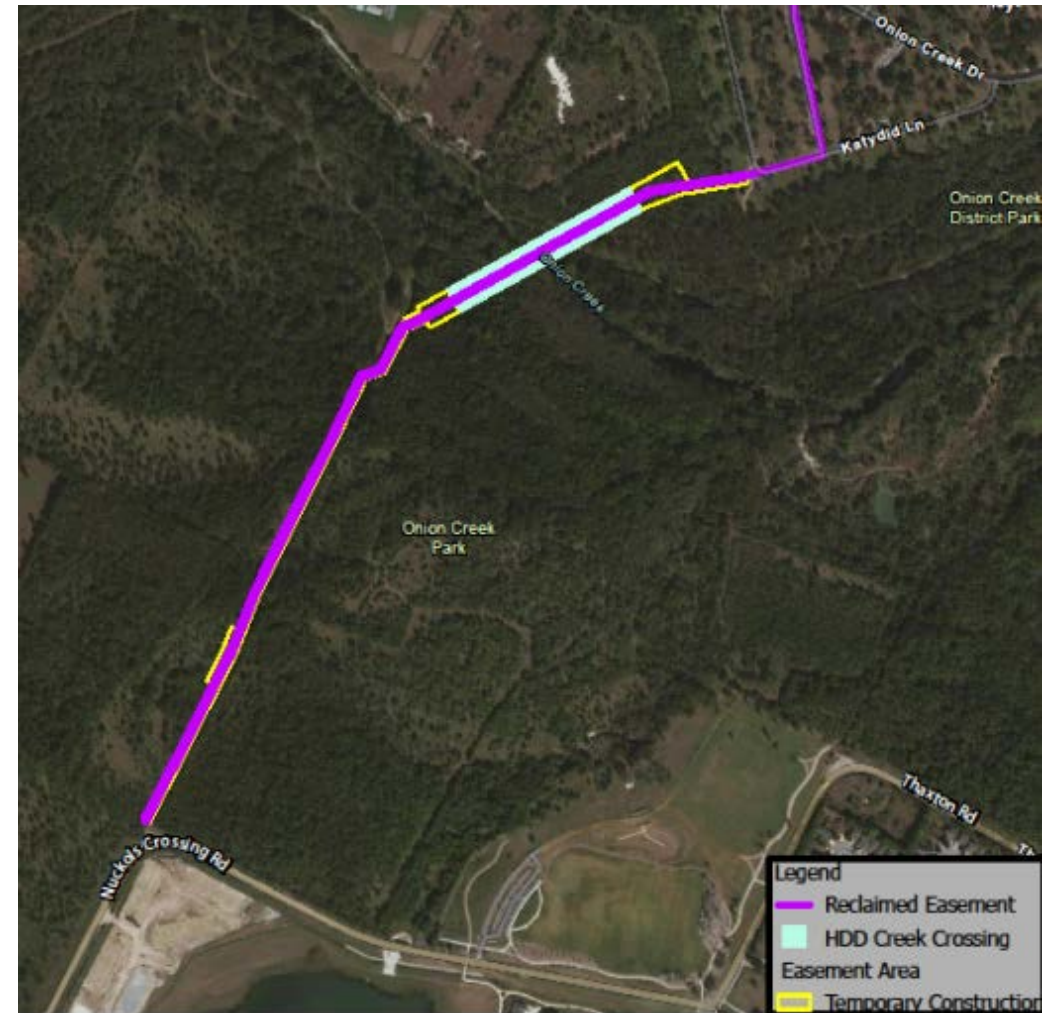
Onion Creek Metro Park (S. Entrance)

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 1.190 acres
- ◆ Temporary Construction: 3.318 acres
- ◆ Usage:
 - Nuckol's Crossing Rd. Access: 2.614 acres
 - HDD Staging Areas
 - North (100 ft X 225 ft)
 - South (100 ft X 140 ft)
 - Temporary Staging Area (30 ft X 250 ft)

IMPACTS MITIGATION:

- ◆ Horse Trails maintained during construction



Next Steps:

- Received bids, pricing guaranteed for September start
- Make a recommendation to City Council for approval of Permanent Wastewater Use and Temporary Work Area, not to exceed **600 Calendar Days** on parkland located at Jimmy Clay Golf Course, Roy Kizer Golf Course, Onion Creek Soccer Complex, Onion Creek Metropolitan Park N. Entrance, and Onion Creek Metropolitan Park S. Entrance. **Total Mitigation is \$818,542**
- On July 20, 2022 to be reviewed by the Water & Wastewater Commission
- July 28, 2022 Council Agenda to set date for Council Approval



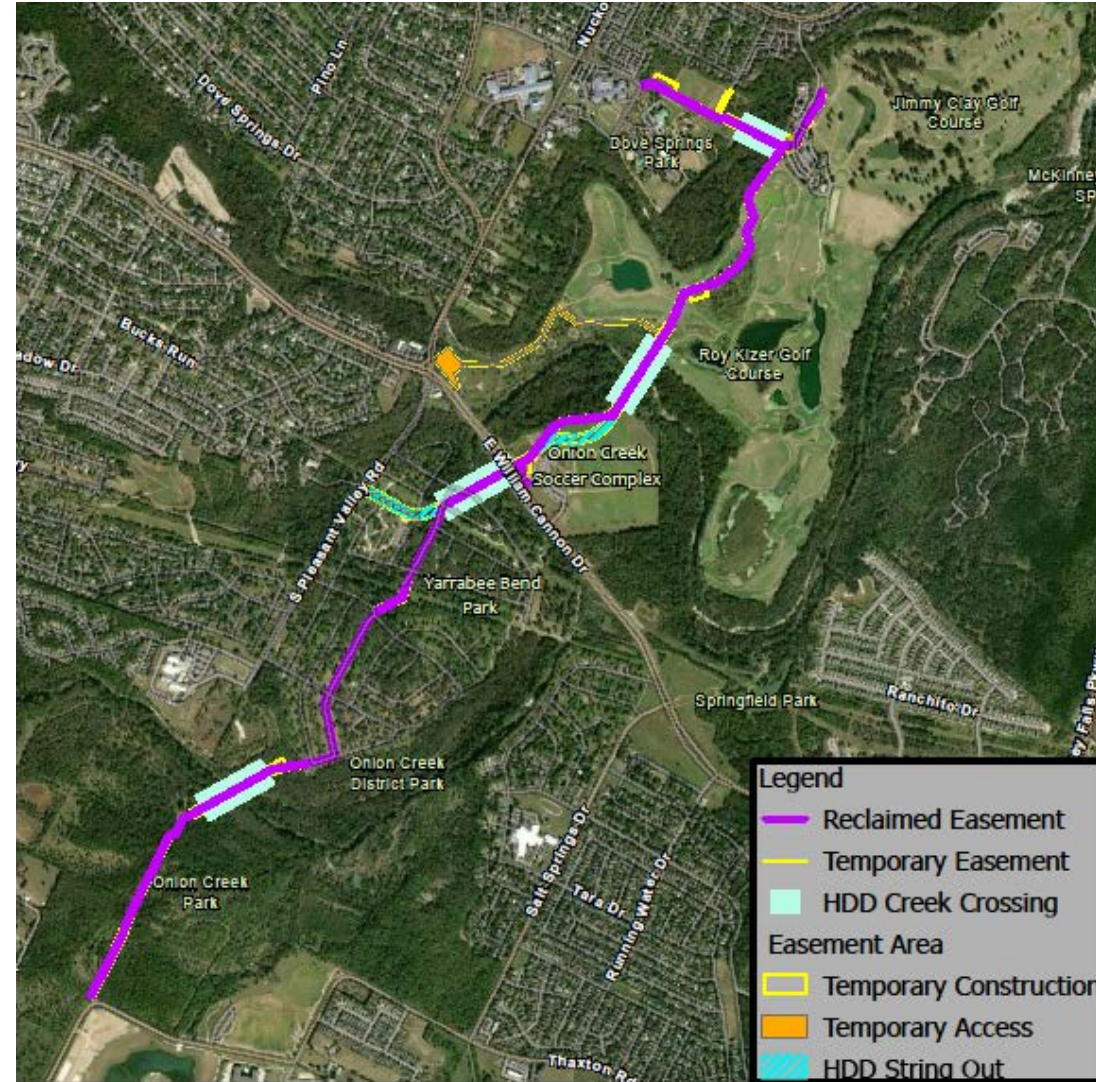


Questions?



Tree Mitigation

- Alignment selected to minimize tree removal
 - (cleared areas, future roadways, abandoned roadways containing other utilities)
- Construction technique (HDD) selected to spare trees by going under
- Some cleared areas are future horse trails that will be cleared in the future.
- Not appropriate to plant trees over mains
- Tree planting not a component of AW's core competencies



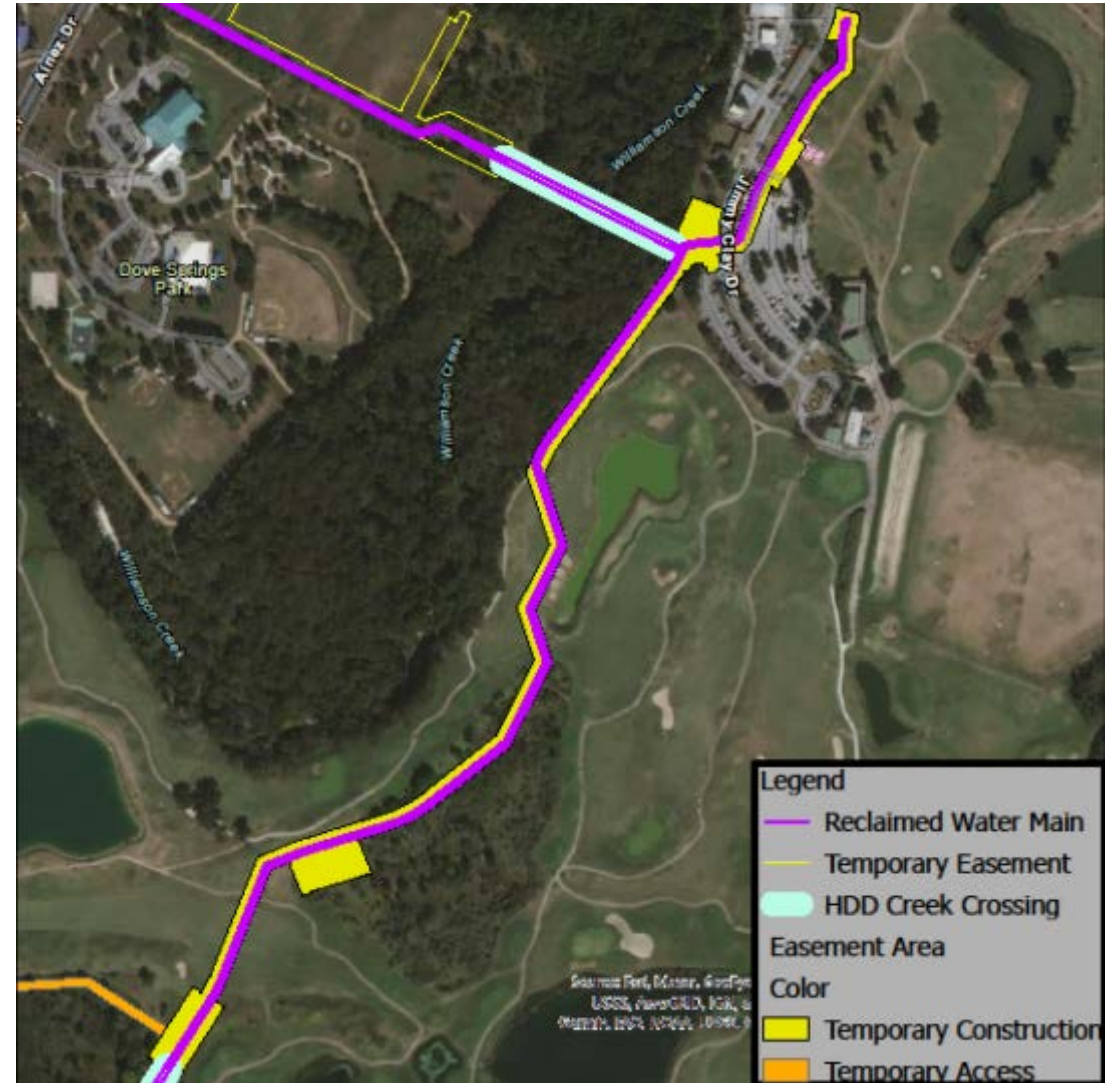
Clay-Kizer

EASEMENTS NEEDED:

- ◆ Permanent Reclaimed Waterline: 1.619 acres
- ◆ Temporary Construction: 5.142 acres
- ◆ Temporary Access: 2.916 acres
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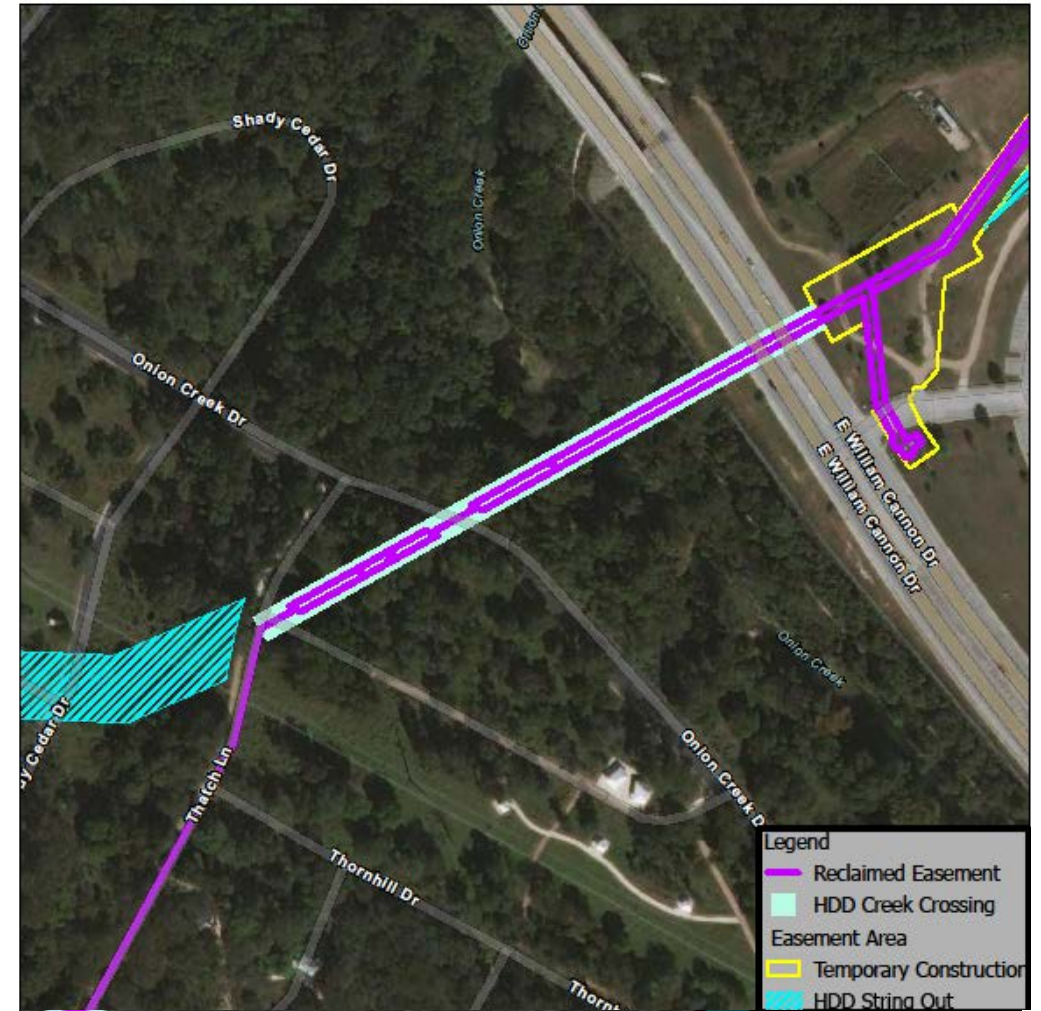
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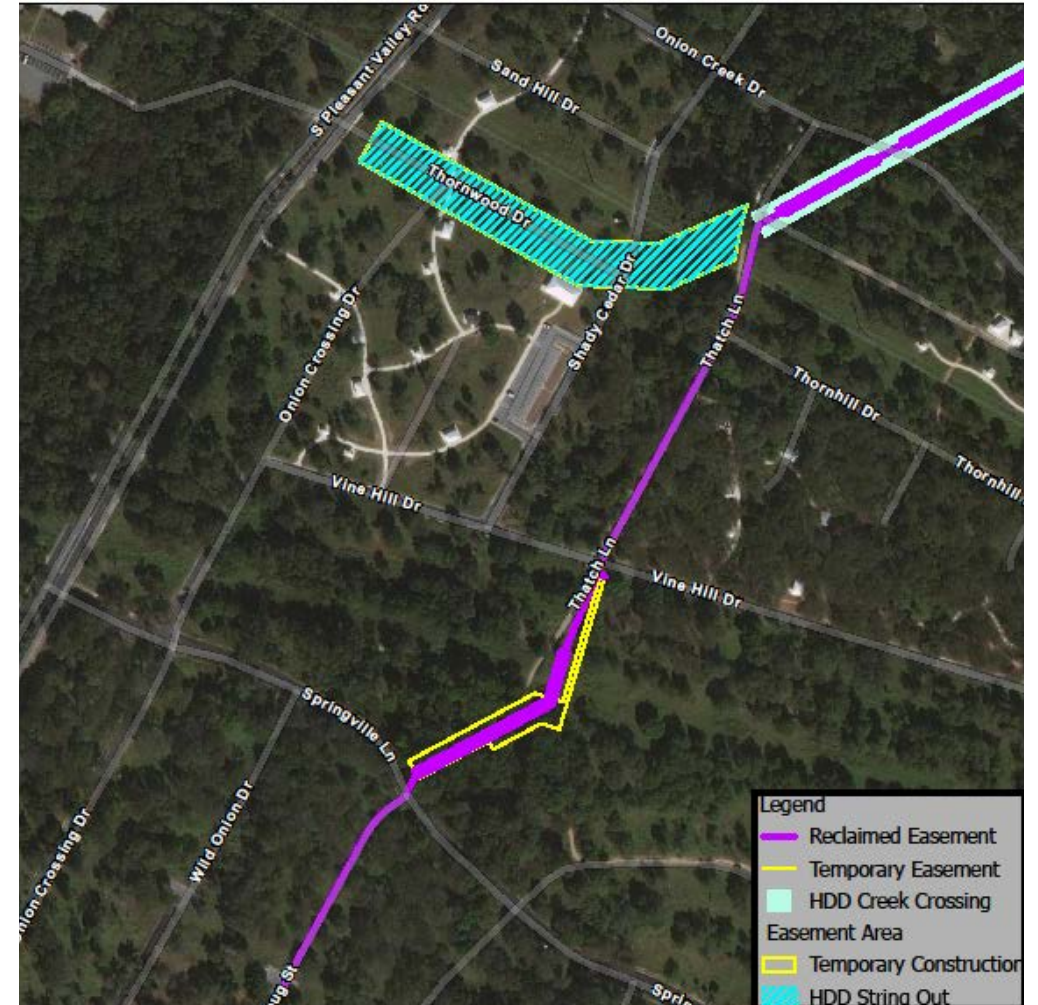
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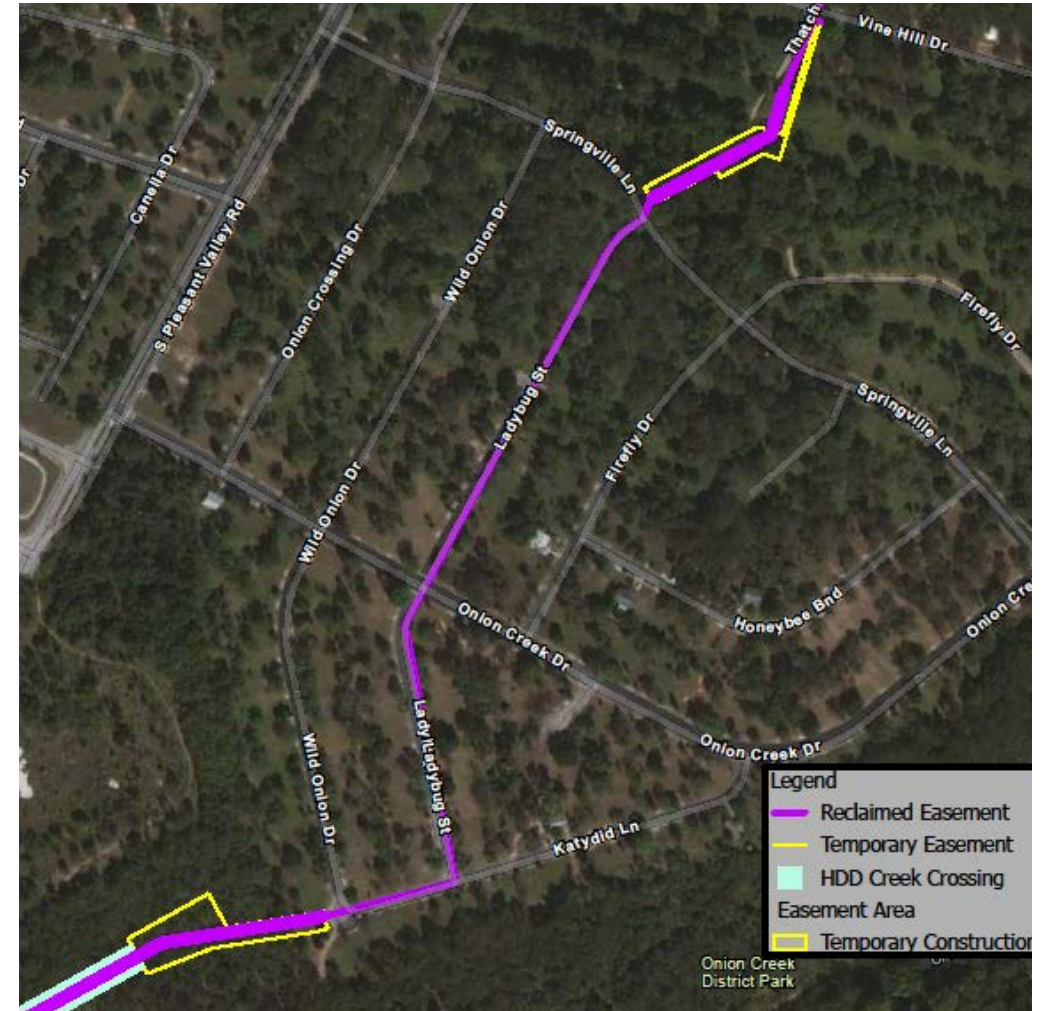
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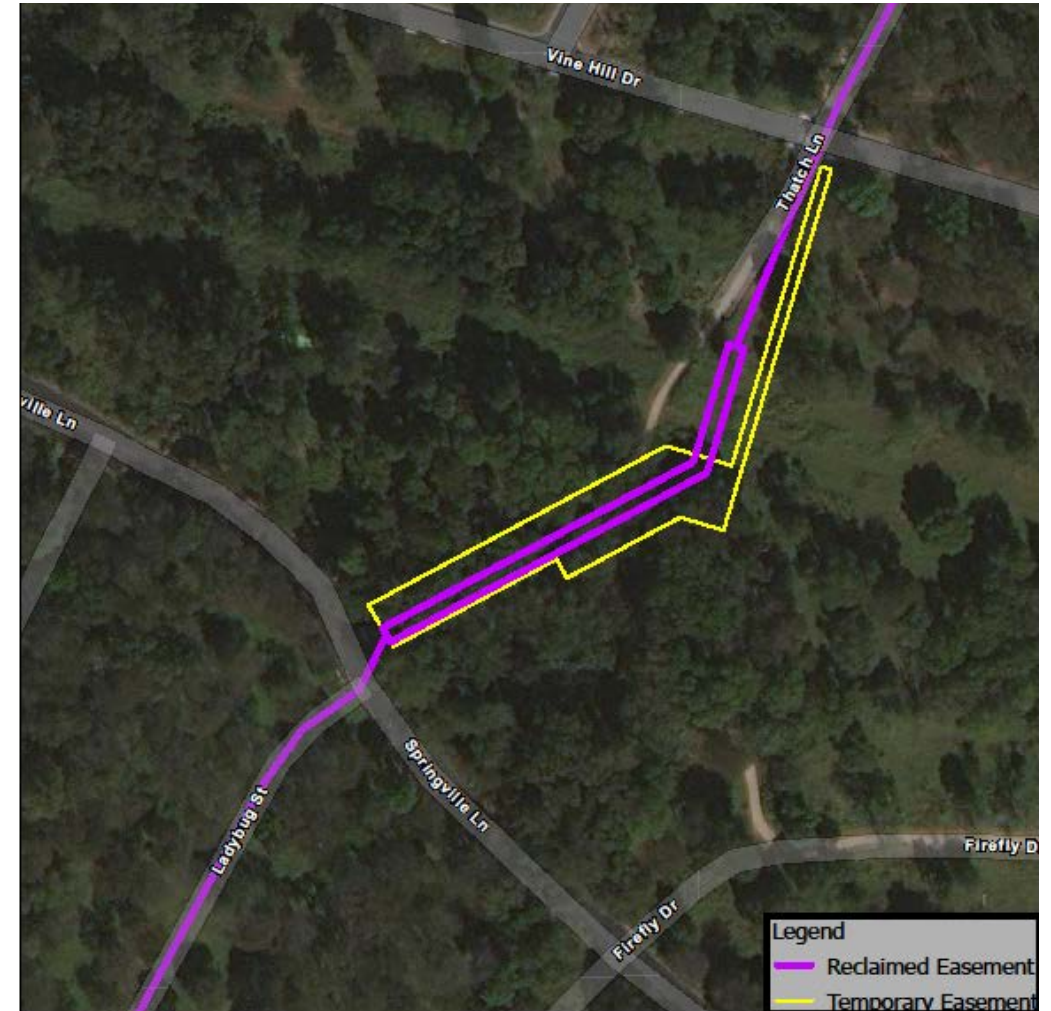
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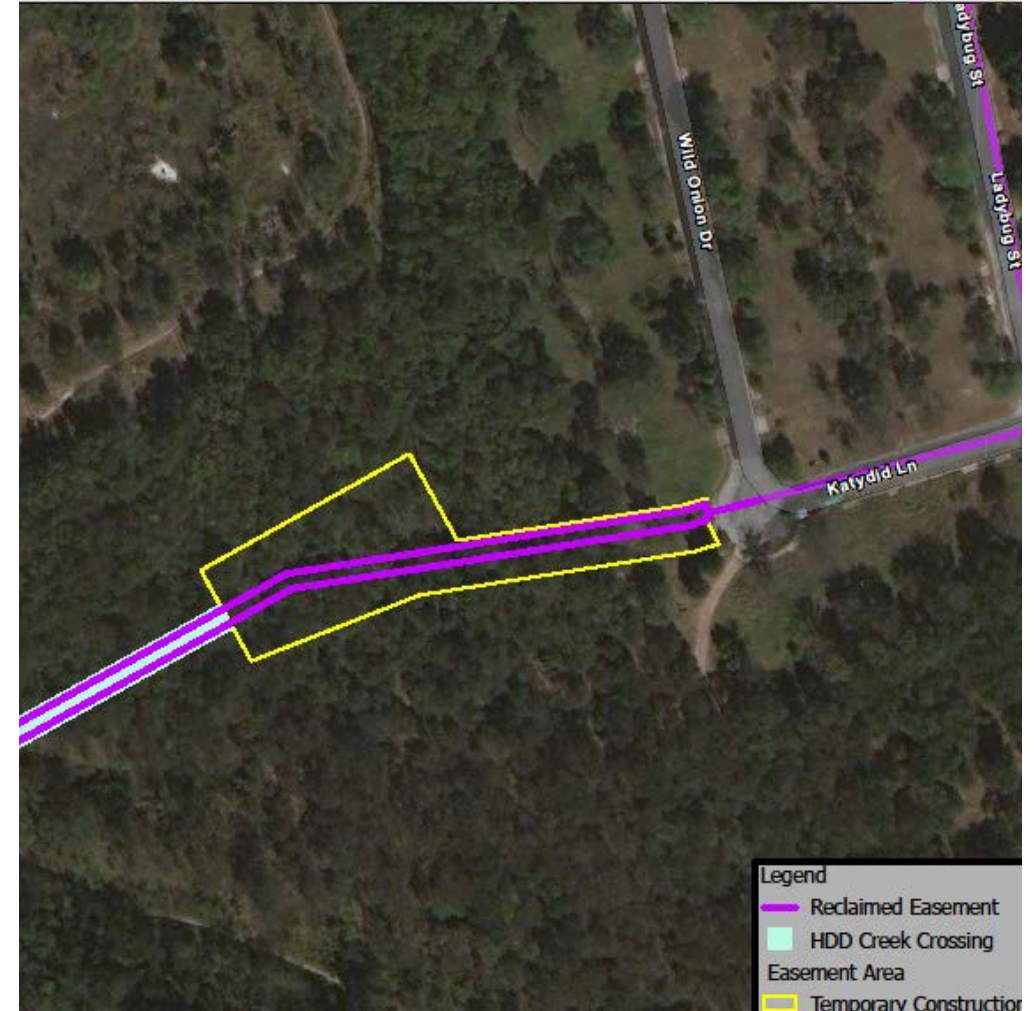
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