

WATER AND SEWER CAPITAL PROJECTS

Water and Sewer Capital Projects have one or more funding sources. Currently, the funding sources consist of Capital Recovery Fees, bond proceeds and transfers from the Water and Sewer Operating Fund. Projects eligible for Capital Recovery Fees (also known as Impact Fees) must be identified in a Capital Recovery Fee study. There are three significant Water and Sewer Capital Projects budgeted this fiscal year.

1) SCADA (Supervisory Control and Data Acquisition) Upgrade

JUSTIFICATION: The City currently has an outdated system which only provides basic control and monitoring of system performance. The updated system will provide much more sophisticated control and integration of major system components such as pump stations, storage tanks and lift stations. The updated capabilities include greater analytics for detecting inefficiencies and overall system performance.

FY 2013 BUDGET: \$250,000

OPERATING BUDGET IMPACT: The project is anticipated to save 10% of the department's \$230,000 maintenance budget and make the department more efficient.

2) Sanitary Sewer Lift Stations (2)

JUSTIFICATION: The City has two lift stations that are ageing and in need of updating. Once completed, the project will improve water pumps, piping and controls City-wide.

FTY 2013 BUDGET: \$130,000

OPERATING BUDGET IMPACT: The project will save the City, a minimum of, \$10,000 (annually) by reducing maintenance costs.

3) Video Camera/Monitoring System

JUSTIFICATION: The City has been paying an outside vendor to view and record sanitary sewer lines' conditions. Once the system is acquired, this function can be performed internally for a quicker response time to our citizens.

FY 2013 BUDGET: \$125,000

OPERATING BUDGET IMPACT: The project will save the City approximately \$50,000 (annually) by eliminating out-sourcing expenses.

A complete listing of potential projects (through 2017) is listed in the later portion of this section.

**CITY OF CEDAR HILL
WATRE AND WASTEWATER CIP WORKSHOP**

PROJECT NAME	ACTIVITY	FROM	TO	FYE 13	FYE 14	FYE 15	FYE 16	FYE 17	FUTURE YEAR PROJECTS	TOTAL
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WATER PROJECTS:

CURRENT PROPOSED PLAN:

5	Lakeridge Pkwy Ground Storage Tank & Water Lines	Lake Ridge 2 MG Storage Tank	Lake Ridge Parkway		(3,000,000)	3,000,000				\$0
6	US Highway 67 Water Line	16" & 20" Water Line	Lake Ridge Parkway	Mount Lebanon	(625,000)	625,000				\$0
7	Water System Controls Upgrade (SCADA)	Replacing existing panels and radios due to changes in FCC regulations		Various	250,000					\$250,000
8	Automatic Meter Reading System Phase I				750,000					\$750,000
9	Automatic Meter Reading System Phase I-Grant Funding				(300,000)					(\$300,000)
10	Miscellaneous Line Resizing	Miscellaneous Line Resizing	Various	Various	300,000		200,000			\$500,000
11	Meadowcrest Ground Storage Tank	Ground Storage Tank					2,000,000	2,350,000		\$4,350,000
12	Joe Wilson 16" Water Line	16" Water Line	Parkerville Road	Bear Creek			665,000			\$665,000
13	Parkerville Water Line	16" Water Line	Parkerville Tank	Joe Wilson Road			930,000			\$930,000
14	Parkerville Rd. 24" Water Line	24" Water Line	Clark Rd	Houston Street @ Tidwell					1,775,000	\$1,775,000
15	Belt Line Water Line	12" Water Line	Waterford Oaks	Duncanville Road					494,000	\$494,000
16	Duncanville Road Water Line	16" Water Line	Pleasant Run Road	Parkerville Road					1,580,000	\$1,580,000
17	Wintergreen Rd./Duncanville Road 16" Water Line	16" Water Line	Wintergreen Road @ US67	Duncanville Road @ E. Pleasant Run Road					1,070,000	\$1,070,000
18	12" Water Line loop from Lake Ridge Parkway to US67	12" Water Line	Lake Ridge Parkway	US Highway 67					1,525,000	\$1,525,000
19	12" Water Lines & PRV near Cedar Hill State Park	12" Water Line, Pressure Reducing Valve	Various	Various					1,365,000	\$1,365,000
20	Flameleaf Transmission Water Line	30" Water Line	Flame leaf via Strauss	Belt Line Road					4,845,000	\$4,845,000
21	Flameleaf Transmission (Road "A") Water Line	30" Water Line	Belt Line Road	Houston Street					985,000	\$985,000
22	Flame Leaf Pump Station Expansion	PS Expansion	N/A	N/A					2,898,000	\$2,898,000
23	Belt Line Rd. 20"/24" Water Line	24"/20" Water Line	Flame leaf Transmission Line	Meadowcrest Transmission Line					2,270,000	\$2,270,000
24	Clark Road 20" Water Line	16" Water Line	Belt Line Road	Parkerville Road					1,160,000	\$1,160,000
25	12" Water Line Connector - Windmill Hill Subdivision to US67	12" Water Line	US Highway 67	Windmill Hill Subdivision					790,000	\$790,000
26	Clark Road 16" Water Line	16" Water Line	Parkerville Road	Capricorn Road					905,000	\$905,000
27	FM 1382 - 12" Water Line Loop	12" Water Line	FM 1382	Along City Limits					1,275,000	\$1,275,000
28	Waterford Oaks Water Line	12" Water Line	Waterford Oaks	Parkerville Road					310,000	\$310,000
29	Weaver Street (south extension) Water Line	12" Water Line	Weaver Street	Duncanville Road					250,000	\$250,000
30	Bear Creek Road Water Line	12" Water Lines	Joe Wilson Road	Duncanville Rd.					565,000	\$565,000
31	Parkerville/Bear Creek Connector	12" Water Line	Parkerville Road	Bear Creek Road					625,000	\$625,000
32	Little Creek 12" Water Line	12" Water Line	Clark Road	Joe Wilson Road					775,000	\$775,000
33	Clark Road Water Line	16" Water Line	Capricorn Rd	Bear Creek Road					425,000	\$425,000
34	Rocky Brook Extension Water Line	12" Water Line	Rocky Brook	Bear Creek Extension					240,000	\$240,000
35	Bear Creek Extension Water Line	12" Water Line	Joe Wilson Rd	S. Clark Rd.					660,000	\$660,000
36	S. Clark Road/Lake Ridge Water Line Connector	12" Water Line	Clark Road	Lake Ridge Parkway					1,170,000	\$1,170,000
37	Texas Plume 12" Water Line	12" Water Line	Mt. Lebanon	Lake Ridge Parkway					645,000	\$645,000
38	Meadow Crest Pump Station	Pump Station Replacement	N/A	N/A					290,000	\$290,000
39	US 67 Elevated Storage Tank Replacement	Replace Elevated Storage Tank							4,420,000	\$4,420,000
40	Parkerville Rd. 24" water Line Extension	24" Water Line	Clark Rd	Parkerville Elevated Storage Tank					300,000	\$300,000
41	Joe Wilson Road Water Line Loop south of Bear Creek Road	12" Water Line	Joe Wilson Road at Bear Creek Road	Bear Creek Subdivision					1,080,000	\$1,080,000
42	Parkerville Road/ Cockrell Hill Road Water Line	12" Water Line	Parkerville Road @ Duncanville Rd.	Cockrell Hill Rd @ Bear Creek Rd.					1,015,000	\$1,015,000
43	S. Clark Rd./US67 Water Line Loop	12" Water Line	S. Clark Road @ Bear Creek	US Highway 67					1,840,000	\$1,840,000
44	Cedar Hill Road 12" Water Line	12" Water Line	Parkerville Rd. @ US67	Massey Lane					530,000	\$530,000
45	Kingswood Ground Storage Tank Rehab	Replace cooling tower system and repaint							300,000	\$300,000
46	PS Power Generators	Generators for water pump stations							2,000,000	\$2,000,000

**CITY OF CEDAR HILL
WATRE AND WASTEWATER CIP WORKSHOP**

PROJECT NAME	ACTIVITY	FROM	TO	FYE 13	FYE 14	FYE 15	FYE 16	FYE 17	FUTURE YEAR PROJECTS	TOTAL
SEWER:										
CURRENT PROPOSED PLAN:										
48	Lake Ridge 10" Lift Station & Force Main (Phase II)	Lake Ridge Lift Station and Force Main	Lake Ridge						3,800,000	\$3,800,000
49	Bee Branch Interceptor (TRA)	Relocate a 21" Interceptor	Joe Wilson Road		250,000					\$250,000
50	Sanitary Sewer Lift Stations Upgrade	Rehabilitate Existing Sewer Lift Stations		130,000						\$130,000
51	Sub-Basin RO-7 Collector	12" Sewer Line	Cedar Hill Road		(650,000)				650,000	\$0
52	Videoamera/and Monitoring System	To televise the existing sanitary sewer & storm sewer pipes		125,000						\$125,000
53	Citywide I & I Rehabilitation	Rehab Existing Sewer Lines	Various	300,000	250,000	250,000	250,000	250,000		\$1,300,000
54	Cedar Hill Relief Line (Shady Brook)	18" Relief	North of Pleasant Run			150,000				\$150,000
55	Sub-Basin RO-2 Interceptor	Various Sizes Sewer Lines	Joe Wilson Road			1,410,000				\$1,410,000
56	Sub-Basin TCN-1 Collector	10" Sewer Line	Northwest Cedar Hill City Limits				490,000			\$490,000
57	Stewart Branch Collector (Phase I)	10" & 12" Collectors	Northern City Limits						780,000	\$780,000
58	Bear Creek Interceptor	Various Sizes Sewer Lines	Duncanville Road						1,240,000	\$1,240,000
59	South Sub-Basin RO - 2 Interceptor	12" & 15" Sewer Lines	Cedar Hill Rd.						1,680,000	\$1,680,000
60	RO-8 Sub-basin Collector, Lift Station & Force Main	Lift Station, 8" Force Main, 8" Sewer Line	US67						1,275,000	\$1,275,000
61	Baggett Branch Interceptor Extension	10" & 12" Sewers, 10" Force Main, Expand Lift Station	Lake Ridge II & III Lift Stations						1,640,000	\$1,640,000
62	Sub-Basin RO-3 Interceptor	Various Sizes Sewer Lines	Clark Road						645,000	\$645,000
63	Clark Road Interceptor Relief	12"/24" Relief Sewer	Clark Road						1,165,000	\$1,165,000
64	Bear Creek Interceptor Extension	Various Sizes Sewer Lines	Highlands Lift Station						2,060,000	\$2,060,000
65	Duncanville Road Interceptor	10"/12"/15" Sewer Lines	Duncanville Road						885,000	\$885,000
66	Stewart Branch Collector (Phase II)	10" & 12" Sewer Lines	Northern City Limits						740,000	\$740,000
67	Sub-Basin TCN-1 Additional Collector	10" Sewer Line	Northwest Cedar Hill City Limits						665,000	\$665,000
68	Belt Line Road Sanitary Sewer Improvements	Expand LS, 15" Sewer Line	Shady Ridge Drive						860,000	\$860,000
69	Lakeview Improvements	Expand LS, 10" Sewer Line	Lakeview						960,000	\$960,000
70	FM1382 Improvements	Expand LS, 16" Force Main	FM1382 Lift Station						710,000	\$710,000
71	RO -2 Interceptor Sub-basin Collector, Lift Station and Force Main	LS, Force Main, 10" Sewer Line	Southeast Cedar Hill						1,560,000	\$1,560,000
72	Lake Ridge Collectors	10" Sewer Line	Existing Lift Station						330,000	\$330,000
73	Sub-Basin RO-2 Collector	10" Sewer Line	Tar Road						490,000	\$490,000
74	Sub-basin RO-8 Collector	8" Sewer Lines	US67						540,000	\$540,000
75	Sub-basin TCN-2 Collector	8" Sewer Lines	Sherwood Ct.						230,000	\$230,000
76	24" Red Oak Interceptor Relief	24" Relief Main	Capricorn Street						540,000	\$540,000

Water & Sewer Fund

(\$2,470,000) \$5,435,000 \$2,940,000 \$4,195,000 \$250,000 \$63,822,000 \$74,172,000

ANNUAL REQUIREMENTS TO AMORTIZE DEBT

As of September 30, 2012

FISCAL PERIOD	PRINCIPAL	INTEREST	TOTAL
2012-13	705,000	501,497.52	1,206,497.52
2013-14	740,000	472,021.26	1,212,021.26
2014-15	765,000	439,241.26	1,204,241.26
2015-16	805,000	405,072.52	1,210,072.52
2016-17	845,000	368,115.02	1,213,115.02
2017-18	885,000	328,941.26	1,213,941.26
2018-19	920,000	289,118.76	1,209,118.76
2019-20	655,000	247,146.26	902,146.26
2020-21	680,000	218,806.26	898,806.26
2021-22	720,000	188,958.76	908,958.76
2022-23	740,000	156,376.26	896,376.26
2023-24	780,000	122,838.76	902,838.76
2024-25	590,000	87,001.26	677,001.26
2025-26	620,000	59,770.00	679,770.00
2026-27	420,000	30,675.00	450,675.00
2027-28	215,000	10,750.00	225,750.00
TOTAL	<u>\$11,085,000</u>	<u>\$3,926,330.16</u>	<u>\$15,011,330.16</u>