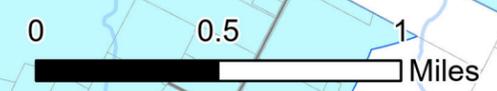
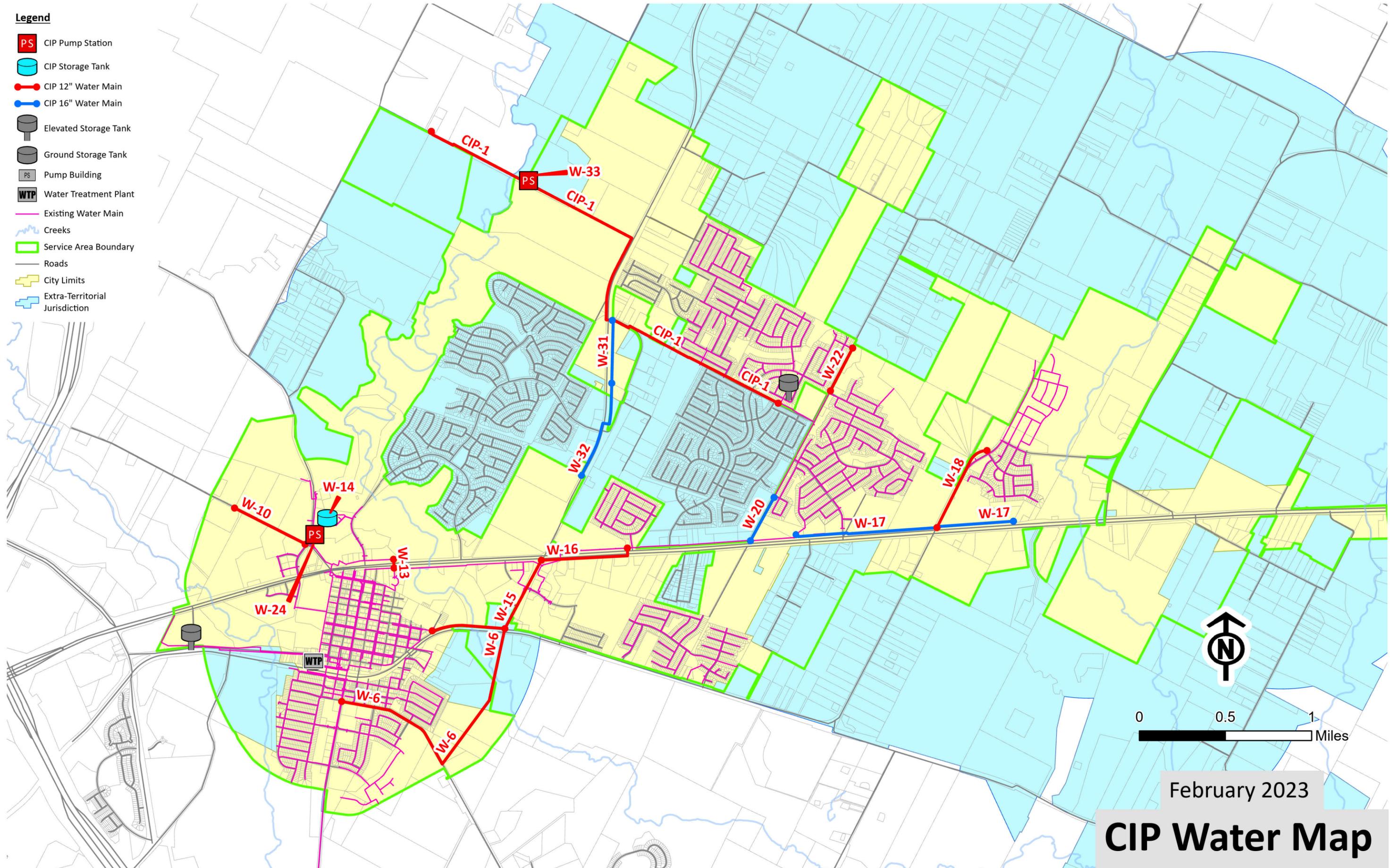


Legend

-  CIP Pump Station
-  CIP Storage Tank
-  CIP 12" Water Main
-  CIP 16" Water Main
-  Elevated Storage Tank
-  Ground Storage Tank
-  Pump Building
-  Water Treatment Plant
-  Existing Water Main
-  Creeks
-  Service Area Boundary
-  Roads
-  City Limits
-  Extra-Territorial Jurisdiction



February 2023

CIP Water Map

EXHIBIT A-2
CITY OF MANOR WATER IMPROVEMENTS
10-YEAR CAPITAL IMPROVEMENTS PLAN
FEBRUARY 2023

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 (2022 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	2026	Blake Manor Road Water Line	12	inch	3,200	\$ 400,000.00	0.050	20	\$ 580,000.00	\$ 87,000.00	\$ 120,100.00	\$ 476,078.81	\$ 1,263,000.00	Transmission main from downtown along Blake Manor Road to future FM 973. Includes replacing 400 LF of 6" pipe in Downtown Plant
W-10	2022	Hill Lane Water Line	12	inch	3,450	\$ 289,800.00	0.050	20	\$ 362,250.00	\$ 54,300.00	\$ 58,300.00	\$ 287,213.85	\$ 762,000.00	Water Distribution main along Hill Lane to serve new growth
W-13	2023	US 290 Crossing at Golf Course	12	inch	250	\$ 200,000.00	0.050	20	\$ 260,000.00	\$ 39,000.00	\$ 44,900.00	\$ 208,008.51	\$ 552,000.00	Connect 12" water lines on north and south sides of US 290
W-14	2023	Gregg Manor Road Water Supply - Ground Storage Tank and Pumps	250,000	gallon		\$ 2,500,000.00	0.050	20	\$ 3,250,000.00	\$ 487,500.00	\$ 560,600.00	\$ 2,599,713.28	\$ 6,898,000.00	250,000 gal Ground Storage Tank and 1,400 gpm expandable pump station for wholesale water supply connection
W-15	2022	FM 973 Water Line	12	inch	4000	\$ 336,000.00	0.050	20	\$ 420,000.00	\$ 63,000.00	\$ 67,600.00	\$ 333,031.37	\$ 884,000.00	Transmission main from US 290 to serve new growth on the east and west sides of FM 973
W-16	2023	US 290 Water Line	12	inch	2900	\$ 500,000.00	0.050	20	\$ 650,000.00	\$ 97,500.00	\$ 112,100.00	\$ 519,930.56	\$ 1,380,000.00	Parallel 12" waterline to increase US 290 capacity
W-17	2021	US 290 Water Line	16	inch	4400	\$ 677,626.12	0.050	20	\$ 813,151.34	\$ 122,000.00	\$ 121,600.00	\$ 639,177.89	\$ 1,696,000.00	Extend transmission main from Presidential Glen to Old Kimbro Road
W-18	2021	Old Kimbro Road Water Line	12	inch	3000	\$ 474,000.00	0.050	20	\$ 568,800.00	\$ 85,300.00	\$ 85,000.00	\$ 447,045.92	\$ 1,186,000.00	Transmission main to serve new growth north of US 290
W-20	2024	Bois D'Arc Lane Water Line	16	inch	2700	\$ 500,000.00	0.050	20	\$ 675,000.00	\$ 101,300.00	\$ 124,200.00	\$ 544,669.00	\$ 1,445,000.00	Transmission main to improve delivery of water from East EST
W-22	2024	Bois D'Arc Lane Water Line	12	inch	2500	\$ 400,000.00	0.050	20	\$ 540,000.00	\$ 81,000.00	\$ 99,400.00	\$ 435,735.20	\$ 1,156,000.00	Transmission main to serve new growth north of Tower Rd
W-24	2025	Gregg Manor Road Pump Improvements	1200	gpm		\$ 400,000.00	0.050	20	\$ 560,000.00	\$ 84,000.00	\$ 109,500.00	\$ 455,755.79	\$ 1,209,000.00	Increase Pump Capacity (and contracted supply) at wholesale water connection
W-31	2022	FM 973 Water Line	16	inch	5200	\$ 582,400.00	0.050	20	\$ 728,000.00	\$ 109,200.00	\$ 117,200.00	\$ 577,270.50	\$ 1,532,000.00	Transmission main along FM 973 from Tower Road to boundary of school site..
W-32	2023	FM 973 Water Line	16	inch	3200	\$ 358,400.00	0.050	20	\$ 465,920.00	\$ 69,900.00	\$ 80,400.00	\$ 372,721.74	\$ 989,000.00	Transmission main along FM 973 to connect waterlines along FM 973.
W-33	2024	Gregg Lane Water Supply - Ground Storage Tank and Pumps	250,000	gallon		\$ 2,500,000.00	0.050	20	\$ 3,375,000.00	\$ 506,300.00	\$ 621,000.00	\$ 2,723,224.01	\$ 7,226,000.00	250,000 gal Ground Storage Tank and 1,400 gpm expandable pump for future growth.
Water CIP-1	2021	Gregg Lane to Tower Road Waterline	12	inch	3400	\$ 1,595,346.40	0.050	20	\$ 1,914,415.68	\$ 287,200.00	\$ 286,200.00	\$ 1,504,759.65	\$ 3,993,000.00	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.
Total												\$ 33,628,000.00		

Notes:
Water LUEs are defined as requiring 450 gallons of water per day per single family residence as determined in the the City of Manor Water Master Plan.

