EXHIBIT B-1
CITY OF MANOR
PLANNING AND DESIGN CRITERIA
FEBRUARY 2023

Water Infrastructure

Criteron	Value	Unit
People per LUE	3.2	
Average Day Water Demand	245	gpd/LUE
Maximum Day Water Demand	490	gpd/LUE
Peak Hour Water Demand	1.5	gpm/LUE
Total Water Storage	200	gal/LUE
Minimum Water Elevated Storage	100	gal/LUE
Minimum Water Pump Capacity	0.6	gpm/LUE
Minimum Water System Pressure (Normal Conditions)	35	psi
Minimum Water System Pressure (Fire Flow Conditions)	20	psi
Maximum Water Line Velocity (Peak Hour/Fire Flow Conditions)	5	fps

Wastewater Infrastructure

Criteron	Value	Unit
People per LUE	3.2	
Average Wastewater Flow	200	gpd/LUE
Peak Wastewater Flow	800	gpd/LUE
Minimum Wastewater Line Velocity	2	fps
Maximum Wastewater Line Velocity	8	fps

Notes:
Water demands and wastewater flows from the City of Manor Adopted Water and Wastewater Master Plans.
System capacities and other design criteria from 30 TAC Chapters 217 and 290.

EXHIBIT B-2
CITY OF MANOR WATER IMPROVEMENTS
10-YEAR CAPITAL IMPROVEMENTS PLAN
PRO RATA CALCULATIONS
MARCH 2023

Project No.	Year	Description	Size	Total LUE Capacity	10-Year LUE Demand	Total Project Cost in 2023 Dollars	Pro Rata Share	Pro Rata Project Cost in 2023 Dollars
W-6	2026	Blake Manor Road Water Line	12"	1667	1000	$ 1,263,000.00	60%	$ 757,648.47
W-13	2025	US 290 Crossing at Golf Course	12"	1667	1667	$ 605,000.00	100%	$ 605,000.00
W-14	2023	Gregg Manor Road Water Supply - Ground Storage Tank and Pumps	250000	2500	2400	$ 6,898,000.00	96%	$ 6,622,080.00
W-16	2023	US 290 Water Line	12"	1667	1667	$ 1,380,000.00	100%	$ 1,380,000.00
W-20	2025	Bois D'Arc Lane Water Line	16"	2400	2400	$ 1,512,000.00	100%	$ 1,512,000.00
W-22	2025	Bois D'Arc Lane Water Line	12"	1667	1400	$ 1,209,000.00	84%	$ 1,015,356.93
W-24	2025	Gregg Manor Road Pump Improvements	1200	2000	2000	$ 1,209,000.00	100%	$ 1,209,000.00
W-31	2022	FM 973 Water Line	12"	2400	2400	$ 1,532,000.00	100%	$ 1,532,000.00
								$ 14,633,085.40

Previously Completed Projects

Year	Total LUE Capacity	Name	Description	Project Cost	LUEs Used	10-Year LUE Demand	Pro Rata Share	Pro Rata Project Cost
2002	1667	Creekside Offsite Utilities	12"	$ 175,000.00	650	1000	60%	$ 105,000.00
2005	1667	Greenbury Offsite Utilities	12"	$ 407,816.64	308	1667	100%	$ 408,000.00
2007	5,600	Water Supply Main From City of Austin to West Elevated Storage Tank and Downtown	16"	$ 1,057,675.36	1550	4500	80%	$ 850,000.00
2008	5,000	West Elevated Storage Tank	500,000	$ 2,138,083.58	1550	4500	90%	$ 1,924,000.00
2010	2,400	Presidential Glen Water Lines	16"	$ 465,054.06	8	2000	83%	$ 388,000.00
2009	5,000	East Manor Elevated Storage Tank	500,000	$ 1,880,381.34	1550	4500	90%	$ 1,692,000.00
2018	2,400	AMR Water Meters		$ 399,300.00	2400	2400	100%	$ 399,000.00
2022	1,667	FM 973 Waterline	12"	$ 452,005.00	500	1667	100%	$ 452,000.00
2021	1,667	Old Kimbro Waterline	12"	$ 474,000.00	1000	1667	100%	$ 474,000.00
2022	2,400	FM 973 Waterline	16"	$ 582,400.00	150	1900	79%	$ 461,000.00
2021	2,400	Gregg Lane to Tower Rd Waterline	12"	$ 1,209,000.00	2000	2400	100%	$ 1,209,000.00
2021	2,400	US 290 Waterline	16"	$ 1,696,000.00	1500	2400	100%	$ 1,696,000.00
2022	1667	Hill Lane Waterline	12"	$462,893.00	600	800	48%	$ 222,000.00
			Totals	**$ 11,399,608.97**				**$ 10,280,000.00**

CIF Ineligible Projects

EXHIBIT B-3
CITY OF MANOR WATER IMPROVEMENTS
MISCELLANEOUS PROJECT COSTS
MARCH 2023

Description		Amount
CIF Studies	$	21,000.00
Study Cost for Water, Mapping, Modeling	$	138,800.00
Total Water-Related Costs	$	159,800.00

EXHIBIT B-4
CITY OF MANOR WATER
IMPACT FEE CALCULATION
MARCH 2023

CATEGORY		AMOUNT
Total CIP Eligible Project Cost :	$	25,072,885.40
Number of LUEs added:	$	6,200.00
Maximum Water CIF:	**$**	**4,044.00**
50% Credit:	**$**	**2,022.00**
MAXIMUM ASSESSABLE CIF:	**$**	**2,022.00**

EXHIBIT B-5
CITY OF MANOR WASTEWATER IMPROVEMENTS
10-YEAR CAPITAL IMPROVEMENTS PLAN
PRO RATA CALCULATIONS
MARCH 2023

Project No.	Year	Description	Size	Total LUE Capacity	10-Year LUE Demand	Total Project Cost in 2022 Dollars	Pro Rata Share	Pro Rata Project Cost in 2022 Dollars
S-18	2023	West Cottonwood Gravity Line, Phase 2	15"	1200	1200	$ 2,297,000.00	100.00%	$ 2,297,000.00
S-23	2025	Willow Lift Station and Force Main	200 gpm	210	100	$ 3,009,000.00	47.62%	$ 1,433,000.00
S-30	2024	Expand Cottonwood WWTP to 0.40 MGD Capacity	0.40 MGD	909	909	$10,067,000.00	100.00%	$10,067,000.00
S-31	2025	Expand Cottonwood WWTP to 0.60 MGD Capacity	0.50 MGD	1272	1272	$10,530,000.00	100.00%	$10,530,000.00
S-33	2023	Wilbarger Basin Gravity Line to Lift Station (off Gregg Lane)	15"	1200	1200	$ 2,746,000.00	100.00%	$ 2,746,000.00
S-34	2023	Wilbarger Basin lift station and force main (off Gregg Lane)	12" FM and 225 gpm LS	1200	1000	$ 3,570,000.00	83.33%	$ 2,975,000.00
S-35	2025	Gravity line from City Limits to tie in to Wastewater line to Cottonwood	12"	1200	300	$ 3,310,000.00	25.00%	$ 828,000.00
CIP-2	2023	Bell Farms Lift Station Expansion	1,400 gpm, 2nd WW	2172	1800	$ 716,000.00	82.87%	$ 593,000.00
CIP-3	2023	Presidential Glen Lift Station Expansion	2,275 gpm, 2nd WW	3517	2400	$ 716,000.00	68.24%	$ 489,000.00
CIP-4	2024	US 290 WW Line Expansion	12" & 15"	3600	2300	$ 1,736,000.00	63.89%	$ 1,109,000.00
					Totals			$33,067,000.00

Previously Completed Projects

Year	Total LUE Capacity	Name	Description	Project Cost	LUEs Used	10-Year LUE Demand	Pro Rata Share	Pro Rata Project Cost
2001	300	Hamilton Point Sewer Main	Gravity Sewer Line to Serve Hamilton Point Sub	$ 128,000.00	300	0	0%	$ -
2003	1091	Creekside Offsite/Onsite and Wilbarger WWTP	Lift Station, Forced Main and WWTP	$ 1,033,000.00	726	726	67%	$ 687,000.00
2004	1264	East Old Highway 20 Gravity Line, Lift Staion,Forced Main (Bell Farms FM)	Gravity Line Lift Station and Forced Main to Serve new growth along Old Highway 20	$ 1,034,873.04	616	1264	100%	$ 1,035,000.00
2005	1885	Greenbury Gravity Line	Gravity Line Along US 290 to Serve Greenbury Sub	$ 619,007.39	308	1500	80%	$ 493,000.00
2008	888	Carriage Hills Lift Station and Forced Main	Lift Station and Forced Main to Serve Carriage Hills Sub	$ 680,972.01	275	888	100%	$ 681,000.00
2018	1000	High school gravity line to Stonewater LS; LS improvements	Gravity wastewater line to servce new high school	$ 51,000.00	200	1000	100%	$ 51,000.00
2020	679	Travis County Rural Center lift station and force main	Lift Station and Force Main from Rural Center to existing wastewater line	$ 2,524,000.00	345	580	85%	$ 2,156,000.00
2021	1272	Bastrop-Parsons wastewater line	Replacement of existing wastewater line in Bastrop and Parsons; to correct current capacity issues and serve additional growth	$ 423,292.00	1272	1272	100%	$ 423,000.00
2021	1586	Wildhorse Creek lift station expansion	Change in discharge point increased Phase 1 capacity from 440 to 1026 LUEs, currently at about 706 LUEs. Will need to expand LS when Lagos develops to ultimate 1586 LUE capacity.	$ 1,367,000.00	1300	1586	100%	$ 1,367,000.00
2020	5354	Addl. Wilbarger WWTP Capacity	New treatment capacity to meet growth	$ 34,960,000.00	4200	5000	93%	$32,648,000.00
2022	363	Cottonwood WWTP Ph 1	New plant for growth in eastern portion of City	$ 12,622,000.00	100	363	100%	$12,622,000.00
2022	754	FM 973 Gravity Wastewater line	15" wastewater line to extend service north along FM 973	$ 1,473,000.00	75	754	100%	$ 1,473,000.00
2023	1200	West Cottonwood LS and FM	New lift station and distribution lines to meet growth in eastern portion of City	$ 2,175,000.00	150	1200	100%	$ 2,175,000.00
			Totals					**$55,811,000.00**

CIF Ineligible Projects

2009	727	Wilbarger WWTP Capacity Buyback	
	2005	Creekside Lift Station Forced Main Adjustment	

EXHIBIT B-6
CITY OF MANOR WASTEWATER IMPROVEMENTS
10-YEAR CAPITAL IMPROVEMENTS PLAN
MISCELLANEOUS PROJECT COSTS
MARCH 2023

Description		Total Cost
CIF Studies	$	21,000.00
Gilleland Creek COA Impact Fee (34 LUEs @ $1,400)	$	-
Study Cost for Wastewater, Mapping, Modeling	$	303,100.00
Total Sewer-Related Costs	**$**	**324,100.00**

EXHIBIT B-7
CITY OF MANOR WASTEWATER
IMPACT FEE CALCULATION
MARCH 2023

CATEGORY	AMOUNT
Total CIP Eligible Project Cost :	$ 89,202,000.00
Number of LUEs added:	6,200.00
Maximum Wastewater CIF:	**$ 14,387.00**
50% Credit:	**$ (7,193.50)**
MAXIMUM ASSESSABLE CIF:	**$ 7,193.50**

EXHIBIT B-8
CITY OF MANOR WATER AND WASTEWATER IMPACT
FEE FACTORS
MARCH 2023

1. RESIDENTIAL DEVELOPMENT

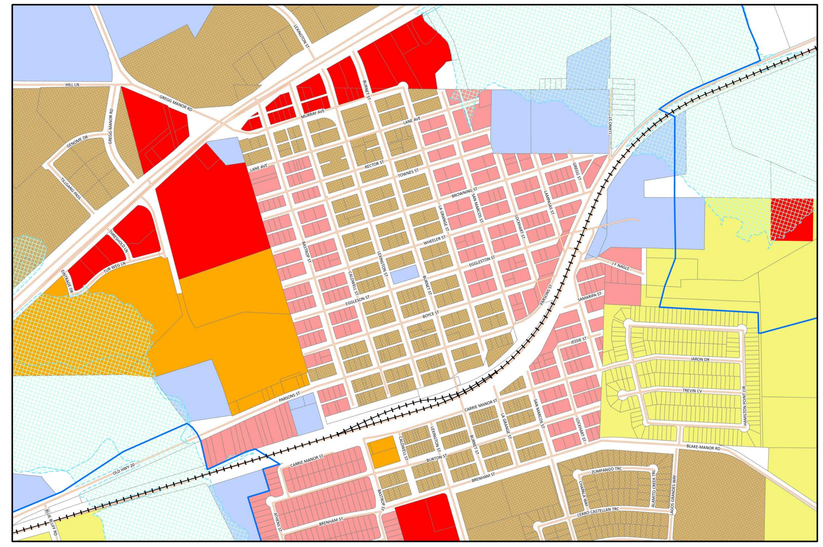
Community Impact Fees for residential development shall be assessed based upon the number of dwelling units proposed for development times the appropriate LUE Factor for water as shown below.

Dwelling Type	Units	LUE Factor
Single Family Residential	Per Housing Unit	1
Two-Family Residential	Per Residential Unit	0.7
Three-Family Residential	Per Residential Unit	0.7
Multi-Family Residential	Per Residential Unit	0.5

2. NON-RESIDENTIAL DEVELOMENT

Community Impact Fees for all non-residential development shall be assessed based upon the water meter size and type installed to serve the proposed development water, as shown below.

Meter Size (Inch)	Type	LUE Factor
5/8	Positive Displacement	1
3/4	Positive Displacement	1.5
1	Positive Displacement	2.5
1-1/2	Positive Displacement	5
2	Positive Displacement	8
2	Compound	8
2	Turbine	10
3	Compound	16
3	Turbine	24
4	Compound	25
4	Turbine	42
6	Compound	50
6	Turbine	92
8	Compound	80
8	Turbine	160
10	Compound	115
10	Turbine	250
12	Turbine	330



Downtown Area

Land to have water and wastewater service

Land to have water and wastewater service

Texas Local Government Code Section 213.005:
A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

Map Created By:

GBA

Land Use Category
- C - Commercial (Corridor)
- CMU - Community Mixed Use
- DMU - Downtown Mixed Use
- E - Employment
- MDNB - Mixed Density Neighborhood
- MF - Multi-Family
- NB - Neighborhood
- NMU - Neighborhood Mixed Use
- OS - Parks/Open Space
- P/SP - Public/Semi-Public
- SF-4 - High Density Single Family

Legend
- Roads
- Floodplain
- City Limits
- Extra-Territorial Jurisdiction
- Railroad

Land Use Assumption Map

Map Updated: February 03, 2023

CITY OF MANOR EST. 1872 TEXAS

0 0.25 0.5 1 1.5 2
Miles

0 1,000 2,000 4,000 6,000 8,000
Feet