City of Fair Oaks Ranch
Water, Wastewater and Reuse
5-year CIP

Project #	Type	Description	Score	Revised Score	Phase	Total Project Cost	Prior Years	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27		
TOTALS							**$ 798,733**	**$ 2,646,205**	**$ 2,750,943**	**$ 7,478,532**	**$ 12,372,386**	**$ 15,075,526**	**$ 8,610,039**	**Criticality**	**Notes**
CURRENT PROJECTS															
28R	Water Rehab	Rolling Acres Trail Water Line	43.0	48.0	Design & Construction	$ 337,597		$ 61,754	$ 275,843					Must / Resiliency and O&M	
29R	Water Rehab	Willow Wind Drive/Red Bud Hill Water Line	43.0	48.0	Design & Construction	$ 357,433		$ 65,370	$ 292,063					Must / Resiliency and O&M	
4.1R	Sewer CIP	Wastewater Treatment Plant Solids Handling Improvements	36.0	36.0	Design & Construction	$ 1,066,966	$ 146,756	$ 920,210						Must / O&M	Project in design in FY 21.
2.1S	Sewer CIP	Wastewater Treatment Plant Study - Expansion/Improvement of Existiing vs New WWTP	33.0	38.0	Study	$ 214,624	$ 14,624	$ 200,000						Must / Regulatory and Growth	New Project for engineering consultant to perform study evaluating cost/benefits of a new WWTP versus upgrades to the existing WWTP.
1W	Water CIP	9,000-Gallon Plant #2 Hydropneumatic Tank (Zone C) & VFDs	30.0	33.0	Design & Construction	$ 1,049,390	$ 102,575	$ 946,815						Must / Regulatory	
2W	Water CIP	0.5-MG Zone A Elevated Storage Tank with Plant 3 Upgrades, System PRVs, and 12-inch waterline	30.0	33.0	Design & Construction	$ 5,083,528	$ 446,905	$ 181,623		$ 2,227,500	$ 2,227,500			Must / Regulatory and Contractual Agreements	Project in design in FY 21.
6R	Water Rehab	Creek Crossing Repair West	29.0	34.0	Design & Construction	$ 308,306	$ 87,873	$ 220,433						Must / Resiliency and O&M	Project in design FY 21. Project was started due to water main being exposed with a potential for imminent failure.
21W	Water CIP	Old Fredericksburg Rd Water Line Relocation	23.0	26.0	Design & Construction	$ 300,000		$ 50,000	$ 250,000					Should / O&M and City Priority	New Project not included in master plan. Bexar County developed roadway project after Master Plan effort. Project intended to replace water main with frequent main breaks and to take advantage of construction cost efficiencies by joint bidding with roadway project.
FUTURE PROJECTS															
5W	Water CIP	400-gpm Plant #5 Zone B Pump Station Expansion and 0.5-MG GST (Zone B)	29.0	34.0	Design & Construction	$ 2,530,999			$ 223,499	$ 1,804,353	$ 503,147			Must / Regulatory and Resiliency	Provides additional pumping capacity in Zone B to improve firm pumping capacity and serve growth. Estimated to hit 75% of available pumping capacity in approximately 2025. Storage needed due to high demand - tank turns over numerous times per day due to irrigation demand.
6W[A]	Water CIP	650-gpm Elmo Davis Pump Station Expansion (Zone C)	29.0	34.0	Design & Construction	$ 1,245,304						$ 125,438	$ 770,126	Must / Regulatory and Resiliency	System connections currently exceed 75% capacity for HSP. Increase firm capacity to 1450 GPM in Zone C to maintain adequate pressure during peak demand events.
1R 2R	Water Rehab	Elmo Davis GST #1 & GST #2 – Mechanical/Structural	28.0	33.0	Design & Construction	$ 1,677,084			$ 167,313	$ 524,584	$ 985,187			Should / O&M and Regulatory	Budget includes coatings and cathodic protection system.
1S	Sewer CIP	8-inch Gravity Line and Decommission Falls Lift Station	28.0	33.0	Design & Construction	$ 628,061				$ 507,944	$ 120,116			Should / O&M and Resiliency	Ops experiencing issues with pump sealing and flooding of panel and crews called out frequently. Move forward in CIP per 6/11/20 discussion with City
2S	Sewer CIP	New Wastewater Treatment Plant and Decommission Old WWTP	28.0	33.0	Design & Construction	$ 15,898,083			$ 1,480,583	$ 915,711	$ 5,348,755	$ 6,648,625	$ 1,504,408	Must / Regulatory and Growth	Budget based on Impact Fee update March 2020. Existing WWTP limiting processes are sludge drying beds (rated at 0.1 MGD) and oxidation ditch (rated at 0.34 MGD). 0.35 MGD ADF triggers TCEQ 75% rule for starting new design. 2018 ADF approximately 0.24 MGD. 0.1 MGD difference allows approximately 700 new connections (at 160 gpd/connection) before triggering 75% rule (and exceeding oxidation ditch capacity). May need to consider oxidation ditch improvements to increase treatment capacity if new WWTP delayed.
30R	Water Rehab	Fair Oaks Parkway Water Line Reroute	22.0	27.0	Design & Construction	$ 284,335						$ 56,331	$ 228,004	Nice / O&M and Resiliency	Operational issue for access when main breaks. Move to ROW to provide easier and cleaner access when main break occurs. Possible system looping opportunity as well.
15R	Water Rehab	Well 27 – Electrical	20.0	23.0	Design & Construction	$ 48,650				$ 48,650				Nice / O&M and Resiliency	
5R	Water Rehab	Plant #3 Pump Station – Electrical/Instrumentation	19.0	24.0	Design & Construction	$ 290,445				$ 290,445				Nice / O&M and Resiliency	
4S	Sewer CIP	1.6 MGD Lift Station and 12" Force Main to New WWTP	19.0	24.0	Design & Construction	$ 3,796,459					$ 404,203	$ 1,670,404	$ 1,721,852	Must / Driven by WWTP Efforts	Construction timeline is adjustable - needs to be built in time for new WWTP to come online, but exact timing has some flexibility prior to new WWTP completion. Timing tied with new gravity main for construction of force main at same time as gravity main.
8R	Sewer Rehab	School Lift Station – Mechanical	16.0	19.0	Design & Construction	$ 223,707				$ 223,707				Should / O&M and Resiliency	
9R	Sewer Rehab	Deer Meadows Lift Station #2 – Instrumentation	16.0	19.0	Design & Construction	$ 126,649				$ 126,649				Should / O&M and Resiliency	
10R	Sewer Rehab	Deer Meadows Lift Station #1 – Instrumentation	16.0	19.0	Design & Construction	$ 126,649				$ 126,649				Should / O&M and Resiliency	
27R	Reuse CIP	Effluent Pump Station Expansion	16.0	19.0	Design & Construction	$ 205,818						$ 42,701	$ 163,117	Must / Driven by WWTP Efforts	This project is dependent on the timing of the WWTP. If the WWTP project is delayed, this project will become a higher priority and improvements at the existing WWTP will be needed.
3R	Water Rehab	Elmo Davis Pump Station – Electrical	15.0	20.0	Design & Construction	$ 311,049			$ 61,642	$ 122,812	$ 126,595			Should / O&M and Resiliency	Consider combining with project 6W. Not combined with Project 1R/2R since different subcontractors required.
11R	Water Rehab	Well K6 – Electrical	15.0	20.0	Design & Construction	$ 45,656				$ 45,656				Nice / O&M and Resiliency	
11W	Water CIP	Plant #6 and New GBRA Delivery Point (Zone A/B)	14.0	19.0	Design & Construction	$ 7,609,986				$ 448,231	$ 2,287,044	$ 4,874,711		Should / Resiliency & Growth	Provides additional production and distribution capacity Zones A & B and addresses low pressure and low fire flow plus water for new development. Water supply deficit anticipated 2026 per Master Plan, but depends on growth rates. Assume land donated by developer. Programmed to be completed by 2027
1RU	Reuse CIP	Pump Station - New 2.0 MGD	13.0	16.0	Design & Construction	$ 3,924,403					$ 369,839	$ 1,406,316	$ 2,148,248	Must / Driven by WWTP Efforts	Coordinate force main design with gravity pipeline project 3S. Time completion with new WWTP construction completion or decommissioning of existing WWTP
16R	Water Rehab	Well CR1 – Electrical	13.0	16.0	Design & Construction	$ 44,190				$ 44,190				Nice / O&M and Resiliency	
19R	Water Rehab	Well 31 – Mechanical/Structural	13.0	16.0	Design & Construction	$ 21,450				$ 21,450				Nice / O&M and Resiliency	

City of Fair Oaks Ranch
Water, Wastewater and Reuse
5-year CIP

Project #	Type	Description	Score	Revised Score	Phase	Total Project Cost	Prior Years	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27		
TOTALS							**$ 798,733**	**$ 2,646,205**	**$ 2,750,943**	**$ 7,478,532**	**$ 12,372,386**	**$ 15,075,526**	**$ 8,610,039**	**Criticality**	**Notes**
13R	Water Rehab	Well 9 – Electrical	12.0	15.0	Design & Construction	Project Completed									Completed by CFOR staff July 2020.
3S	Sewer CIP	New Gravity Line from Old WWTP to New WWTP	11.0	14.0	Design & Construction	$ 2,325,284						$ 251,000	$ 2,074,283	Must / Driven by WWTP Efforts	Needed if city constructs new WWTP and abandons existing WWTP
7R	Sewer Rehab	Creek Crossing Repair Central	9.0	12.0	Design & Construction	Project Completed									Completed by CFOR staff
20R	Water Rehab	Well 32 – Electrical/Mechanical/Structural	5.0	5.0	Design & Construction	Project Completed									Completed by CFOR staff.
23R	Water Rehab	Well K7 – Mechanical/Structural	5.0	5.0	Design & Construction	Project Completed									Completed by CFOR staff.
24R	Water Rehab	Well 14 – Electrical/Mechanical/Structural	5.0	5.0	Design & Construction	Project Completed									Completed by CFOR staff.
26R	Water Rehab	Well 19 – Electrical	5.0	5.0	Design & Construction	Project Completed									Completed by CFOR staff.
TOTALS					WATER CIP		$ 549,480	$ 1,178,438	$ 473,499	$ 4,480,084	$ 5,017,691	$ 5,000,149	$ 770,126		
					WATER REHAB		$ 87,873	$ 347,557	$ 796,861	$ 1,097,787	$ 1,111,782	$ 56,331	$ 228,004		
					SEWER CIP		$ 161,380	$ 1,120,210	$ 1,480,583	$ 1,423,656	$ 5,873,074	$ 8,570,029	$ 5,300,543		
					SEWER REHAB		$ -	$ -	$ -	$ 477,005	$ -	$ -	$ -		
					REUSE CIP		$ -	$ -	$ -	$ -	$ 369,839	$ 1,449,016	$ 2,311,366		
					REUSE REHAB		$ -	$ -	$ -	$ -	$ -	$ -	$ -		
					TOTAL	$ 50,082,103	$ 798,733	$ 2,646,205	$ 2,750,943	$ 7,478,532	$ 12,372,386	$ 15,075,526	$ 8,610,039		

Notes:
1. Timing of projects in FY23 to FY27 to be evaluated each year and is subject to change based on prioritization criteria, updates in growth rates, system condition, etc.
2. Budgets shown for projects in FY23 to FY27 are estimates and subject to change. Actual anticipated spend to be updated based on project schedules.
3. Budgets based on 2018 dollars with 3% inflation rate assumed.
[A] Total Project Cost shown includes additional dollars beyond 5-year planning cycle.