



**CITY OF FAIR OAKS RANCH**  
**BOND ADVISORY COMMITTEE**

Wednesday, April 03, 2024 at 6:00 PM  
City Hall Council Chambers, 7286 Dietz Elkhorn, Fair Oaks Ranch

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**AGENDA**

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**OPEN MEETING**

1. Roll Call - Declaration of a Quorum.

**CITIZENS and GUEST FORUM**

*To address the Committee, please sign the Attendance Roster located on the table at the entrance of the Council Chambers. In accordance with the Open Meetings Act, the Bond Advisory Committee may not discuss or take action on any item which has not been posted on the agenda. Speakers shall limit their comments to five (5) minutes each.*

2. Citizens to be heard.

**CONSIDERATION / DISCUSSION ITEMS**

3. Town Hall Meeting Update.

Scott Huizenga, ICMA-CM, City Manager

4. Capital Improvements Plan Overview.

Summer Fleming, Director of Finance

5. Introduction of Wastewater Projects.

Grant Watanabe, P.E., Director of Public Works & Engineering Services

**FUTURE MEETINGS**

6. Consideration and possible action to schedule future meeting dates.

Amanda Valdez, TRMC, Deputy City Secretary

**ADJOURNMENT**

*Requests for City topic needing additional information/research; or, potential consideration for a future agenda*

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**Signature of Agenda Approval:** s/Scott M. Huizenga s

Scott M. Huizenga, ICMA-CM, City Manager

I, Amanda Valdez, TRMC, Deputy City Secretary, certify that the above Notice of Meeting was posted on the outside bulletin board at the Fair Oaks Ranch City Hall, 7286 Dietz Elkhorn, Fair Oaks Ranch, Texas, and on the City's website [www.fairoaksranchtx.org](http://www.fairoaksranchtx.org), both places being convenient and readily accessible to the general public at all times.

As per Texas Government Code 551.045, said Notice was posted by 9:00 AM, March 31, 2024 and remained so posted continuously for at least 72 hours before said meeting was convened. A quorum of City Council, various boards, committees, and commissions may attend the Bond Advisory Committee meeting.

The Fair Oaks Ranch Police Station is wheelchair accessible at the front main entrance of the building from the parking lot. Requests for special services must be received forty-eight (48) hours prior to the meeting time by calling the City Secretary's office at (210) 698-0900. Braille is not available.



# Capital Improvement Plan Overview



Item #4.

April 3, 2024

Summer Fleming  
Director of Finance



# Projects Under Consideration



### Drainage

- 11 Projects
- \$2.2 million



### Roadways

- 4 projects
- \$16 million



### Buildings/Other

- 2 projects
- \$3 million



### Water/Wastewater

- 19 Projects
- \$23.9 million



# CIP Assumptions and Methodology

- Uses Council-adopted CIP priorities
- Combination of cash and debt financing
- 20-year debt financing
- Phase-in of projects over five-year period



# Available Funding Sources

- Utility Capital Reserve Fee
- Utility Impact Fee
- Debt Issuance
  - Certificate of Obligation (CO) – No election required, but voters retain the right of referendum
  - Revenue Bond – No election required; supported by utility revenue



# 5-Year Water CIP

	2023	2024	2025	2026	2027	2028	Total
Willow Wind/Red Bud Hill Water Line (29R)	\$35,836	\$34,869	\$879,807	-	-	-	\$950,512
Elevated Storage Tank (2W)	14,480	161,833	639,453	3,763,968	3,914,527	-	8,494,260
Rolling Acres Trail Water Line Rehab (28R)	30,011	36,783	610,941	-	-	-	677,735
Expand Plant No. 5 (Impact Fee) (5W)	5,856	223,643	1,320,800	-	-	-	1,550,299
Old Fredericksburg Water Line (21W)	25,857	266,063	270,400	-	-	-	562,320
Upgrade Elmo Davis Pump Station (1R, 2R)	-	-	400,400	-	-	-	400,400
Upgrade Electrical at Plant No.3 Pump Station (5R)	-	-	74,419	318,519	-	-	392,939
Upgrade Electrical at Elmo Davis Pump Station (3R)	-	-	70,348	320,530	91,743	-	482,620
Well K6 Electrical (11R)	-	-	60,000	-	-	-	60,000
Well CR1 Electrical (16R)	-	-	60,000	-	-	-	60,000
Expand Elmo Davis Water Plant Zone C (Impact Fee) (6W)	-	-	-	193,240	1,094,715	300,408	1,588,363
<b>Total Water</b>	<b>\$112,040</b>	<b>\$723,191</b>	<b>\$4,386,567</b>	<b>\$4,596,257</b>	<b>\$5,100,985</b>	<b>\$300,408</b>	<b>\$15,219,448</b>



# 5-Year Wastewater CIP

	2023	2024	2025	2026	2027	2028	Total
Wastewater Treatment Plant Phase 1 Expansion (2S)	\$77,985	\$917,253	\$1,714,987	\$2,737,530	-	-	\$5,447,755
Install Sewer Line and Decommission Falls Lift Station (1S)	-	-	-	113,521	811,763	-	925,284
Improvements at School Lift Station (8R)	-	-	-	303,470	-	-	303,470
Improvements at Deer Meadow Lift Stations No.1 (10R)	-	-	-	-	179,487	-	179,487
Improvements at Deer Meadow Lift Stations No.2 (9R)	-	-	-	-	179,487	-	179,487
<b>Total Wastewater</b>	<b>\$77,985</b>	<b>\$917,253</b>	<b>\$1,714,987</b>	<b>\$3,154,521</b>	<b>\$1,170,736</b>	-	<b>\$7,035,483</b>





# Utilities Fund – Service Fees

Funding Required						
	2023	2024	2025	2026	2027	2028
Total Water Projects	\$112,040	\$723,191	\$4,386,567	\$4,596,257	\$5,100,985	\$300,408
Total Wastewater Projects	77,985	917,253	1,714,987	3,154,521	1,170,736	-
<b>Total All Projects</b>	<b>\$190,025</b>	<b>\$1,640,444</b>	<b>\$6,101,554</b>	<b>\$7,750,778</b>	<b>\$6,271,721</b>	<b>\$300,408</b>

Debt Service & Capital Fees						
	2023	2024	2025	2026	2027	2028
Water	\$14.15	\$14.69	\$29.32	\$30.64	\$27.93	\$33.12
Wastewater	6.41	6.77	21.40	21.61	24.24	16.75
<b>Combined</b>	<b>\$20.56</b>	<b>\$21.46</b>	<b>\$50.72</b>	<b>\$52.25</b>	<b>\$52.17</b>	<b>\$49.87</b>



# Other Projects

Other Water Projects	2023	2024	2025	2026	2027	2028	Total
SAWS Emergency Interconnect	-	-	\$200,000	-	-	-	\$200,000
Ground Storage Tank at Plant No. 4	-	-	400,000	-	-	-	400,000
<b>Total Other Water</b>	-	-	<b>\$600,000</b>	-	-	-	<b>\$600,000</b>

Other Wastewater Projects	2023	2024	2025	2026	2027	2028	Total
Cojak Circle Manhole and Sewer Upgrade	-	-	\$1,000,000	-	-	-	\$1,000,000
<b>Total Other Wastewater</b>	-	-	<b>\$1,000,000</b>	-	-	-	<b>\$1,000,000</b>



# Questions?



# Wastewater CIP Workshop

April 3, 2024

Grant Watanabe, P.E.

Director of Public Works and Engineering Services



# Agenda

- Overview
- Projects Completed
- Approved 5-year Wastewater CIP
  - WWTP Phase 1 Expansion
  - Install Sewer Line and Decommission The Falls Lift Station
  - Improvements at School Lift Station
  - Improvements at Deer Meadows Lift Station No. 1
  - Improvements at Deer Meadows Lift Station No. 2
- Other Projects for Consideration
  - Cojak Circle Manhole and Sewer Line Upgrade
- Discussion





# Overview

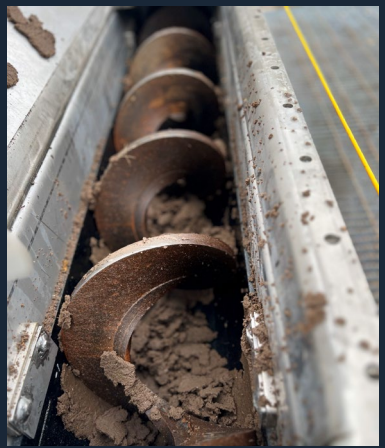
- Much of the City's sewer infrastructure was originally built in the 1970s. It now includes:
  - Wastewater Treatment Plant (W/WTP)
  - 34.5 miles of gravity mains
  - 2.5 miles of force mains
  - 2.8 miles of effluent mains
  - 7 lift stations
- Currently serves 2024 wastewater customers







# Project Completed – Dewatering Press





# Approved 5-Year Wastewater CIP

	2023	2024	2025	2026	2027	2028	Total
Wastewater Treatment Plant Phase 1 Expansion (2S)	77,985	917,253	1,714,987	2,737,530	-	-	5,447,755
Install Sewer Line and Decommission Falls Lift Station (1S)	-	-	-	113,521	811,763	-	925,284
Improvements at School Lift Station (8R)	-	-	-	303,470	-	-	303,470
Improvements at Deer Meadow Lift Stations No.1 (10R)	-	-	-	-	179,487	-	179,487
Improvements at Deer Meadow Lift Stations No.2 (9R)	-	-	-	-	179,487	-	179,487
<b>Total Wastewater</b>	<b>77,985</b>	<b>917,253</b>	<b>1,714,987</b>	<b>3,154,521</b>	<b>1,170,736</b>	<b>-</b>	<b>7,035,483</b>



Cash Funded



Requires Debt Funding





# Past Ranking/Scoring Schemes

## “Must Do” Projects

- Regulatory driven
- System resiliency significantly improved based on current operations
- Improvements to infrastructure with known high O&M costs

## “Should Do” Projects

- Added system resiliency
- Reduction in O&M costs
- Potential for regulatory deficiencies

## “Nice to Do” Projects

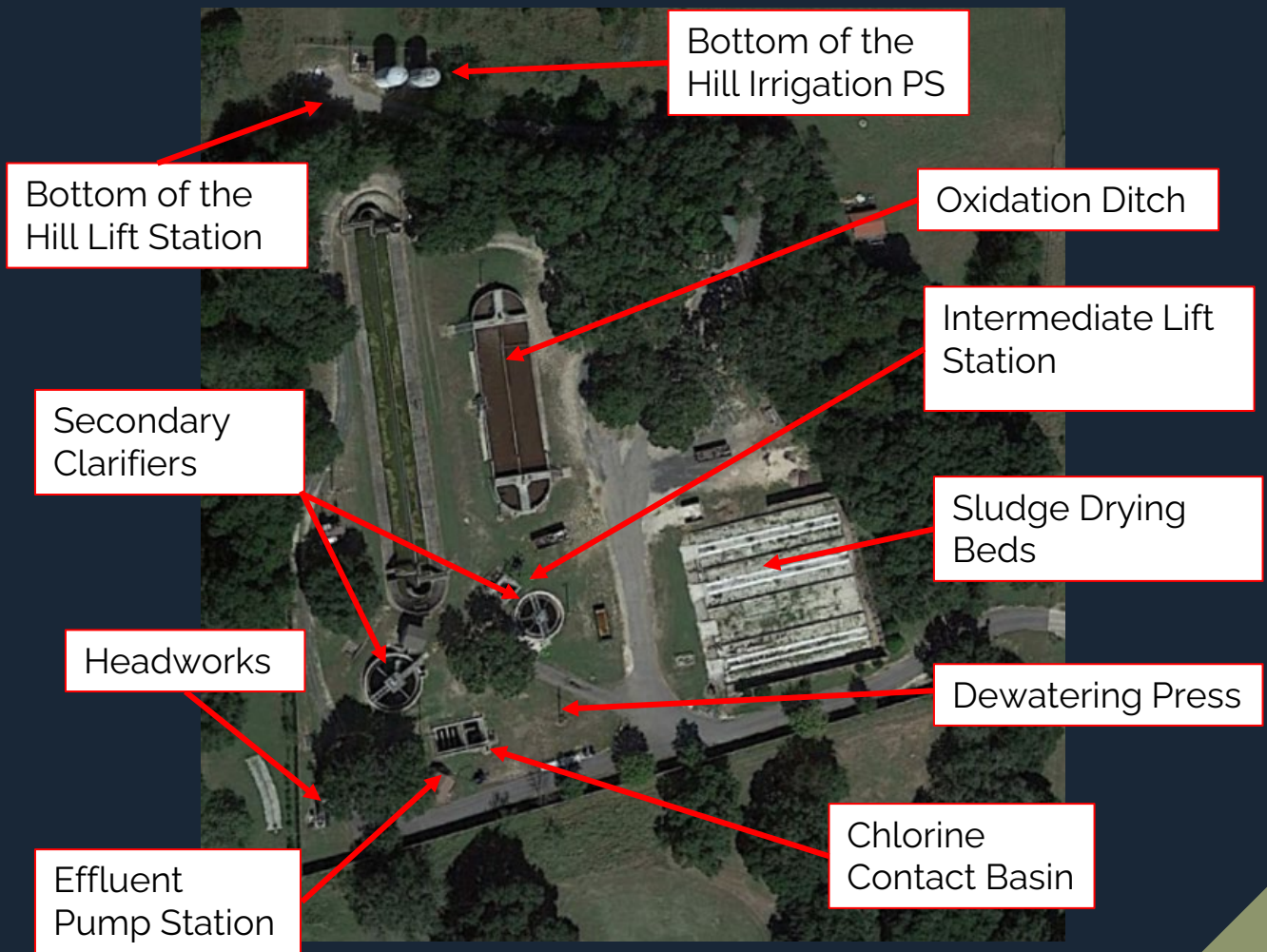
- Minor O&M corrections
- Minor system resiliency improvements
- Growth related projects

Criteria	Weight	Maximum Score	Weighted Score
Regulatory Driver	3	5	15
Contractual Agreement	2	5	10
Health and Safety Impact	3	5	15
Operating and Maintenance Cost	2	5	10
Resiliency	2	5	10
Growth and Development	1	5	5
City Priority	1	5	5
Total Score Possible			70



# WWTP Phase 1 Expansion

- Wastewater Treatment Plant
  - Permitted Capacity: 0.5 MGD
  - Ave. Daily Flow: 0.27 MGD
  - Projected Build-out: 0.47 MGD
  - Treated effluent discharged to golf course storage ponds and used for irrigation purposes
  - Building setback of 150 ft. exists on surrounding properties to meet TCEQ buffer requirements.

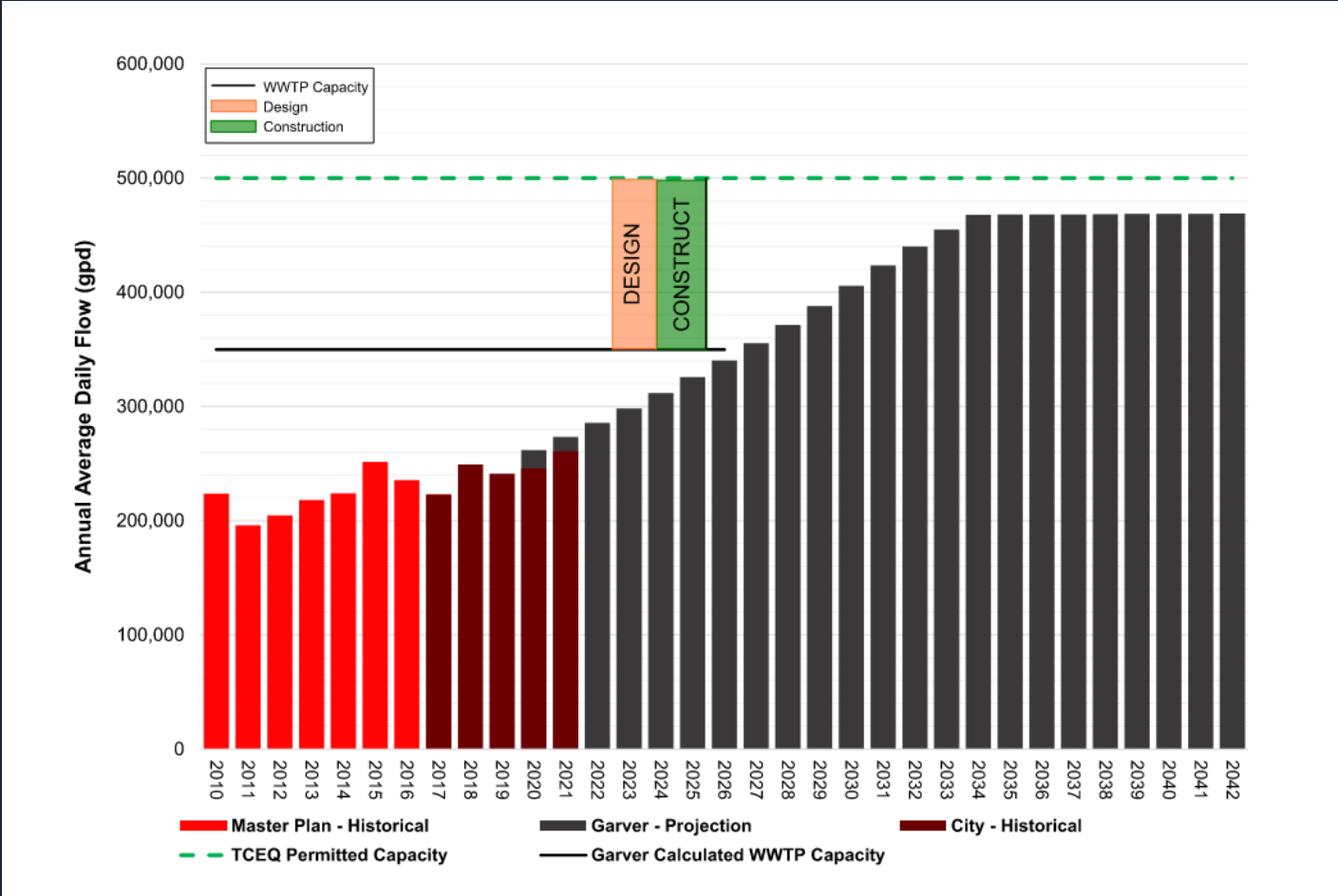




# WWTP Phase 1 Expansion (cont.)

## Expansion Study Projections

- Ultimate build-out projected to occur in 2042 vice 2033
- Ultimate capacity projection decreased from 0.56MGD to 0.47 MGD
- Current capacity limited to 0.35 MGD due to treatment process components
- Design for Phase 1 Expansion underway
- Construction for Phase 1 needs to start in the 2025-26 timeframe





# WWTP Phase 1 Expansion (cont.)

## Phase 1 (Immediate Needs): \$5.4 million

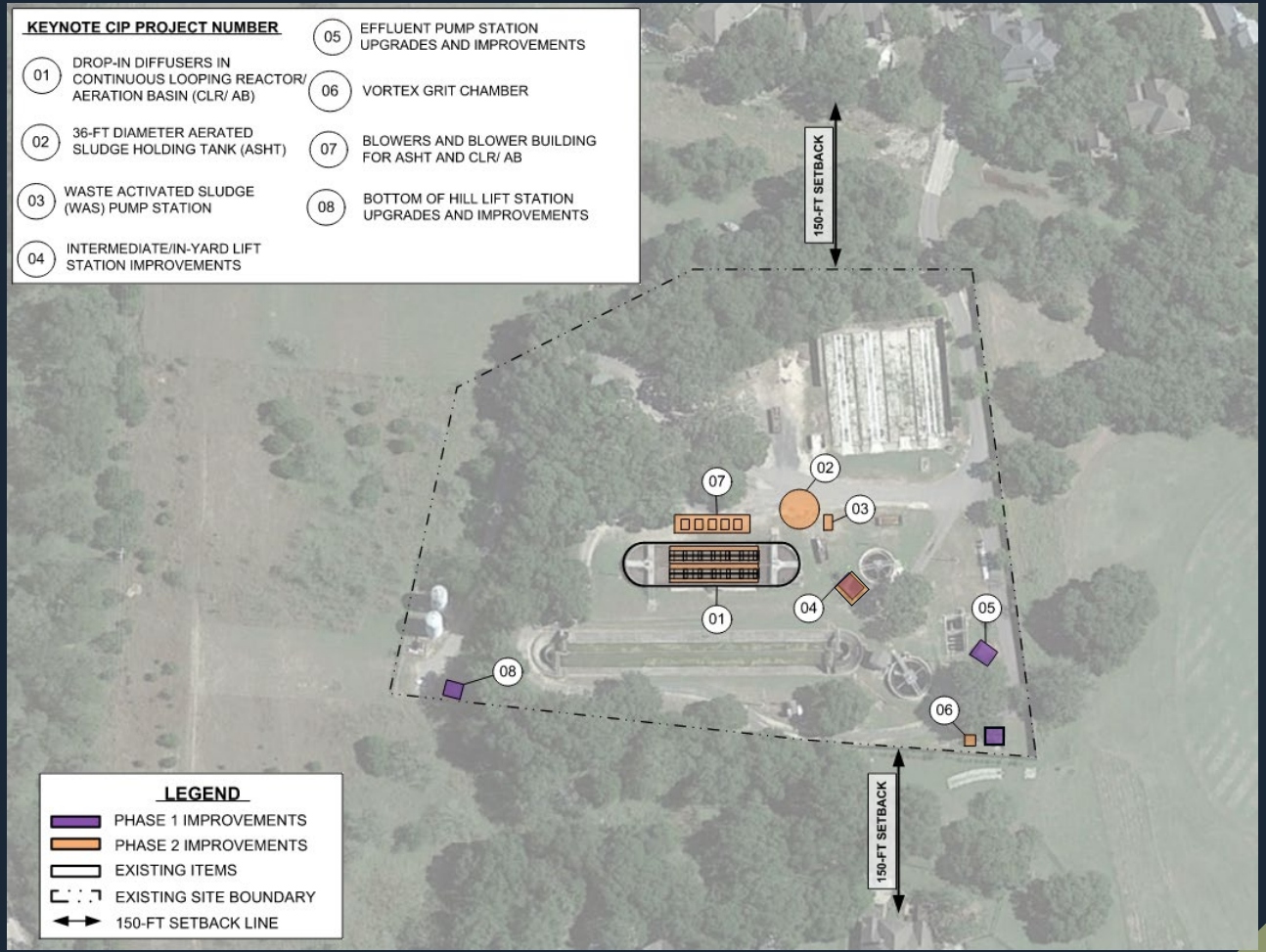
- Effluent Pump Station and Conveyance Upgrade
- Bottom of the Hill LS Improvements
- Headworks Odor Control Improvements

## Phase 2 (Future Needs): \$11.2 million

- Oxidation Ditch to Aeration Basin Retrofit
- Aerated Sludge Holding Tank
- Headworks Grit Removal
- Intermediate/In-Yard LS Improvements

Prioritization Score: 33

“Must Do” Project (Regulatory)





# Install Sewer Line and Decommission Falls Lift Station

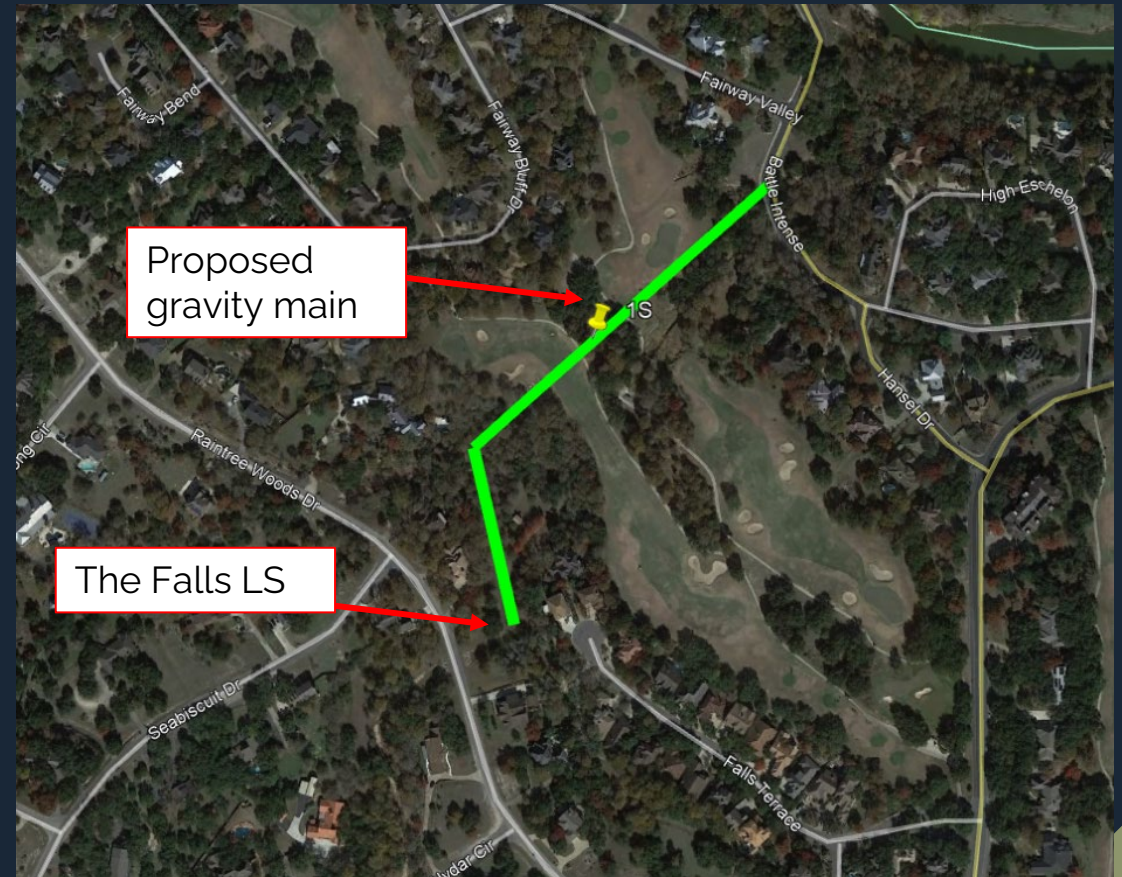


Item #5.

- The Falls Lift Station (LS) is in poor condition and frequently requires e-pump deployment when pumps/pipes fail.
- Electrical components have been damaged during storm events since LS located in a floodplain.
- Project installs 1,730 linear ft. of gravity main to replace the LS.
- **Total Estimated Cost = \$925,284**

Prioritization Score: 33

“Should Do” Project (Resiliency and O&M reduction)





# Improvements at School Lift Station

- Original project adds SCADA to receive alarm notifications, control pumps remotely, and constructs e-pump access port
- Ongoing repairs and incremental improvements will largely accomplish this.
- **Total Estimated Cost = \$303,470**

Prioritization Score: 19  
"Nice to Do" Project (Resiliency)





# Improvements at Deer Meadows Lift Station No. 1 and 2



- Original project adds SCADA to receive alarm notifications, control pumps remotely, and constructs e-pump access port
- Ongoing repairs and incremental improvements will largely accomplish this.
- **Total Estimated Cost = \$179,487 each**



Prioritization Score: 19  
"Nice to Do" Project (Resiliency)

# Other Projects for Consideration



Other Wastewater Projects	2023	2024	2025	2026	2027	2028	Total
Cojak Circle Manhole and Sewer Upgrade	-	-	1,000,000	-	-	-	-
<b>Total Other Wastewater</b>	-	-	<b>1,000,000</b>	-	-	-	<b>1,000,000</b>

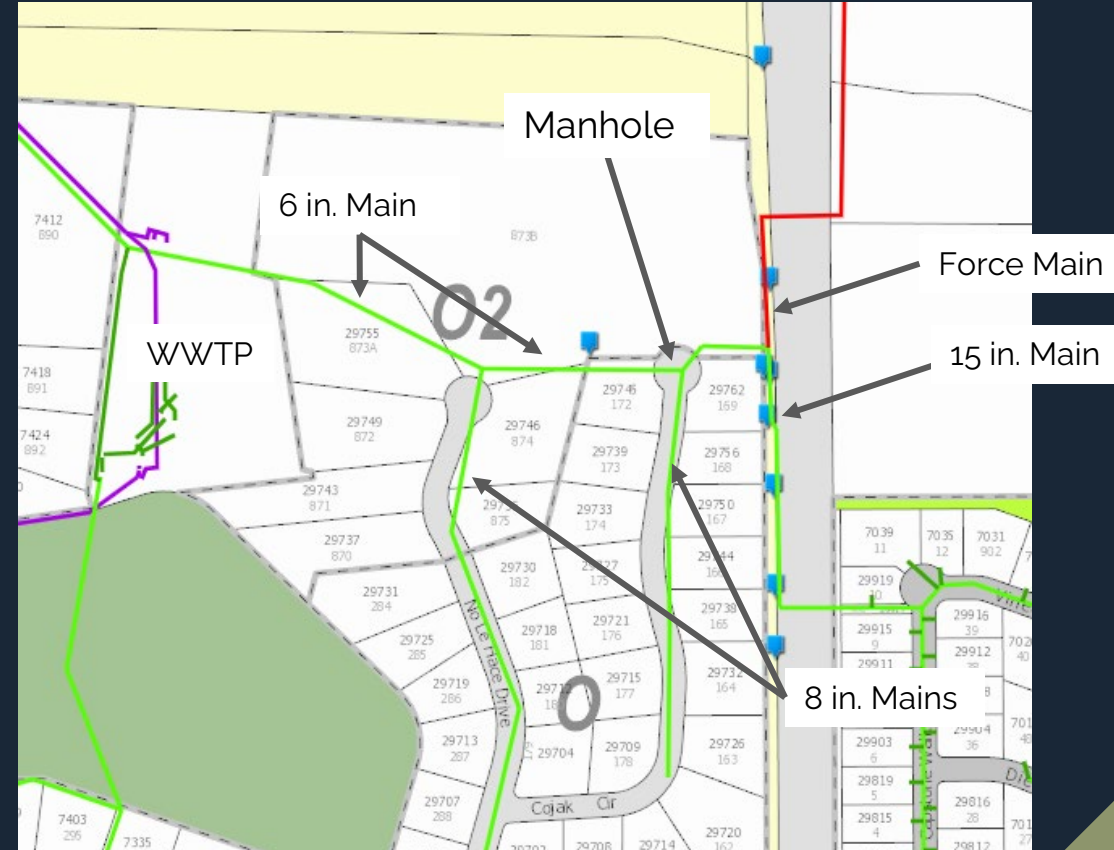


# Cojak Circle Manhole and Sewer Upgrade



- Project upgrades Cojak Circle manhole and 1200 linear feet of 6 in. sewer line which is undersized.
- Flow from Arbors, Setterfeld, No Le Hace and Cojak Circle cause backups and high levels in manhole.
- Ongoing construction in the Arbors will exacerbate the issue, may result in spills during peak flow events.
- **Total Estimated Cost = \$1,000,000**

Prioritization Score: New project  
"Must Do" Project (Resiliency, Health and Safety)





# Discussion

- Do you agree with the proposed projects?
  - Are there any projects to add or remove?
  - Is the timing logical?
  - Are the cost estimates reasonable?
  - Do you need additional info or analysis?
- 
- Are you comfortable recommending these projects be included in the upcoming 2024 bond program?