

CASTLE ROCK WATER

# **RESOLUTION – FIRST AMENDMENT TO THE SERVICE AGREEMENT WITH CAROLLO ENGINEERS FOR ESCAVERA WASTEWATER ODOR EVALUATION**

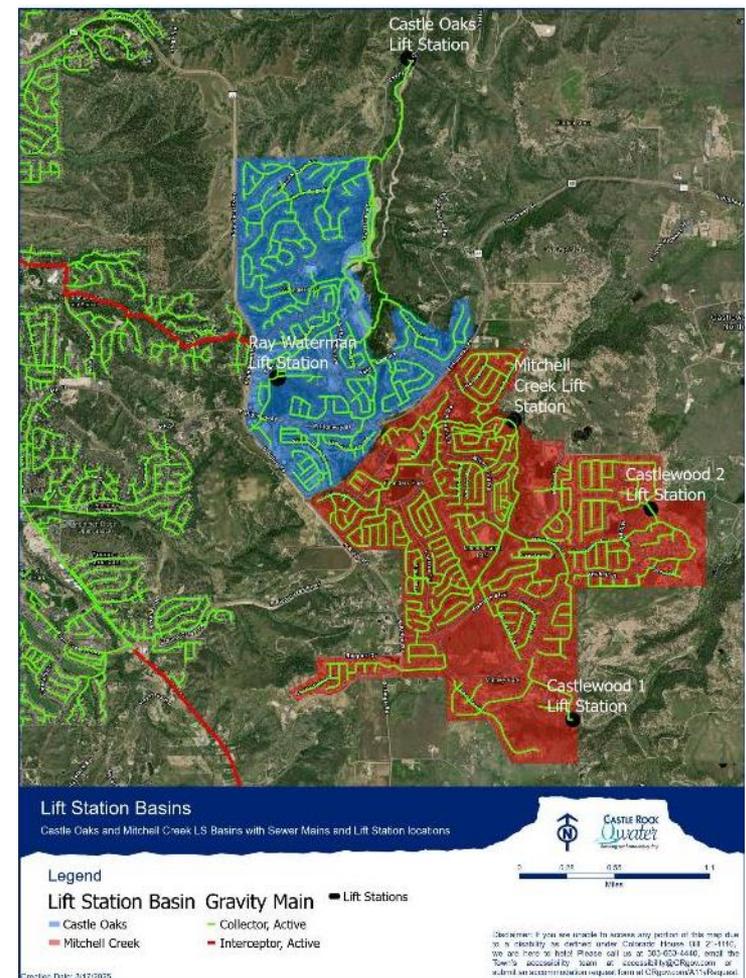
OCTOBER 21, 2025



# ESCAVERA WASTEWATER ODOR EVALUATION

## BACKGROUND

- Woodlands Sewer Interceptor built in 1987
- Escavera/Woodlands homes built 2002 – 2006
- Woodlands neighborhood complaints on odor
- Odor Improvement Facility built in 2007
- Current treatment systems
  - Bioxide (since 2003)
  - IMET (Since 2023)
  - Odor Control Station (Since 2007)
- Phase 1 services awarded to Carollo May 29, 2025



# ESCAVERA WASTEWATER ODOR EVALUATION

## PHASE 1 SCOPE

### CRW Operational adjustments

- Increased inspection frequency
- Actively manage odor control station
- Media change out

### Carollo Phase 1 Services

- Engineering evaluation of existing facilities
  - Collection system monitoring
  - Odor control system testing
  - Media testing
  - Review bioxide feed quantity and injection location
  - Additional operational adjustments

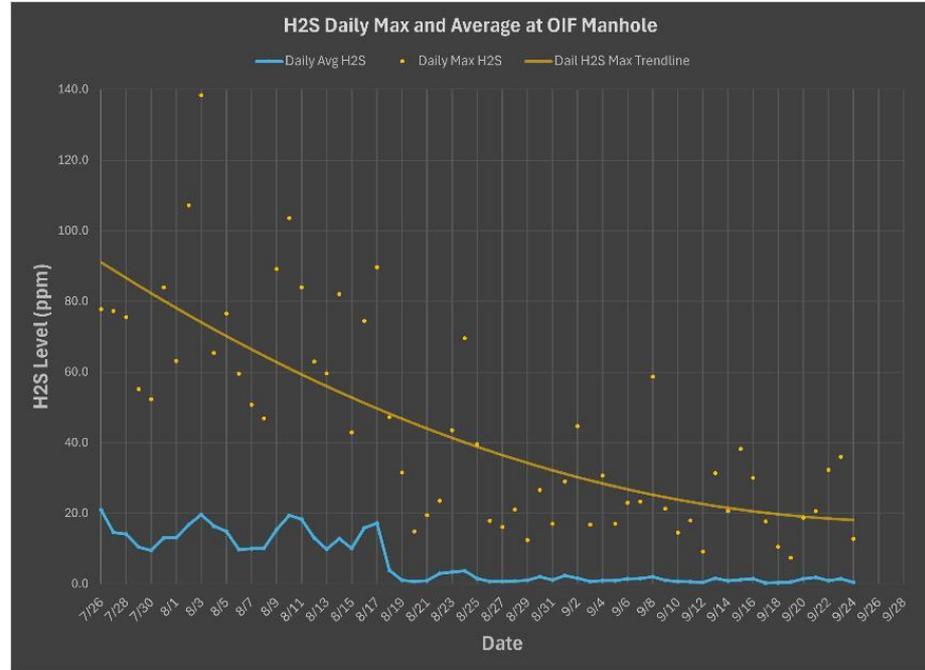
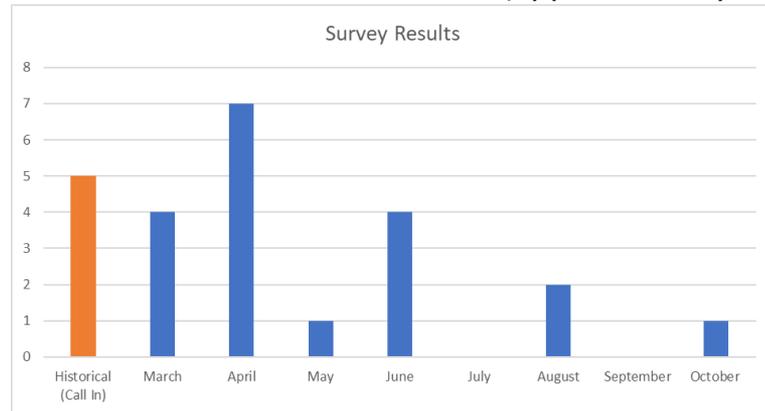


ODOR CONTROL STATION

# ESCAVERA WASTEWATER ODOR EVALUATION

## PROGRESS TO DATE – CAROLLO RECOMMENDATIONS

- Continued increased inspection frequency – new hydrogen sulfide monitoring equipment
- Shut down and sealed odor control station
- Fixed Homeowners Association clean-out near the bathrooms
- Sealed all manholes in area
- Shutdown experimental IMET system
- Increased bioxide addition rates (approximately 60%)



# ESCAVERA WASTEWATER ODOR EVALUATION

## AMENDMENT 1 (PHASE 2) SCOPE

- Continuous monitoring and evaluation of operational changes and existing infrastructure improvements
- Assistance with lift station chemical mixing and pumping improvements
- Evaluate alternative infrastructure options and treatment technologies
  - Line changes, location of structure and design
    - Alternate Odor Improvement Facility location downstream
    - Convey Castle Oaks flows to Pinery Wastewater Plant
  - Potential additional treatment technologies
    - Ozone
    - Facultative Bacteria
    - Speece Cone
    - pH Control
    - New Meters
    - Wet Well Wizard Upgrades
    - Nano Bubbles
    - PureAir Filtration
- Evaluate and recommend capital investments



CASTLE OAKS LIFT STATION

# ESCAVERA WASTEWATER ODOR EVALUATION

## PROJECT SUMMARY

### Service Agreement

- Phase 1 services awarded to Carollo May 29, 2025
- Sole source procurement
  - Nationally recognized leader in wastewater engineering with staff specializing in wastewater odor issues
  - Recommended by Plum Creek Water Reclamation Authority staff
  - Previous project experience

### Funding

- Adequate funding in 2025 budget

### Schedule

- Phase 1: March 2025 – October 2025
- Phase 2 (this amendment): October 2025 – March 2026
- Operational Improvements: ongoing

### Recommendations

- Water Commission
- Staff

Agreement	Contract \$	Contingency \$	Authorization \$
Original Agreement (Approved 5/29/2025)	157,080	15,708	172,788
Amendment 1 (under consideration)	146,922	14,692	161,614
<b>Amended Totals</b>	<b>304,002</b>	<b>30,400</b>	<b>334,402</b>



- PROPOSED MOTION:

- *“I move to approve the Resolution 2025-596 as introduced by title.”*

- ALTERNATIVE MOTIONS:

- *“I move to approve the Resolution as introduced by title, with the following conditions: (list conditions).”*
- *“I move to continue this item to the Town Council meeting on \_\_\_\_ date to allow additional time to (list information needed).”*