

LEGEND	
	PROPOSED WATER TANK
	EXISTING WATER TANK
	MANOR ROADS
	10-YR. WATER SERVICE AREA
	MANOR ETJ
	EXISTING OR NON-CIP WATERLINES
	PROPOSED 8-INCH WATERLINES
	PROPOSED 12-INCH WATERLINES
	PROPOSED 16-INCH WATERLINES



SCALE: 1" = 2500'

**EXHIBIT A-1**  
 CITY OF MANOR  
 10 YEAR WATER  
 CAPITAL IMPROVEMENTS PLAN  
 SEPTEMBER 2020  
**FINAL**

EXHIBIT A-2  
CITY OF MANOR WATER IMPROVEMENTS  
10-YEAR CAPITAL IMPROVEMENTS PLAN  
SEPTEMBER 2020

The following projects have been identified as required to serve new growth within the service area, in accordance with approved land use assumptions and as part of the 10-year Capital Improvements Plan

Project No.	Year	Description	Size	Unit	Length (ft)	Construction Cost (2020 Dollars)	Annual Interest	Period (yr)	Construction Cost (adjusted for Inflation @ 5% per annum)	Soft Costs	Contingency (10% + 1% per annum)	Financing Cost (5% over 20 Years)	Total Project Costs	Detailed Description
W-6	2021	Blake Manor Road Water Line	12	inch	3,200	\$ 268,800.00	0.050	20	\$ 322,560.00	\$ 48,400.00	\$ 48,200.00	\$ 253,529.66	\$ 673,000.00	Transmission main from downtown along Blake Manor Road to future FM 973. Includes replacing 400 LF of 6" pipe in Downtown Plant
W-10	2020	Hill Lane Water Line	12	inch	3,450	\$ 289,800.00	0.050	20	\$ 333,270.00	\$ 50,000.00	\$ 46,000.00	\$ 259,644.71	\$ 689,000.00	Water Distribution main along Hill Lane to serve new growth
W-13	2025	US 290 Crossing at Golf Course	12	inch	250	\$ 100,000.00	0.050	20	\$ 140,000.00	\$ 21,000.00	\$ 27,400.00	\$ 113,954.07	\$ 302,000.00	Connect 12" water lines on north and south sides of US 290
W-14	2021	Gregg Manor Road Water Supply - Ground Storage Tank and Pumps	250,000	gallon		\$ 2,000,000.00	0.050	20	\$ 2,400,000.00	\$ 360,000.00	\$ 358,800.00	\$ 1,886,411.62	\$ 5,005,000.00	250,000 gal Ground Storage Tank and 1,400 gpm expandable pump station for wholesale water supply connection
W-15	2021	FM 973 Water Line	12	inch	4000	\$ 336,000.00	0.050	20	\$ 403,200.00	\$ 60,500.00	\$ 60,300.00	\$ 316,942.31	\$ 841,000.00	Transmission main from US 290 to serve new growth on the east and west sides of FM 973
W-16	2021	US 290 Water Line	12	inch	2900	\$ 243,600.00	0.050	20	\$ 292,320.00	\$ 43,800.00	\$ 43,700.00	\$ 229,734.79	\$ 610,000.00	Parallel 12" waterline to increase US 290 capacity
W-17	2020	US 290 Water Line	16	inch	4400	\$ 540,000.00	0.050	20	\$ 621,000.00	\$ 93,200.00	\$ 85,700.00	\$ 483,820.91	\$ 1,284,000.00	Extend transmission main from Presidential Glen to Old Kimbro Road
W-18	2020	Old Kimbro Road Water Line	12	inch	3000	\$ 474,000.00	0.050	20	\$ 545,100.00	\$ 81,800.00	\$ 75,200.00	\$ 424,666.41	\$ 1,127,000.00	Transmission main to serve new growth north of US 290
W-20	2025	Bois D'Arc Lane Water Line	16	inch	2700	\$ 302,400.00	0.050	20	\$ 423,360.00	\$ 63,500.00	\$ 82,800.00	\$ 344,559.84	\$ 914,000.00	Transmission main to improve delivery of water from East EST
W-22	2025	Bois D'Arc Lane Water Line	12	inch	2500	\$ 210,000.00	0.050	20	\$ 294,000.00	\$ 44,100.00	\$ 57,500.00	\$ 239,279.35	\$ 635,000.00	Transmission main to serve new growth north of Tower Rd
W-24	2025	Gregg Manor Road Pump Improvements	1200	gpm		\$ 200,000.00	0.050	20	\$ 280,000.00	\$ 42,000.00	\$ 54,700.00	\$ 227,847.65	\$ 605,000.00	Increase Pump Capacity (and contracted supply) at wholesale water connection
W-31	2021	FM 973 Water Line	12	inch	5200	\$ 436,800.00	0.050	20	\$ 524,160.00	\$ 78,600.00	\$ 78,400.00	\$ 412,000.81	\$ 1,093,000.00	Transmission main along FM 973 from Tower Road to Canopy Lane to serve new growth.
Water CIP-1	2020	Gregg Lane to Tower Road Waterline	12	inch	3400	\$ 1,560,000.00	0.050	20	\$ 1,794,000.00	\$ 269,100.00	\$ 247,600.00	\$ 1,397,630.92	\$ 3,708,000.00	Transmission main from Manville WSC Booster Station to East Elevated Storage Tank
Water CIP-2	2017	AMR Water Meters				\$ 300,000.00	0.05	20	\$ 300,000.00	\$ 45,000.00	\$ 31,100.00	\$ 227,484.74	\$ 604,000.00	1350 Meter bodies and AMR registers, 810 replacement meter box lids, software, two vehicle transmitter units, two laptops.
Water CIP-3	2018	AMR Water Meters				\$ 400,000.00	0.05	20	\$ 420,000.00	\$ 63,000.00	\$ 48,300.00	\$ 321,357.73	\$ 853,000.00	1350 Meter bodies and AMR registers, 810 replacement meter box lids, software, two vehicle transmitter units, two laptops.
<b>Total</b>												<b>\$ 18,943,000.00</b>		

Notes:  
Water LUEs are defined as requiring 451 gallons of water per day per single family residence as determined in the the City of Manor Water Master Plan.