



Cresandra Hardeman, Chairperson Place 3
Julie Leonard, Place 1
Anthony Butler, Place 2
Felix Paiz, Place 4
Celestine Sermo, Place 5
Cecil Meyer, Place 6
LaKesha Small, Place 7
Barth Timmerman, Developer Representative

Community Impact Fee Advisory Committee Regular Meeting

Wednesday, May 10, 2023, at 7:00 PM

Manor City Hall, Council Chambers, 105 E. Eggleston St.

AGENDA

This meeting will be live streamed on Manor's YouTube Channel

You can access the meeting at <https://www.youtube.com/@cityofmanorsocial/streams>

CALL TO ORDER AND ANNOUNCE A QUORUM IS PRESENT

PUBLIC COMMENTS

Non-Agenda Item Public Comments (white card): Comments will be taken from the audience on non-agenda related topics for a length of time, not to exceed three (3) minutes per person.

Agenda Item Public Comments (yellow card): Comments will be taken from the audience on non-agenda and agenda items combined for a length of time, not to exceed five (5) minutes total per person on all items, except for Public Hearings. Comments on Public Hearing items must be made when the item comes before the Board/Commission/Committee and, not to exceed two (2) minutes per person. No Action or Discussion May be Taken by the Board/Commission/Committee during Public Comments on Non-Agenda Items.

To address the Board/Commission/Committee, please complete the white or yellow card and present it to the city staff designee prior to the meeting.

CONSENT AGENDA

All of the following items on the Consent Agenda are considered to be self-explanatory by the Community Impact Fee Advisory Committee and will be enacted with one motion. There will be no separate discussion of these items unless requested by the Chair or a Committee Member; in which event, the item will be removed from the consent agenda and considered separately.

- 1. Consideration, discussion, and possible action to approve the minutes of April 12, 2023, Community Impact Fee Advisory Regular Meeting.**

REGULAR AGENDA

- 2. Consideration, discussion, and possible action on calculating Water and Wastewater Impact Fee.**
- 3. Consideration, discussion, and possible action on a Roadway Impact Fee Service Area Map.**
- 4. Consideration, discussion, and possible action on calculating service units for the Roadway Impact Fee.**

ADJOURNMENT

In addition to any executive session already listed above, the Community Impact Fee Advisory Committee reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by Texas Government Code Section §551.071 (Consultation with Attorney), §551.072 (Deliberations regarding Real Property), §551.073 (Deliberations regarding Gifts and Donations), §551.074 (Personnel Matters), §551.076 (Deliberations regarding Security Devices) and §551.087 (Deliberations regarding Economic Development Negotiations).

CONFLICT OF INTEREST

In accordance with Section 12.04 (Conflict of Interest) of the City Charter, "No elected or appointed officer or employee of the city shall participate in the deliberation or decision on any issue, subject or matter before the council or any board or commission, if the officer or employee has a personal financial or property interest, direct or indirect, in the issue, subject or matter that is different from that of the public at large. An interest arising from job duties, compensation or benefits payable by the city shall not constitute a personal financial interest."

Further, in accordance with Chapter 171, Texas Local Government Code (Chapter 171), no City Council member and no City officer may vote or participate in discussion of a matter involving a business entity or real property in which the City Council member or City officer has a substantial interest (as defined by Chapter 171) and action on the matter will have a special economic effect on the business entity or real property that is distinguishable from the effect on the general public. An affidavit disclosing the conflict of interest must be filled out and filed with the City Secretary before the matter is discussed.

POSTING CERTIFICATION

I, the undersigned authority do hereby certify that this Notice of Meeting was posted on the bulletin board, at the City Hall of the City of Manor, Texas, a place convenient and readily accessible to the general public at all times and said Notice was posted on the following date and time: Friday, May 5, 2023, by 5:00 p.m. and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting.

/s/ Lluvia T. Almaraz, TRMC
City Secretary for the City of Manor, Texas

NOTICE OF ASSISTANCE AT PUBLIC MEETINGS:

The City of Manor is committed to compliance with the Americans with Disabilities Act. Manor City Hall and the Council Chambers are wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 10 days prior to this meeting. Please contact the City Secretary at 512.215.8285 or e-mail lalmaraz@manortx.gov

**AGENDA ITEM SUMMARY FORM**

PROPOSED MEETING DATE: May 10, 2023
PREPARED BY: Scott Dunlop, Director
DEPARTMENT: Development Services

AGENDA ITEM DESCRIPTION:

Consideration, discussion, and possible action to approve the minutes of April 12, 2023, Community Impact Fee Advisory Regular Meeting.

BACKGROUND/SUMMARY:

LEGAL REVIEW: Not Applicable
FISCAL IMPACT: No
PRESENTATION: No
ATTACHMENTS: Yes

- April 12, 2023, CIF Advisory Committee Regular Session Minutes

STAFF RECOMMENDATION:

It is the City Staff's recommendation that the Community Impact Fee advisory Committee approve the minutes of the April 12, 2023, CIF Advisory Committee Regular Meeting.

PLANNING & ZONING COMMISSION: Recommend Approval Disapproval None



**COMMUNITY IMPACT FEE ADVISORY COMMITTEE
REGULAR SESSION MINUTES
APRIL 12, 2023**

PRESENT:

COMMISSIONERS:

Cresandra Hardeman, Chairperson, Place 3
Julie Leonard, Place 1 (Absent)
Anthony Butler, Place 2 (Absent)
Felix Piaz, Place 4 (Absent)
Celestine Sermo, Place 5
Cecil Meyer, Place 6
LaKesha Small, Place 7
Barth Timmermann, Developer Representative

CITY STAFF:

Pauline Gray, City Engineer
Scott Dunlop, Development Services Director
Mandy Miller, Development Services Supervisor
Chasem Creed, IT Technician

REGULAR SESSION: 8:00 P.M.

CALL TO ORDER AND ANNOUNCE A QUORUM IS PRESENT

With a quorum of the Community Impact Fee (CIF) Advisory Committee present, the Regular Session of the Manor CIF Advisory Committee was called to order by Chair Hardeman at 9:50 p.m. on Wednesday April 12, 2023, in the Council Chambers of the Manor City Hall, 105 E. Eggleston St., Manor, Texas.

PUBLIC COMMENTS

Robert Battaile, 502 E. Eggleston St., Manor, Texas, submitted a speaker card to speak during public comment. Mr. Battaile did not appear during this time to speak.

CONSENT AGENDA

1. Consideration, discussion, and possible action to approve the minutes of March 8, 2023, Community Impact Fee Advisory Regular Meeting.

MOTION: Upon a motion made by Commissioner Small and seconded by Developer Representative Timmerman to approve the consent agenda.

There was no further discussion.

Motion to Approve carried 5-0

REGULAR AGENDA

Director Dunlop requested Item # 3 to be addressed first. He stated the information being reviewed would give insight to the other items on the agenda for the new Commissioner.

3. Consideration, discussion, and possible action on calculating service units for the Roadway Impact Fee.

Engineer Gray gave a slide show presentation. (See attached)

Engineer Gray answered questions regarding the calculations presented on the slides as examples. She assured the Committee that the calculations would be comparable to surrounding areas. She informed the Committee that the costs could not be set until the improvement projects were assessed.

Discussion was held regarding the different proposed service areas and how they would play in calculating the impact fees.

Director Dunlop stated this item was informational only. This item was designed to introduce the process of setting the impact fees.

Concerns were expressed regarding the negative impact on development this type of fee would have if the fees were set too high.

Engineer Gray explained a few different development categories and how the vehicle service miles could potentially be set. She compared the process to setting the water and wastewater impact fees.

Director Dunlop informed the Committee of the Roadway Impact Fee for the three service areas for Pflugerville. He quoted the fees as:

- Service Area A = \$1,590 / vehicle mile
- Service Area B = \$2,916 / vehicle mile

- Service Area C = \$3,156 / vehicle mile

Apprehension was expressed regarding the methodology in calculating the fees. It was recommended that the Committee take a good look at the calculations themselves to make sure the amount set for the impact fees would not deter retail growth.

Engineer Gray answered questions from the Committee regarding the allocation of funds. She explained the funds could be used anywhere inside the service area the funds were collected from. She went over the requirements for the use of funds as indicated by Statue Law and in the City Ordinance. She explained the main requirement would be a TIA showing the necessity of the project the funds would be applied to.

She confirmed funds could not be used in other service areas. Funds collected must be used within 10 years of being collected. If funds are not used, they must be returned to the developer with interest.

MOTION: Upon a motion made by Commissioner Small and seconded by Developer Representative Timmerman to close discussion on Item # 3 with no action taken.

There was no further discussion.

Motion to Close Discussion carried 5-0

2. Consideration, discussion, and possible action on a Roadway Impact Fee Service Area Map.

Engineer Gray gave a summary of the updated Roadway Impact Fee Service Area Map. (See attached) She detailed the changes made to the map which included a third service area and designations for the different roads as either City, County, or State.

Engineer Gray confirmed the vote for this item, if taken, was only to approve the map with the service areas laid out.

Discussion was held regarding the various ways the service areas could be drawn differently on the map. Consideration was given to adding another service area or potentially adjusting the location of the areas if the fee calculations were not relatively close to each other in cost.

MOTION: Upon a motion made by Commissioner Small and seconded by Developer Representative Timmerman to approve the Roadway Impact Fee Service Area Map as presented.

There was no further discussion.

Motion to Approve carried 5-0

4. Consideration, discussion, and possible action on calculating Water and Wastewater Impact Fee.

Engineer Gray presented an updated Engineering Report. (See attached)

Engineer Gray described the reasons behind the update presented verses the information originally submitted to the Committee for the backup. She explained the items in the report previously approved by the City Council.

Engineer Gray explained the information obtained from the City, the requirements from TCEQ, and the projected water needs assessed from that data. She stated that the total eligible projects would cost an estimated \$25 million for water improvements. The recommendation to Council based on these totals would be a Water Impact Fee of \$2,022.

Engineer Gray stated the wastewater would break down similarly. Calculations were done based on what has been constructed, what is currently under construction, and the cost of needed construction estimated at approximately \$89 million. The recommendation to Council based on these totals would be a Wastewater Impact Fee of \$7,193.50.

Engineer Gray stated calculations for Multifamily and Commercial were included in the updated report. She compared the totals on current impact fees for the following cities:

- City of Manor is \$6,872 with proposed fees of \$10,715.50.
- City of Elgin is \$10,138
- City of Bastrop is \$13,921
- City of Georgetown is \$18,779
- City of Pflugerville is \$16,581

Engineer Gray answered questions regarding the data presented for other cities. The Commissioners expressed their desire to see more calculations. They wanted to see data from Austin and maybe Kyle, and Buda.

Director Dunlop addressed questions from the Commissioners regarding the staff recommendation listed on the summary form for this item.

MOTION: Upon a motion made by Commissioner Meyer and seconded by Developer Representative Timmerman to postpone discussion until the May 10, 2023, CIF Advisory Committee Regular Session with the additional information from Austin, Kyle and Buda.

There was no further discussion.

Motion to Approve carried 5-0

ADJOURNMENT

MOTION: Upon a motion made by Developer Representative Timmerman and seconded by Commissioner Small to adjourn the regular scheduled CIF Advisory Committee at 10:41 p.m. on Wednesday, April 12, 2023.

There was no further discussion.

Motion to Adjourn carried 5-0

APPROVED:

Cresandra Hardeman
Chairperson

ATTEST:

Scott Dunlop
Development Services Director

CITY OF MANOR ROADWAY IMPACT FEE

FUNDING SOURCES

WHAT ARE THE FUNDING NEEDS?

- MAINTENANCE
- OPERATIONS OF STREETS DEPARTMENT
- COMPLETE RECONSTRUCTION
- GROWTH NEEDS (BONDS, OTHER SOURCES)

FUNDING OPTIONS

- BONDS
- STREET MAINTENANCE FEE
- ROADWAY IMPACT FEE
- TIRZ (TAX INCREMENT REINVESTMENT ZONE)
- DEVELOPER AGREEMENTS (380 AGREEMENT)
- PID (PUBLIC IMPROVEMENT DISTRICT)
- TRAFFIC IMPACT ANALYSIS (TIA)
- CAPMETRO FUNDS

TRANSPORTATION FUNDING

- FEDERAL / STATE FUNDING NO LONGER KEEPS UP WITH NEEDS
- FUNDING MECHANISMS FOR INFRASTRUCTURE (ESPECIALLY TRANSPORTATION) ARE LIMITED IN TEXAS
- 'GROWTH SHOULD PAY FOR GROWTH' IS LOGICAL & REASONABLE

ROADWAY IMPACT FEE PIECES

1. SERVICE AREAS
2. LAND USE ASSUMPTION MAP
3. SERVICE UNITS
4. CAPITAL IMPROVEMENTS PLAN
5. MAXIMUM ROADWAY IMPACT FEE
6. CITY POLICY ON COLLECTION

TYPICALLY ASSESSED AT FINAL PLAT RECORDATION AND FEE IS PAID AT BUILDING PERMIT STAGE

SERVICE AREA

WHAT IS A SERVICE AREA?

- A. ROADWAY SERVICE AREAS ARE DIFFERENT THAN WATER AND WASTEWATER SERVICE AREAS.
- B. ROADWAY SERVICE AREAS ARE REQUIRED TO HAVE A 6-MILE TRIP LENGTH LIMIT.
- C. COLLECTED FUNDS IN EACH SERVICE AREA CAN ONLY BE USED WITHIN THE SERVICE AREA IT WAS COLLECTED FOR.
- D. ROADWAY SERVICE AREAS CAN ONLY BE LOCATED WITHIN CITY LIMITS.
- E. THERE ARE 3 PROPOSED SERVICE AREAS FOR MANOR.

LAND USE ASSUMPTION MAP

- WILL USE SAME LAND USE ASSUMPTION MAP AS WATER AND WASTEWATER IMPACT FEES, BUT WILL ONLY INCLUDE AREAS LOCATED WITHIN CITY LIMITS.
- THE LAND USE ASSUMPTION MAP IS BASED ON THE COMPREHENSIVE PLAN

SERVICE UNITS

- WHAT IS A SERVICE UNIT?
 - A SERVICE UNIT IS A MEASURE OF USE OF CITY FACILITIES BY NEW DEVELOPMENT. IT IS THE UNIT OF MEASURE USED IN THE ROADWAY IMPACT FEE STUDY TO QUANTIFY THE SUPPLY AND DEMAND FOR ROADS IN THE CITY.
 - FOR ROADWAY PURPOSES, THE SERVICE UNIT IS DEFINED AS A VEHICLE MILE.
 - THE DEFINITION FOR VEHICLE MILE IS AS FOLLOWS: A VEHICLE MILE IS THE CAPACITY CONSUMED IN A SINGLE LANE IN THE PM PEAK HOUR BY A VEHICLE MAKING A TRIP ONE MILE IN LENGTH. THE PM PEAK IS USED AS THE BASIS FOR ROADWAY PLANNING AND THE ESTIMATION OF TRIPS CAUSED BY NEW DEVELOPMENT.

VEHICLE MILES

- WHAT IS A VEHICLE MILE
 - A VEHICLE MILE IS THE CAPACITY CONSUMED IN A SINGLE LANE IN THE PM PEAK HOUR BY A VEHICLE MAKING A TRIP ONE MILE IN LENGTH
 - THE LAND USE/VEHICLE MILE EQUIVALENCY TABLE (LUVMET) IS USED

LUVMET TABLE

LAND USE/VEHICLE MILE EQUIVALENCY TABLE (LUVMET)									
Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Trip Rate	Trip Length (mi)	Adj. for O-D	Adj. Trip Length (mi)	Max Trip Length (mi) (Max 6.00)	Veh-Mile Per Dev-Unit
PORT AND TERMINAL									
Truck Terminal	030	1,000 SF GFA	1.87	1.87	10.70	50%	5.35	5.35	10.0
INDUSTRIAL									
Light Industrial	110	1,000 SF GFA	0.63	0.63	12.89	50%	6.45	6.00	3.8
Manufacturing	140	1,000 SF GFA	0.67	0.67	12.89	50%	6.45	6.00	4.0
Warehouse	150	1,000 SF GFA	0.19	0.19	12.89	50%	6.45	6.00	1.1
RESIDENTIAL									
Single-Family Detached Housing	210	Dwelling Unit	0.99	0.99	8.59	50%	4.30	4.30	4.3
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.56	0.56	8.59	50%	4.30	4.30	2.4
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.44	0.44	8.59	50%	4.30	4.30	1.9
Mobile Home Park / Manufactured Home	240	Dwelling Unit	0.46	0.46	8.59	50%	4.30	4.30	2.0
Senior Adult Housing-Attached	252	Dwelling Unit	0.26	0.26	8.59	50%	4.30	4.30	1.1
Assisted Living	254	Beds	0.26	0.26	8.59	50%	4.30	4.30	1.1

LUVMET TABLE

LODGING									
Hotel	310	Room	0.60	0.60	5.41	50%	2.71	2.71	1.6
RECREATIONAL									
Recreational Community Center	495	1,000 SF GFA	2.31	2.31	6.35	50%	3.18	3.18	7.4
Miniature Golf Course	431	Hole	0.33	0.33	6.35	50%	3.18	3.18	1.1
Multiplex Movie Theater	445	Screens	13.73	13.73	6.35	50%	3.18	3.18	43.66
INSTITUTIONAL									
Religious Place of Worship	560	1,000 SF GFA	0.49	0.49	6.30	50%	3.15	3.15	1.5
Day Care Center	565	1,000 SF GFA	11.12	6.23	3.39	50%	1.70	1.70	10.5
Elementary and Middle School (K-8)	520/2	Students	0.17	0.17	3.39	50%	1.70	1.70	0.3
High School	530	Students	0.14	0.14	3.39	50%	1.70	1.70	0.2
MEDICAL									
Clinic	630	1,000 SF GFA	3.28	3.28	6.76	50%	3.38	3.38	11.0
Hospital	610	1,000 SF GFA	0.97	0.97	6.76	50%	3.38	3.38	3.3
Nursing Home	620	Beds	0.22	0.22	6.76	50%	3.38	3.38	0.7
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	2.47	6.76	50%	3.38	3.38	8.4
OFFICE									
General Office Building	710	1,000 SF GFA	1.15	1.15	6.76	50%	3.38	3.38	3.9
Medical-Dental Office Building	720	1,000 SF GFA	3.46	3.46	6.76	50%	3.38	3.38	11.6
Single Tenant Office Building	715	1,000 SF GFA	1.71	1.71	6.76	50%	3.38	3.38	5.8
Office Park	750	1,000 SF GFA	1.07	1.07	6.76	50%	3.38	3.38	3.6

LUMMET TABLE

COMMERCIAL - Automobile Related									
Automobile Care Center	942	1,000 SF GFA	3.11	1.87	5.41	50%	2.71	2.71	5.1
Automobile Parts Sales	843	1,000 SF GFA	4.91	2.80	5.41	50%	2.71	2.71	7.6
Gasoline/Service Station	944	Vehicle Fueling Position	14.03	8.14	1.20	50%	0.60	0.60	4.9
Gasoline/Service Station w/ Conv Market and Car Wash	945	Vehicle Fueling Position	13.99	6.16	1.20	50%	0.60	0.60	3.7
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	2.91	5.41	50%	2.71	2.71	7.9
Self-Service Car Wash	947	Stall	5.54	3.32	1.20	50%	0.60	0.60	2.0
Tire Store	848	1,000 SF GFA	3.98	2.87	5.41	50%	2.71	2.71	7.8
COMMERCIAL - Dining									
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.67	16.34	3.39	50%	1.70	1.70	27.7
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	28.34	14.17	3.39	50%	1.70	1.70	24.0
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.77	5.57	5.41	50%	2.71	2.71	15.0
Quality Restaurant	931	1,000 SF GFA	7.80	4.37	5.41	50%	2.71	2.71	11.8
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	43.38	13.01	1.20	50%	0.60	0.60	7.8

LUMMET TABLE

COMMERCIAL - Other Retail									
Nursery (Garden Center)	817	1,000 SF GFA	6.94	4.86	6.35	50%	3.18	3.18	15.4
Home Improvement Superstore	862	1,000 SF GFA	2.33	1.21	6.35	50%	3.18	3.18	3.9
Pharmacy/D rug store w/o Drive-	880	1,000 SF GFA	8.51	4.00	6.35	50%	3.18	3.18	12.7
Pharmacy/D rug store w/ Drive- Thru Window	881	1,000 SF GFA	10.29	5.25	6.35	50%	3.18	3.18	16.7
Shopping Center	820	1,000 SF GLA	3.81	2.51	6.35	50%	3.18	3.18	8.0
Supermarket	850	1,000 SF GFA	9.24	5.91	6.35	50%	3.18	3.18	18.7
Toy/Children 's Superstore	864	1,000 SF GFA	5.00	3.50	6.35	50%	3.18	3.18	11.1
Department Store	875	1,000 SF GFA	1.95	1.37	6.35	50%	3.18	3.18	4.4
SERVICES									
Walk-In Bank	911	1,000 SF GFA	12.13	7.28	3.39	50%	1.70	1.70	12.3
Drive-In Bank	912	Drive-in Lanes	27.15	17.6 5	3.39	50%	1.70	1.70	30.0
Hair Salon	918	1,000 SF GLA	1.45	1.02	3.39	50%	1.70	1.70	1.7

CALCULATION OF ROADWAY IMPACT FEES

- The calculation of roadway impact fees for new development involves a two-step process. Step one is the calculation of the total number of service units that will be generated by the development. Step two is the calculation of the impact fee due by the new development.

Step 1: Determine number of service units (vehicle-miles) generated by the development using the equivalency table.

$$\begin{array}{ccccc} \text{No. of Development} & & \times & \text{Vehicle-miles} & = & \text{Development's} \\ \text{Units} & & & \text{per development unit} & & \text{Vehicle-miles} \end{array}$$

Step 2: Calculate the impact fee based on the fee per service unit for the service area where the development is located.

$$\begin{array}{ccccc} \text{Development's} & & \times & \text{Fee per} & = & \text{Impact Fee due} \\ \text{Vehicle-miles} & & & \text{vehicle-mile} & & \text{from Development} \end{array}$$

CALCULATION EXAMPLES

- ASSUME THAT THE IMPACT FEE AMOUNT IS \$1000 FOR A SERVICE AREA

Single-Family Dwelling:

1 dwelling unit x 2.13 vehicle-miles/dwelling unit = 2.13 vehicle-miles
2.13 vehicle-miles x \$1000.00 /vehicle-mile = \$2130.00

20,000 square foot (s.f.) Office Building:

20 (1,000 s.f. units) x 3.46 vehicle-miles/1,000 s.f. units = 69.20 vehicle-miles
69.20 vehicle-miles x \$1000.00 /vehicle-mile = \$60,200.00

CALCULATION EXAMPLES

50,000 s.f. Retail Center:

$50 \text{ (1,000 s.f. units)} \times 1.96 \text{ vehicle-miles/1,000 s.f. units} = 98.00 \text{ vehicle-miles}$

$98.00 \text{ vehicle-miles} \times \$1000.00 \text{ /vehicle-mile} = \$980,000.00$

100,000 s.f. Industrial Development:

$100 \text{ (1,000 s.f. units)} \times 1.31 \text{ vehicle-miles/1,000 s.f. units} = 131.00 \text{ vehicle-miles}$

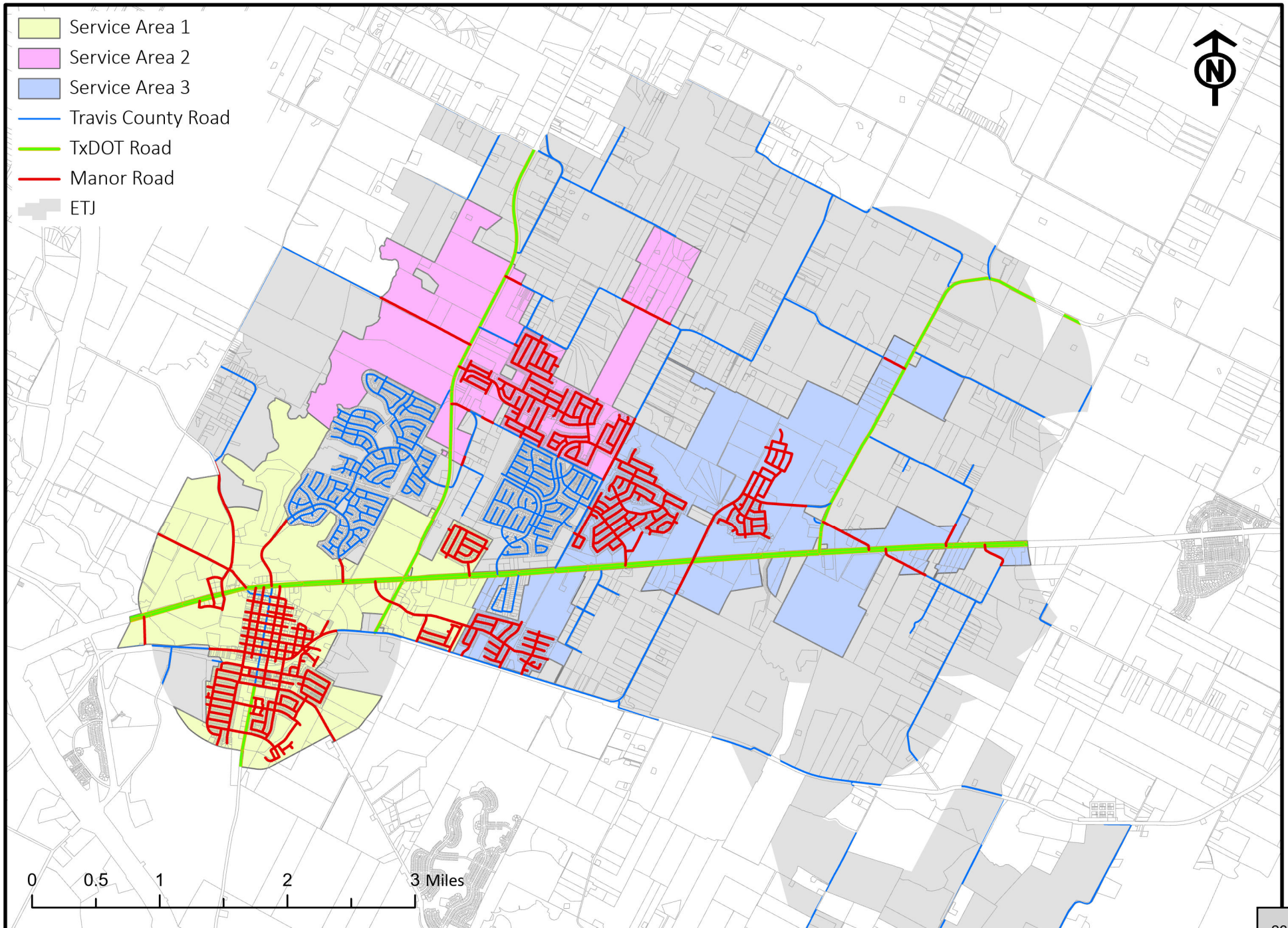
$131.00 \text{ vehicle-miles} \times \$1000.00 \text{ /vehicle-mile} = \$131,000.00$

NEXT STEPS

- ONCE THE PROPOSED SERVICE AREAS ARE APPROVED, THE NEXT STEP WILL BE IDENTIFYING PROJECTS REQUIRED IN EACH SERVICE AREA AND THEN CALCULATING THE

Manor Road Impact Fee Map

Item 1.



GBA

DRAFT ENGINEERING REPORT

CITY OF MANOR 2022 COMMUNITY IMPACT FEE UPDATE

MANOR, TEXAS
GBA NO. 15312.00
APRIL 2023



CITY OF
MANOR

EST.  1872

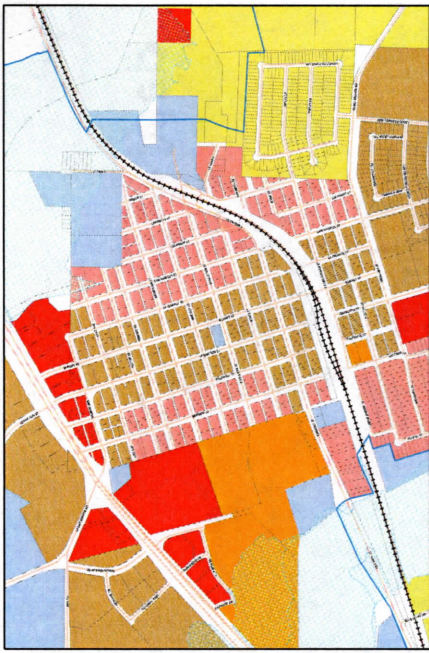
TEXAS

CITY OF MANOR
2022 COMMUNITY IMPACT FEE UPDATE

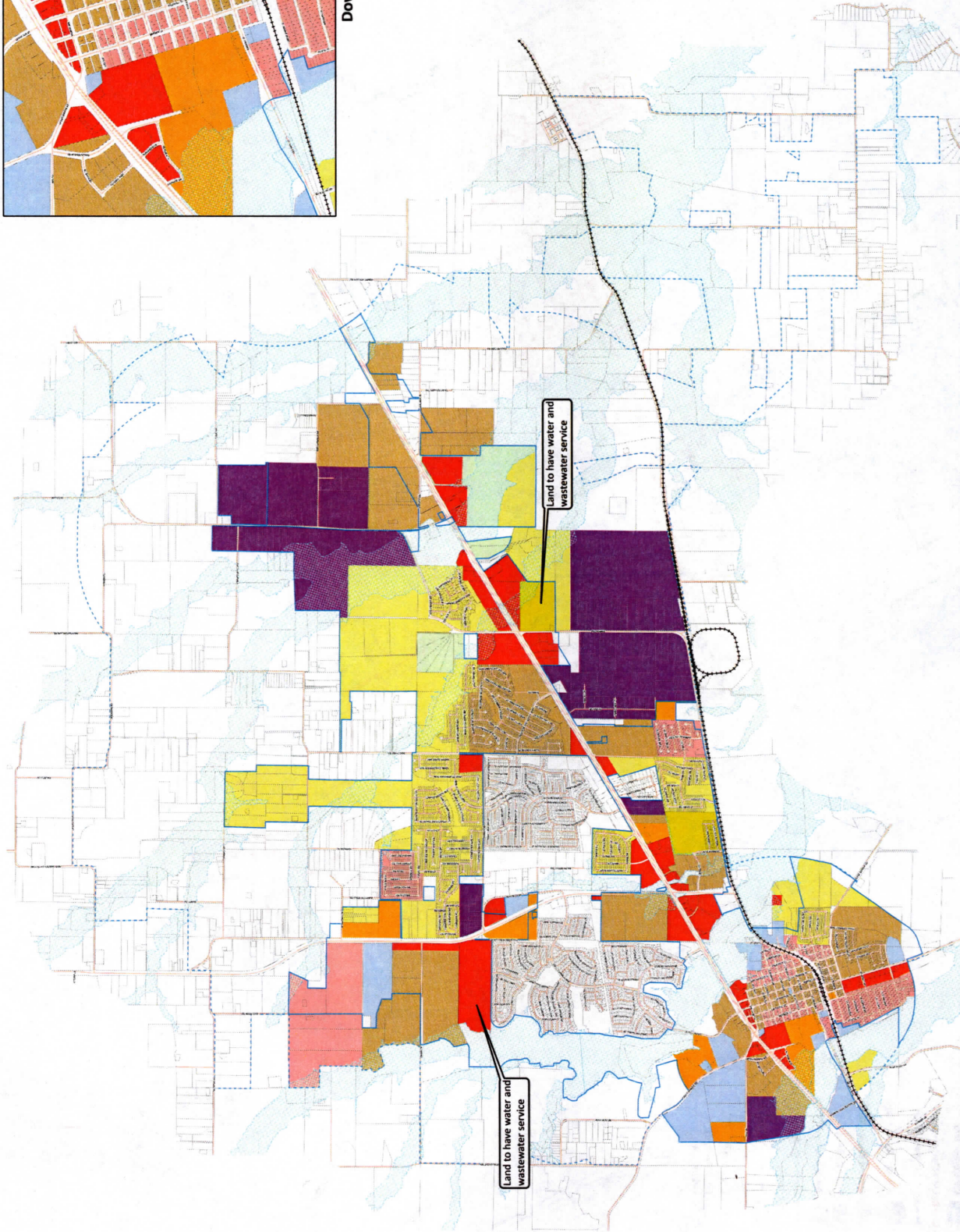
EXHIBITS

TABLE OF CONTENTS

1. LAND USE ASSUMPTIONS MAP
2. EXHIBIT A-1: 10-YEAR WATER CAPITAL IMPROVEMENTS PLAN MAP
3. EXHIBIT A-2: 10-YEAR CAPITAL IMPROVEMENTS PLAN (ESTIMATED COSTS)
4. EXHIBIT A-3: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN MAP
5. EXHIBIT A-4: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN (ESTIMATED COSTS)
6. EXHIBIT B-1: PLANNING AND DESIGN CRITERIA
7. EXHIBIT B-2: 10-YEAR WATER CAPITAL IMPROVEMENTS PLAN PRO-RATA CALCULATIONS
8. EXHIBIT B-3: MISCELLANEOUS PROJECT COSTS – WATER
9. EXHIBIT B-4: WATER IMPACT FEE CALCULATION
10. EXHIBIT B-5: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN PRO-RATA CALCULATIONS
11. EXHIBIT B-6: MISCELLANEOUS PROJECT COSTS – WASTEWATER
12. EXHIBIT B-7: WASTEWATER IMPACT FEE CALCULATION
13. EXHIBIT B-8: WATER AND WASTEWATER IMPACT FEE FACTORS
14. WATER AND WASTEWATER IMPACT FEE COMPARISON CHART




Downtown Area



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

- Legend**
- Land Use Category**
 - C - Commercial (Corridor)
 - CMU - Community Mixed Use
 - DMU - Downtown Mixed Use
 - E - Employment
 - MF - Multi-Family
 - NB - Neighborhood
 - NMU - Neighborhood Mixed Use
 - OS - Parks/Open Space
 - P/SP - Public/Semi-Public
 - SF-4 - High Density Single Family
 - Other**
 - Roads
 - Floodplain
 - City Limits
 - Extra-Territorial Jurisdiction
 - Railroad

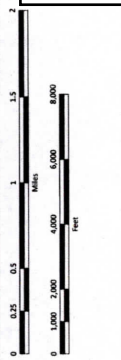


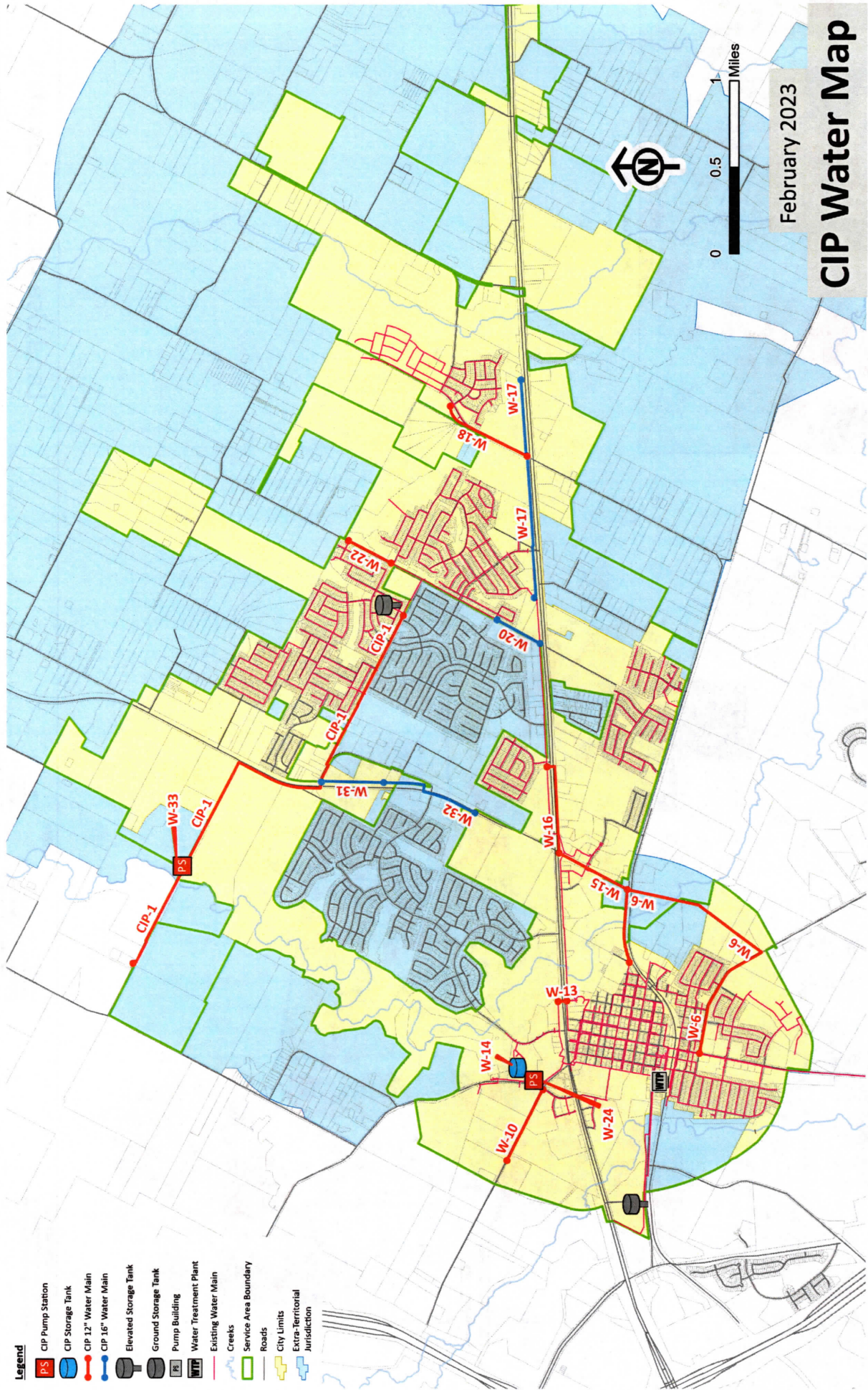
CITY OF MANOR
EST. 1872
TEXAS

Land Use Assumption Map

Map Updated: February 03, 2023

Item 1.





CIP Water Map

February 2023

EXHIBIT A-1

eb

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 (2023 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	\$ 462,893.00	0.050	20	\$ 578,616.25	\$ 86,800.00	\$ 93,200.00	\$ 458,850.36	\$ 1,217,000.00	Water Distribution main along Hill Lane to serve new growth.
W-13	2025	US 290 Crossing at Golf Course	12	inch	250	\$ 200,000.00	0.050	20	\$ 280,000.00	\$ 42,000.00	\$ 54,700.00	\$ 227,847.65	\$ 605,000.00	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	\$ 2,598,713.28	\$ 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	\$ 316,000.00	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	2800	\$ 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	2025	Bois D'Arc Lane Water Line	16	inch	2700	\$ 500,000.00	0.050	20	\$ 700,000.00	\$ 105,000.00	\$ 136,900.00	\$ 569,709.86	\$ 1,512,000.00	Transmission main to improve delivery of water from East EST.
W-22	2025	Bois D'Arc Lane Water Line	12	inch	2500	\$ 400,000.00	0.050	20	\$ 560,000.00	\$ 84,000.00	\$ 109,500.00	\$ 455,755.79	\$ 1,209,000.00	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	2025	Gregg Lane Water Supply - Ground Storage Tank and Pumps	250,000	gallon		\$ 2,500,000.00	0.050	20	\$ 3,500,000.00	\$ 525,000.00	\$ 684,300.00	\$ 2,848,428.32	\$ 7,558,000.00	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													\$ 34,688,000.00	

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





EXHIBIT A-4
CITY OF MANOR WASTEWATER 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	Construction Cost (2022 Dollars)	Interest	Period (months)	Payment	Total Payment	Size	Length	Construction Cost (adjusted for inflation @ 8% per annum)	Soft Costs	Contingency (10% + 1% per annum)	Financing Cost (8.1% over 20 years)	Total Project Costs	Detailed Description
S-13	2020	Add Wilbarger WWTP Capacity	\$ 16,825,000.00	0.00425	240	\$ 145,867.98	\$ 34,960,314.38	1.33 MGD		\$ 19,348,750.00	\$ 2,140,000.00	\$ 400,000.00	\$ 13,071,564.38	\$ 34,960,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-15	2022	Cottonwood WWTP Phase 1, 0.20 MGD	\$ 5,227,569.50	0.00425	240	\$ 52,933.61	\$ 12,622,467.33	0.20 MGD		\$ 6,534,461.88	\$ 398,000.00	\$ 970,500.00	\$ 4,719,925.45	\$ 12,622,000.00	Build plant at Regional Site, road and electrical improvements add \$500,000
S-16	2024	East Cottonwood Gravity Line	\$ 1,500,000.00	0.00425	240	\$ 14,774.81	\$ 3,425,955.08	12"	3,200	\$ 2,025,000.00	\$ 51,000.00	\$ 69,000.00	\$ 1,280,955.08	\$ 3,426,000.00	Extend East Cottonwood gravity w/w to Regional Site, sized for 10-year capacity
S-17	2023	West Cottonwood LS and FM	\$ 949,000.00	0.00425	240	\$ 9,062.01	\$ 2,174,882.54	6" FM and 360 gpm LS	3,700	\$ 1,233,700.00	\$ 79,000.00	\$ 49,000.00	\$ 813,182.54	\$ 2,175,000.00	Extend 27" and 30" gravity w/w from confluence with East Cottonwood to US 250, ultimate capacity
S-18	2024	West Cottonwood Gravity Line, Phase 2	\$ 984,000.00	0.00425	240	\$ 9,572.44	\$ 2,297,386.38	15"	8,200	\$ 1,328,400.00	\$ 64,000.00	\$ 46,000.00	\$ 859,886.38	\$ 2,297,000.00	Serves West Cottonwood Sub-Basin to Bois D'Arc Ln, 21" and 24" gravity w/w sized for ultimate capacity
S-19	2022	FM 973 Gravity Wastewater Line	\$ 684,400.00	0.00425	240	\$ 6,139.30	\$ 1,473,432.00	15"	5,800	\$ 855,500.00	\$ 128,300.00	\$ 106,100.00	\$ 383,532.00	\$ 1,473,000.00	Serves FM 973 Corridor up to Wilbarger Basin divide (approx. Gregg Ln)
S-23	2025	Willow Lift Station and Force Main	\$ 1,000,000.00	0.00425	240	\$ 12,535.88	\$ 3,098,811.46	200 gpm		\$ 1,400,000.00	\$ 210,000.00	\$ 273,700.00	\$ 1,124,911.46	\$ 3,099,000.00	Lift Station and Force Main to serve 220 LUEs in Willow Basin along US 250, 10-11" ADP approx. 60,000 gpm, PWWF approx 200 gpm
S-28	2018	High School gravity line to Storewater Lift Station, Storewater Lift Station Upgrades	\$ 26,271.96	0.00425	240	\$ 210.84	\$ 50,601.98	12"	3,100	\$ 27,585.56	\$ 4,096.48	-	\$ 18,919.94	\$ 51,000.00	Gravity main to serve new high school, upgrades to existing Storewater Lift Station.
S-30	2024	Expand Cottonwood WWTP to 0.40 MGD	\$ 3,500,000.00	0.00425	240	\$ 41,947.32	\$ 10,057,356.68	0.40 MGD		\$ 4,725,000.00	\$ 709,800.00	\$ 869,400.00	\$ 3,784,156.68	\$ 10,057,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-31	2025	Expand Cottonwood WWTP to 0.60 MGD	\$ 3,500,000.00	0.00425	240	\$ 43,975.92	\$ 10,530,219.99	0.60 MGD		\$ 4,900,000.00	\$ 795,000.00	\$ 958,000.00	\$ 3,937,219.99	\$ 10,530,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-32	2021	Bastrop-Parsons WW Improvements	\$ 423,292.00	0.00425	240	\$ 4,392.59	\$ 1,054,220.52	12"		\$ 507,950.40	\$ 76,200.00	\$ 75,900.00	\$ 394,170.12	\$ 1,054,000.00	Replacement of existing wastewater line in Bastrop and Parsons, to correct current capacity issues and serve additional growth
S-33	2023	Wilbarger Basin Gravity Line to Lift Station (off Gregg Lane)	\$ 1,000,000.00	0.00425	240	\$ 11,441.81	\$ 2,746,034.77	15"	6,200	\$ 1,300,000.00	\$ 195,000.00	\$ 224,300.00	\$ 1,026,734.77	\$ 2,746,000.00	New wastewater line to serve growth along Gregg Lane.
S-34	2023	Wilbarger Basin lift station and force main (off Gregg Lane)	\$ 1,300,000.00	0.00425	240	\$ 14,873.76	\$ 3,569,701.45	12" FM and 225 gpm LS	3,500	\$ 1,690,000.00	\$ 253,500.00	\$ 291,500.00	\$ 1,334,701.45	\$ 3,570,000.00	New lift station and force main to serve growth along Gregg Lane.
S-35	2025	Gravity line from City Limits to tie in to Wastewater line to Cottonwood	\$ 1,100,000.00	0.00425	240	\$ 13,789.67	\$ 3,369,520.53	12"	8,130	\$ 1,540,000.00	\$ 231,000.00	\$ 301,100.00	\$ 1,237,420.53	\$ 3,310,000.00	Option 1 - New gravity wastewater line to extend wastewater service to City Limits for future growth.
S-36	2024	Lift Station and Force main to Cottonwood WWTP	\$ 2,000,000.00	0.00425	240	\$ 23,869.71	\$ 5,752,729.61	10" FM 1.575 LUEs		\$ 2,700,000.00	\$ 405,000.00	\$ 498,800.00	\$ 2,150,229.61	\$ 5,753,000.00	New lift station and force main to serve areas south of US Hwy 250 along Old Kinross Road.
S-37	2028	Expand Cottonwood WWTP to 0.80 MGD	\$ 3,500,000.00	0.00425	240	\$ 49,822.76	\$ 11,957,461.69	0.80 MGD		\$ 5,625,000.00	\$ 813,800.00	\$ 1,247,800.00	\$ 4,470,861.69	\$ 11,957,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-38	2025	Travis County Regional WWTP - with Elgin - Phase 1 - 1.1 MGD and 38" trunk main	\$ 350,000,000.00	0.00425	240	\$ 428,229.08	\$ 102,774,979.01	0.20 MGD		\$ 54,600,000.00	\$ 398,000.00	\$ 9,349,700.00	\$ 38,427,279.01	\$ 102,775,000.00	Build plant at Regional Site, road and electrical improvements add \$500,000
CIP-1	2021	Wildhorse Creek Lift Station Expansion	\$ 867,081.50	0.00425	240	\$ 8,595.49	\$ 2,052,916.57	1,075 gpm, 2nd WW		\$ 1,040,487.80	\$ 156,100.00	\$ 95,000.00	\$ 75,900.00	\$ 1,367,000.00	Change in discharge point increased Phase 1 capacity from 440 to 1028 LUEs, currently at about 708 LUEs. Will need to expand LS when Lago develops to ultimate 1595 LUE capacity.
CIP-2	2023	Bell Farms Lift Station Expansion	\$ 866,000.00	0.00425	240	\$ 2,894.94	\$ 716,385.60	1,400 gpm, 2nd WW		\$ 1,125,800.00	\$ 45,000.00	\$ 30,000.00	\$ (484,414.40)	\$ 716,000.00	Presently at approximately 730 LUEs. Current phase 1 capacity is 1284 LUEs. Ultimate Capacity at phase 2 is 2172.
CIP-3	2023	Presidential Glen Lift Station Expansion	\$ 866,000.00	0.00425	240	\$ 2,894.94	\$ 716,385.60	2,275 gpm, 2nd WW		\$ 1,125,800.00	\$ 45,000.00	\$ 30,000.00	\$ (484,414.40)	\$ 716,000.00	Presently at approximately 1281 LUEs. Actual phase 1 capacity with current wastewater flow is in excess of 1500 LUEs. Ultimate Capacity at phase 2 is 3517.
CIP-4	2024	US 250 WW Line Expansion	\$ 603,378.00	0.00425	240	\$ 7,231.64	\$ 1,735,594.12	12" & 15" 1,566 & 2,790		\$ 814,560.30	\$ 122,200.00	\$ 149,900.00	\$ 848,933.82	\$ 1,736,000.00	Presently at approximately 264 POC-308 SW = 572 LUEs out of 1800 LUE capacity, expansion will double capacity.
CIP-6	2020	Travis County Rural Center Lift Station, force main	\$ 1,176,592.00	0.00425	240	\$ 10,515.32	\$ 2,523,676.38	500 gpm		\$ 1,353,080.80	\$ 127,000.00	\$ 100,000.00	\$ 943,595.59	\$ 2,524,000.00	Lift Station and Force Main from Rural Center to existing wastewater line

Total: \$ 216,834,000.00

GBA

Wastewater LUEs are defined as producing 275 gallons of wastewater per day per single family residence as determined in the City of Manor Wastewater Master Plan.

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

Water Infrastructure

Criterion	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

Criterion	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"	\$ 407,816.04	308	1667	100%	\$ 408,000.00
Water Supply Main From City of Austin to West Elevated Storage Tank and Downtown								
2007	5,600	West Elevated Storage Tank	16"	\$ 1,057,675.36	1550	4500	80%	\$ 850,000.00
2008	5,000	Presidential Glen Water Lines	16"	\$ 2,138,083.58	1550	4500	90%	\$ 1,924,000.00
2010	2,400	East Manor Elevated Storage Tank	500,000	\$ 465,054.06	8	2000	83%	\$ 388,000.00
2009	5,000	AMR Water Meters	12"	\$ 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				

CIF Ineligible Projects

\$ 10,280,000.00

GBA

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

GBA

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 Rate Share	Pro Rata Project Cost In 2022 Dollars
S-18	2023	West Cottonwood Gravity Line, Phase 2	15"	1200	1200	\$ 2,287,000.00	100.00%	\$ 2,287,000.00
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	\$10,087,000.00	100.00%	\$10,087,000.00
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	Willbarger 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	Willbarger 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	Ball Farms Lift Station Expansion	1,400 gpm, 2nd WW	2172	1800	\$ 7,116,000.00	82.87%	\$ 5893,000.00
CIP-3	2023	Presidential Glen Lift Station	2,275 gpm, 2nd WW	3517	2400	\$ 716,000.00	68.24%	\$ 489,000.00
CIP-4	2024	US 280 WW Line Expansion	12" & 15"	3800	2300	\$ 1,736,000.00	63.89%	\$ 1,109,000.00
Totals								\$33,087,000.00

Previously Completed Projects

Year	LUE Capacity	Name	Description	Project Cost	LUEs Used	10-Year LUE Demand	Pro Rate Share	Pro Rata Project Cost
2001	300	Hamilton Point Sewer Main	Gravity Sewer Line to Serve Hamilton Point Sub	\$ 126,000.00	300	0	0%	\$ -
2003	1091	Willbarger 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 Station, Forced Main and Force Main	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	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 service 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 Forced Main from Rural Center to existing wastewater line	\$ 2,524,000.00	345	590	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	1598	Wildhorse Creek lift station expansion	Replace existing lift station, increased Phase 1 capacity from 440 to 1026 LUEs. Will need to expand LS when Lago develops to ultimate 1586 LUE capacity.	\$ 1,367,000.00	1300	1586	100%	\$ 1,367,000.00
2020	5354	Add Willbarger WWTP Capacity	New treatment capacity to Willbarger WWTP	\$ 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 force main 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	Willbarger WWTP Capacity Backup						
2005		Creskade Lift Station Forced Main Adjustment						

GBA

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

The logo for GBA, consisting of the letters 'GBA' in a bold, sans-serif font.

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 DEVELOPMENT

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	1
	Displacement	
3/4	Positive	1.5
	Displacement	
1	Positive	2.5
	Displacement	
1-1/2	Positive	5
	Displacement	
2	Positive	8
	Displacement	
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

GBA

City of Manor
Water and Wastewater
Impact/Tap Fee Comparison Chart - APRIL 2023

City	Water Impact Fee ¹	Wastewater Impact Fee ¹	Water Tap Fee ¹	Wastewater Tap Fee ¹	Total
Bastrop	\$ 8,182.00	\$ 5,089.00	\$ 350.00	\$ 300.00	\$ 13,921.00
Bartlett - 11	Vary	Vary	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00
Belton ³			\$ 1,000.00	\$ 800.00	\$ 1,800.00
Elgin	\$ 3,790.00	\$ 2,348.00	\$ 2,000.00	\$ 2,000.00	\$ 10,138.00
Florence ³	\$ 2,527.00	\$ 1,144.00	\$ 1,000.00	\$ 800.00	\$ 5,471.00
Georgetown ⁷	\$ 11,000.00	\$ 6,129.00	\$ 850.00	\$ 800.00	\$ 18,779.00
Harker Heights ⁶	No CIF Program for Water	\$ 6,133.00	\$ 275.00	\$ 275.00	\$ 6,883.00
Holland	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00	\$ 2,000.00	\$ 6,000.00
Jarrell ²	\$ 4,000.00	-	\$ 750.00	-	\$ 4,750.00
Liberty Hill ⁸	\$ 7,037.00	\$ 4,000.00	\$ 3,500.00	\$ 600.00	\$ 15,137.00
Leander	\$ 4,309.00	\$ 2,820.00	\$ 840.00	\$ 750.00	\$ 8,719.00
Manor	\$ 1,325.00	\$ 4,047.00	\$ 750.00	\$ 750.00	\$ 6,872.00
Manor - proposed	\$ 2,022.00	\$ 7,193.50	\$ 750.00	\$ 750.00	\$ 10,715.50
Pflugerville	\$ 7,897.00	\$ 8,184.00	\$ 250.00	\$ 250.00	\$ 16,581.00
Round Rock - 12	\$ 4,025.00	\$ 2,099.00	Vary	Vary	\$ 6,124.00
Salado ^{4,5}	Vary	\$ 5,152.00	\$ 3,400.00	\$ 4,000.00	\$ 12,552.00
Taylor -13	\$ 4,717.00	\$ 2,654.00	\$ 1,375.00	\$ 1,340.00	\$ 10,086.00
Temple ³	No CIF Program	No CIF Program	Varies	Varies	\$ -
Troy	No CIF Program	No CIF Program	\$ 900.00	\$ 725.00	\$ 1,625.00
Waco ⁹	No CIF Program	No CIF Program	quoted on per cost basis	quoted on per cost basis	\$ -
Average	\$ 4,756.23	\$ 3,866.17	\$ 1,234.71	\$ 1,008.24	\$ 7,897.68
Average CIF Program Cities	\$ 5,207.45	\$ 3,626.83	\$ 1,413.75	\$ 1,126.25	\$ 9,780.25

Notes:

- 1 - Fees for a standard single family residential house (1 LUE) with a standard 5/8" x 3/4" meter and 4" ww service; water fee is for production and distribution
- 2 - Jarrell water supplied by Jarrell Schweitzer Water Supply Corporation, Impact Fee includes Capital Recovery and Tap Fee; City of Jarrell provides water service to portions of City
- 3 - prices based on project; no set amount available
- 4 - Tap fee includes: \$100 membership fee, \$300 tap fee and \$700 installation fee
- 5 - Salado does not have a sewer system, \$6,300 represents low price for a septic system; Salado Water Supply Corporation supplies water
- 6 - Harker Heights charges for water and sewer connections on a cost basis, fees range from minimum of \$200 to over \$1,000; flat fee to connect to utility system, connection fee \$275.00 - Wastewater Impact Fee only in select areas
- 7 - Georgetown water and sewer tap fees include a \$500 each engineering and inspection fee; Impact fee effective October 2018
- 8 - Liberty Hill WSC charges \$6,000 fee for gravity section of City
- 9 - Waco quotes on an individual basis
- 10 - City supplied water
- 11 - varies based on level of project and distance to tap location - New to impact fees; currently have new projects that will be "test" subjects to process
- 12 - fee information - <https://www.roundrocktexas.gov/departments/planning-and-development-services/building-inspection/new-single-family-construction/residential/>; no tap fee, built in cost with total construction that the contractor bills his client
- 13 - Vary Impact Fee - <http://www.ci.taylor.tx.us/DocumentCenter/View/6981>

Comparison of Municipal Development Fees.xls



AGENDA ITEM SUMMARY FORM

PROPOSED MEETING DATE: May 10, 2023

PREPARED BY: Scott Dunlop, Director

DEPARTMENT: Development Services

AGENDA ITEM DESCRIPTION:

Consideration, discussion, and possible action on calculating Water and Wastewater Impact Fee.

BACKGROUND/SUMMARY:

After setting the Land Use Assumptions Map and the Water and Wastewater Capital Improvement Projects, the next step is establishing water and wastewater impact fees based on those Capital Improvement Projects. Our current water impact fee \$1,577/LUE and wastewater is \$4,470/LUE. The proposed rates in the CIP are \$2,022/LUE for water and \$7,193.50/LUE for wastewater; totaling \$10,715.50/LUE.

LEGAL REVIEW: *Not Applicable*

FISCAL IMPACT: *NO*

PRESENTATION: *NO*

ATTACHMENTS: *YES*

- Draft Engineer Report

STAFF RECOMMENDATION:

It is the City Staff's recommendation that the Community Impact Fee Advisory Committee discuss and approve a water and wastewater impact fee.

PLANNING & ZONING COMMISSION: **Recommend Approval** **Disapproval** **None**

GBA

DRAFT ENGINEERING REPORT

CITY OF MANOR 2022 COMMUNITY IMPACT FEE UPDATE

MANOR, TEXAS
GBA NO. 15312.00
APRIL 2023



CITY OF
MANOR

EST. ★ 1872
TEXAS

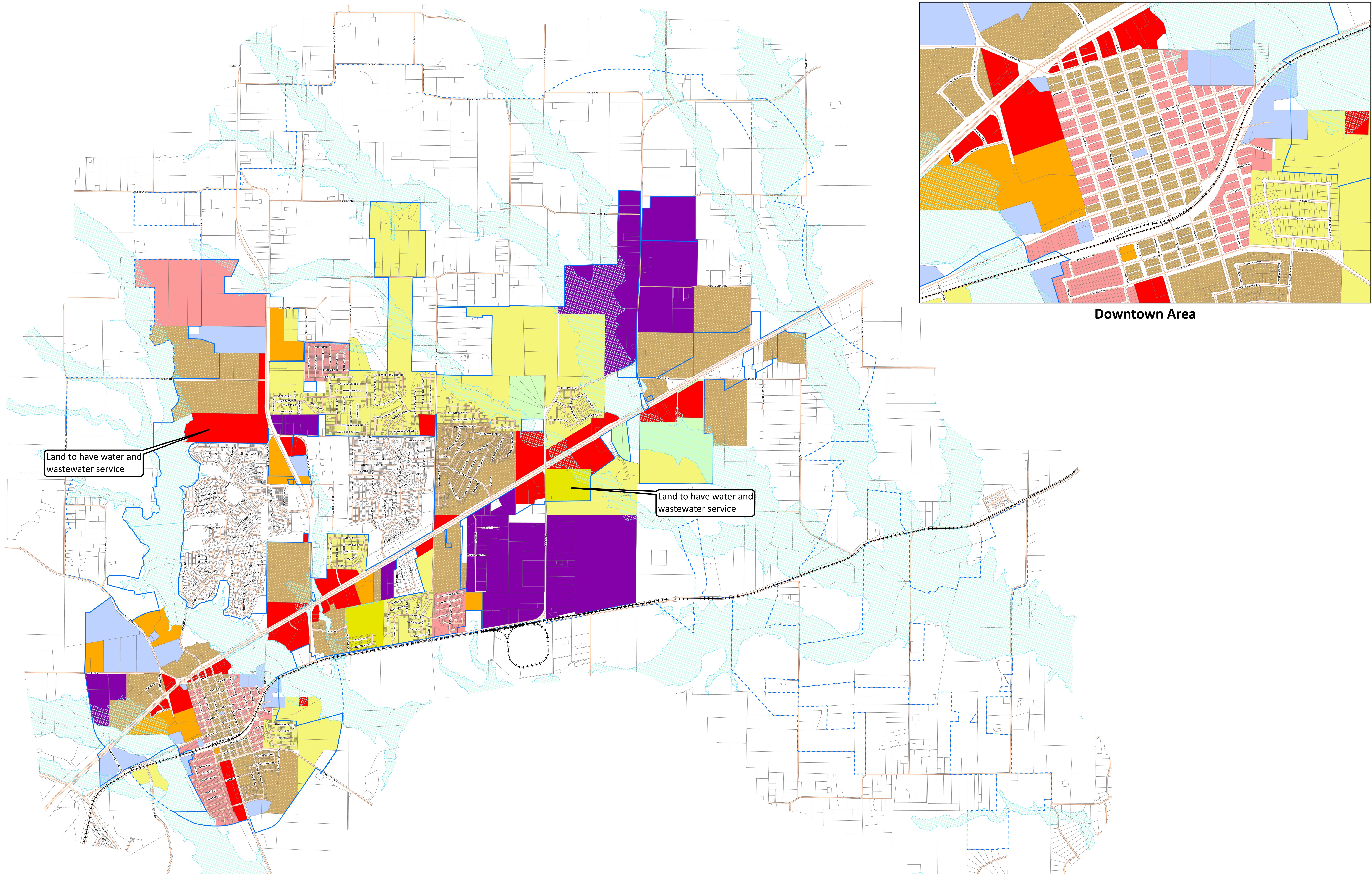
CITY OF MANOR

2022 COMMUNITY IMPACT FEE UPDATE

EXHIBITS

TABLE OF CONTENTS

1. LAND USE ASSUMPTIONS MAP
2. EXHIBIT A-1: 10-YEAR WATER CAPITAL IMPROVEMENTS PLAN MAP
3. EXHIBIT A-2: 10-YEAR CAPITAL IMPROVEMENTS PLAN (ESTIMATED COSTS)
4. EXHIBIT A-3: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN MAP
5. EXHIBIT A-4: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN (ESTIMATED COSTS)
6. EXHIBIT B-1: PLANNING AND DESIGN CRITERIA
7. EXHIBIT B-2: 10-YEAR WATER CAPITAL IMPROVEMENTS PLAN PRO-RATA CALCULATIONS
8. EXHIBIT B-3: MISCELLANEOUS PROJECT COSTS – WATER
9. EXHIBIT B-4: WATER IMPACT FEE CALCULATION
10. EXHIBIT B-5: 10-YEAR WASTEWATER CAPITAL IMPROVEMENTS PLAN PRO-RATA CALCULATIONS
11. EXHIBIT B-6: MISCELLANEOUS PROJECT COSTS – WASTEWATER
12. EXHIBIT B-7: WASTEWATER IMPACT FEE CALCULATION
13. EXHIBIT B-8: WATER AND WASTEWATER IMPACT FEE FACTORS
14. WATER AND WASTEWATER IMPACT FEE COMPARISON CHART



Downtown Area

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

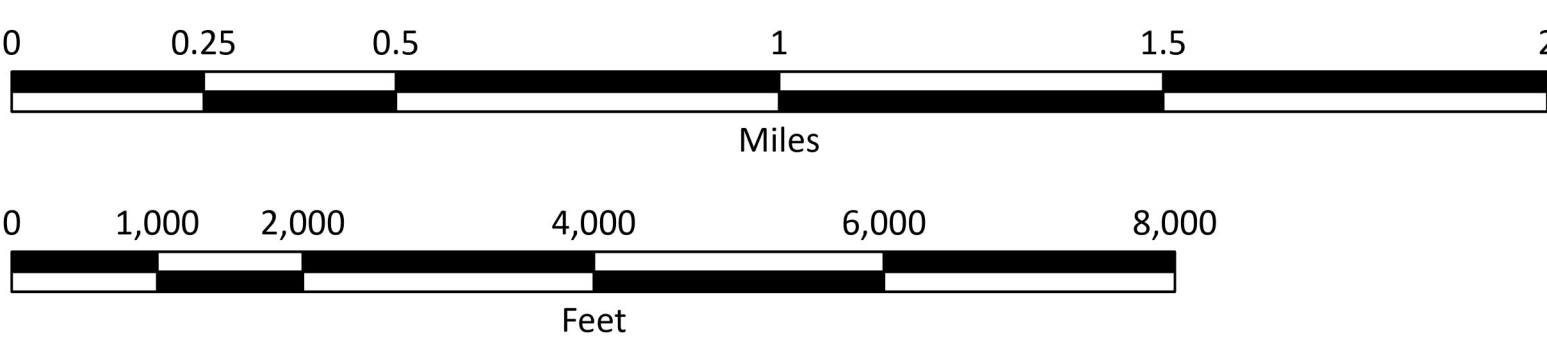
- C - Commercial (Corridor)
- CMU - Community Mixed Use
- DMU - Downtown Mixed Use
- E - Employment
- MDNB - Mixed Density Neighborhood
- MF - Multi-Family
- NB - Neighborhood
- NMU - Neighborhood Mixed Use
- OS - Parks/Open Space
- P/SP - Public/Semi-Public
- SF-4 - High Density Single Family

Legend















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

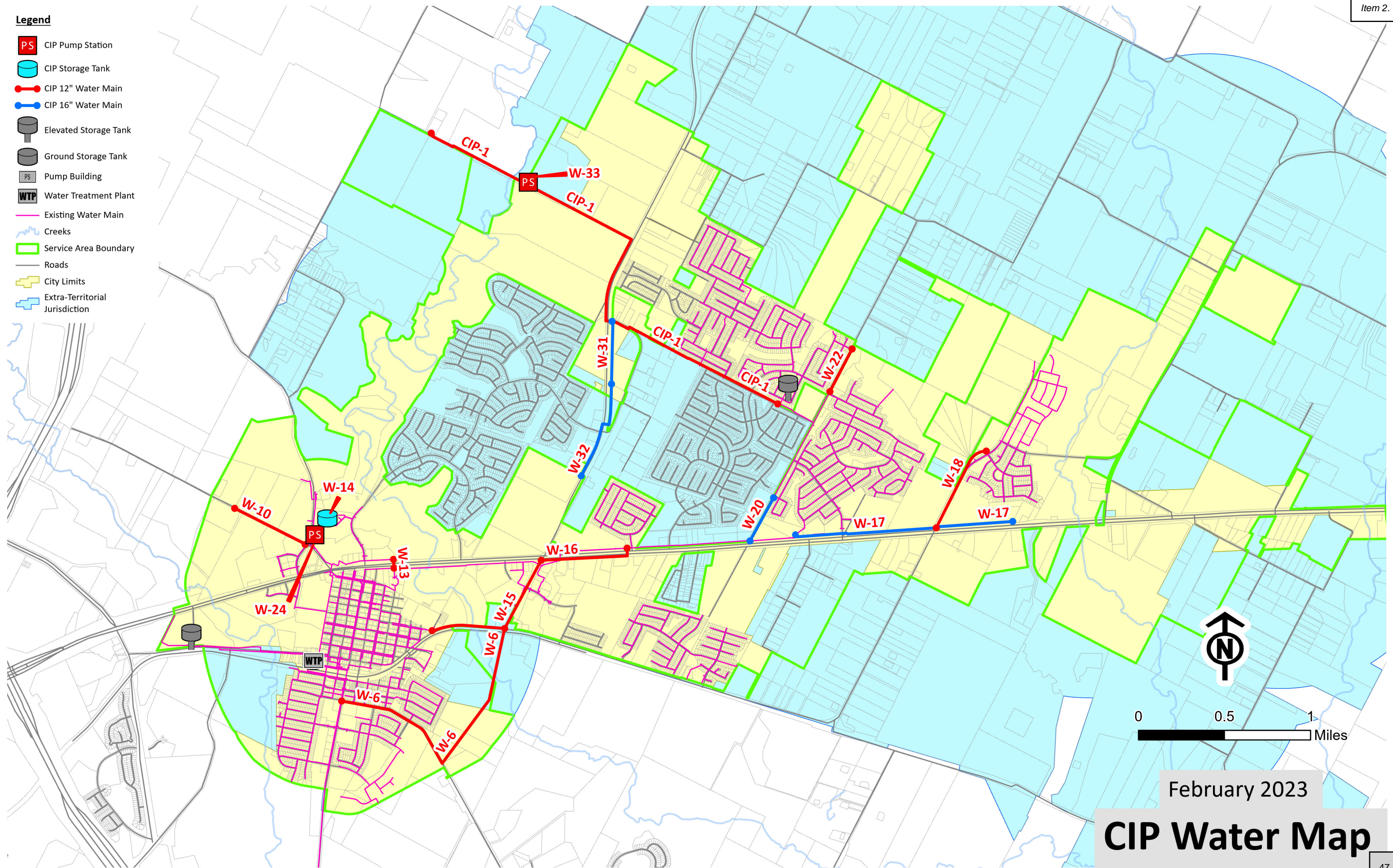
Land Use Assumption Map

Map Updated: February 03, 2023



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

Item 2.

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 (2023 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	\$ 462,893.00	0.050	20	\$ 578,616.25	\$ 86,800.00	\$ 93,200.00	\$ 458,850.36	\$ 1,217,000.00	Water Distribution main along Hill Lane to serve new growth
W-13	2025	US 290 Crossing at Golf Course	12	inch	250	\$ 200,000.00	0.050	20	\$ 280,000.00	\$ 42,000.00	\$ 54,700.00	\$ 227,847.65	\$ 605,000.00	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	2025	Bois D'Arc Lane Water Line	16	inch	2700	\$ 500,000.00	0.050	20	\$ 700,000.00	\$ 105,000.00	\$ 136,900.00	\$ 569,709.86	\$ 1,512,000.00	Transmission main to improve delivery of water from East EST
W-22	2025	Bois D'Arc Lane Water Line	12	inch	2500	\$ 400,000.00	0.050	20	\$ 560,000.00	\$ 84,000.00	\$ 109,500.00	\$ 455,755.79	\$ 1,209,000.00	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	2025	Gregg Lane Water Supply - Ground Storage Tank and Pumps	250,000	gallon		\$ 2,500,000.00	0.050	20	\$ 3,500,000.00	\$ 525,000.00	\$ 684,300.00	\$ 2,848,428.32	\$ 7,558,000.00	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													\$ 34,588,000.00	

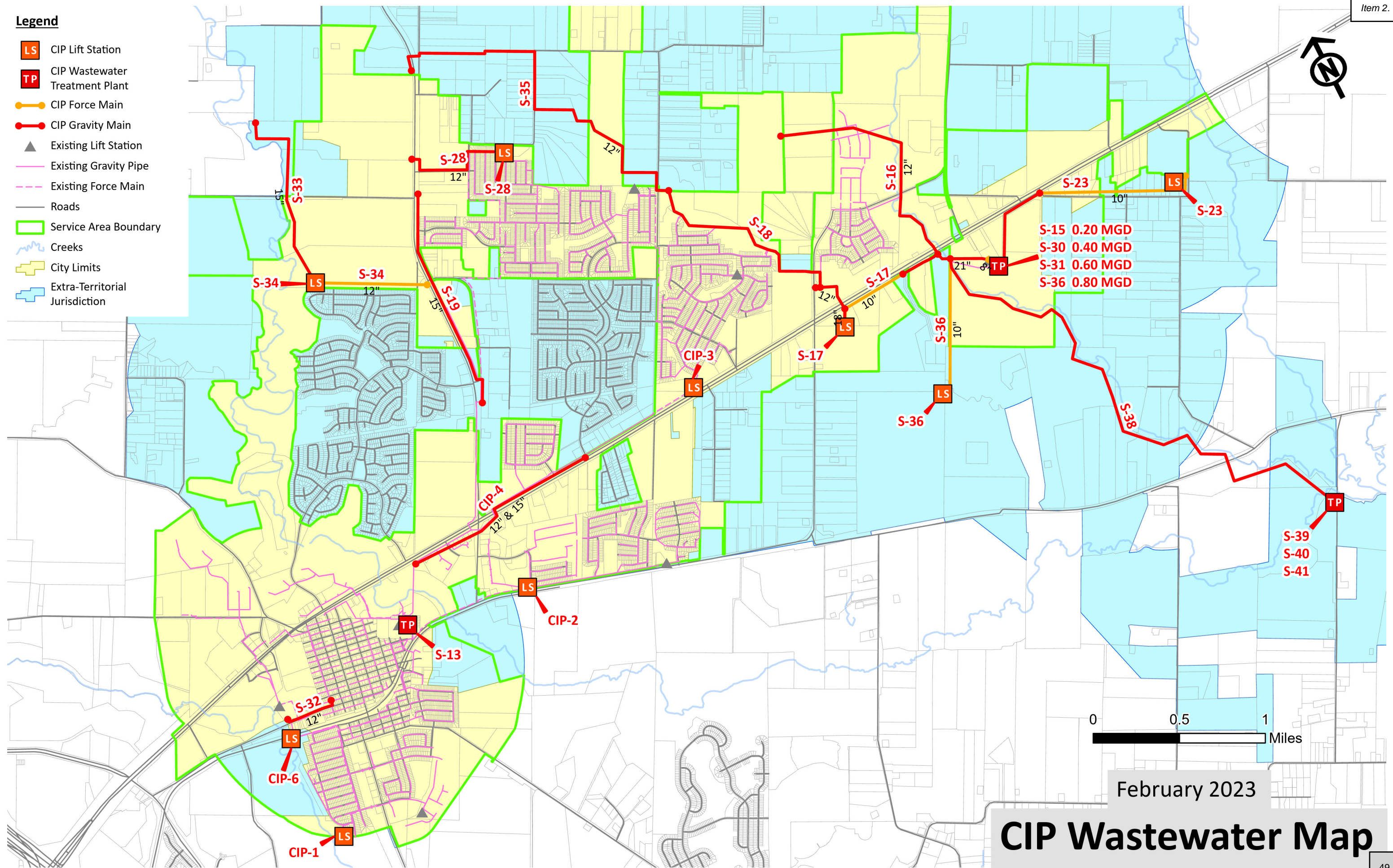
Notes:

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.

GBA

Legend

- LS** CIP Lift Station
- TP** CIP Wastewater Treatment Plant
- CIP Force Main
- CIP Gravity Main
- Existing Lift Station
- Existing Gravity Pipe
- Existing Force Main
- Roads
- Service Area Boundary
- Creeks
- City Limits
- Extra-Territorial Jurisdiction



February 2023

CIP Wastewater Map

EXHIBIT A-4
CITY OF MANOR WASTEWATER 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	Construction Cost (2022 Dollars)	Interest	Period (months)	Payment	Total Payment	Size	Length	Construction Cost (adjusted for Inflation @ 5% per annum)	Soft Costs	Contingency (10% + 1% per annum)	Financing Cost (5.1% over 20 Years)	Total Project Costs	Detailed Description
S-13	2020	Addl. Wilbarger WWTP Capacity	\$ 16,825,000.00	0.00425	240	\$ 145,667.98	\$ 34,960,314.38	1.33 MGD		\$ 19,348,750.00	\$ 2,140,000.00	\$ 400,000.00	\$ 13,071,564.38	\$ 34,960,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-15	2022	Cottonwood WWTP, Phase 1, 0.20 MGD	\$5,227,569.50	0.00425	240	\$ 52,593.61	\$ 12,622,467.33	0.20 MGD		\$ 6,534,461.88	\$ 398,000.00	\$ 970,500.00	\$ 4,719,505.45	\$ 12,622,000.00	Build plant at Regional Site, road and electrical improvements add \$500,000
S-16	2024	East Cottonwood Gravity Line	\$ 1,500,000.00	0.00425	240	\$ 14,274.81	\$ 3,425,955.08	12"	3,200	\$ 2,025,000.00	\$ 51,000.00	\$ 69,000.00	\$ 1,280,955.08	\$ 3,426,000.00	Extend East Cottonwood gravity ww to Regional Site, sized for 10-year capacity
S-17	2023	West Cottonwood LS and FM	\$ 949,000.00	0.00425	240	\$ 9,062.01	\$ 2,174,882.54	6" FM and 350 gpm LS	3,700	\$ 1,233,700.00	\$ 79,000.00	\$ 49,000.00	\$ 813,182.54	\$ 2,175,000.00	Extend 27" and 30" gravity ww from confluence with East Cottonwood to US 290, ultimate capacity
S-18	2024	West Cottonwood Gravity Line, Phase 2	\$ 984,000.00	0.00425	240	\$ 9,572.44	\$ 2,297,386.38	15"	8,200	\$ 1,328,400.00	\$ 64,000.00	\$ 46,000.00	\$ 858,986.38	\$ 2,297,000.00	Serves West Cottonwood Sub-Basin up to Bois D'Arc Ln, 21" and 24" gravity ww sized for ultimate capacity
S-19	2022	FM 973 Gravity Wastewater Line	\$ 684,400.00	0.00425	240	\$ 6,139.30	\$ 1,473,432.00	15"	5,800	\$ 855,500.00	\$ 128,300.00	\$ 106,100.00	\$ 383,532.00	\$ 1,473,000.00	Serves FM 973 Corridor up to Wilbarger Basin divide (approx. Gregg Ln)
S-23	2025	Willow Lift Station and Force Main	\$ 1,000,000.00	0.00425	240	\$ 12,535.88	\$ 3,008,611.46	200 gpm		\$ 1,400,000.00	\$ 210,000.00	\$ 273,700.00	\$ 1,124,911.46	\$ 3,009,000.00	Lift Station and Force Main to serve 220 LUEs in Willow Basin along US 290. 10-Yr ADF approx. 60,000 gpd, PWWF approx 200 gpm
S-28	2018	High School gravity line to Stonewater Lift Station; Stonewater Lift Station Upgrades	\$ 26,271.96	0.00425	240	\$ 210.84	\$ 50,601.98	12"	3,100	\$ 27,585.56	\$ 4,096.48	\$ -	\$ 18,919.94	\$ 51,000.00	Gravity main to serve new high school; upgrades to existing Stonewater Lift Station.
S-30	2024	Expand Cottonwood WWTP to 0.40 MGD Capacity	\$ 3,500,000.00	0.00425	240	\$ 41,947.32	\$ 10,067,356.68	0.40 MGD		\$ 4,725,000.00	\$ 708,800.00	\$ 869,400.00	\$ 3,764,156.68	\$ 10,067,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-31	2025	Expand Cottonwood WWTP to 0.60 MGD Capacity	\$ 3,500,000.00	0.00425	240	\$ 43,875.92	\$ 10,530,219.99	0.50 MGD		\$ 4,900,000.00	\$ 735,000.00	\$ 958,000.00	\$ 3,937,219.99	\$ 10,530,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-32	2021	Bastrop-Parsons WW Improvements	\$ 423,292.00	0.00425	240	\$ 4,392.59	\$ 1,054,220.52	12"		\$ 507,950.40	\$ 76,200.00	\$ 75,900.00	\$ 394,170.12	\$ 1,054,000.00	Replacement of existing wastewater line in Bastrop and Parsons; to correct current capacity issues and serve additional growth
S-33	2023	Wilbarger Basin Gravity Line to Lift Station (off Gregg Lane)	\$ 1,000,000.00	0.00425	240	\$ 11,441.81	\$ 2,746,034.77	15"	6,200	\$ 1,300,000.00	\$ 195,000.00	\$ 224,300.00	\$ 1,026,734.77	\$ 2,746,000.00	New wastewater line to serve growth along Gregg Lane.
S-34	2023	Wilbarger Basin lift station and force main (off Gregg Lane)	\$ 1,300,000.00	0.00425	240	\$ 14,873.76	\$ 3,569,701.45	12" FM and 225 gpm LS	3,500	\$ 1,690,000.00	\$ 253,500.00	\$ 291,500.00	\$ 1,334,701.45	\$ 3,570,000.00	New lift station and force main to servie growth along Gregg Lane.
S-35	2025	Gravity line from City Limits to tie in to Wastewater line to Cottonwood	\$ 1,100,000.00	0.00425	240	\$ 13,789.67	\$ 3,309,520.53	12"	8,130	\$ 1,540,000.00	\$ 231,000.00	\$ 301,100.00	\$ 1,237,420.53	\$ 3,310,000.00	Option 1 -New gravity wastewater line to extend wastewater service to City Limits for future growth.
S-36	2024	Lift Station and Force main to Cottonwood WWTP	\$ 2,000,000.00	0.00425	240	\$ 23,969.71	\$ 5,752,729.61	10" FM 1,575 LUEs		\$ 2,700,000.00	\$ 405,000.00	\$ 496,800.00	\$ 2,150,929.61	\$ 5,753,000.00	New lift station and force main to serve areas south of US Hwy 290 along Old Kimbro Road.
S-37	2028	Expand Cottonwood WWTP to 0.80 MGD Capacity	\$ 3,500,000.00	0.00425	240	\$ 49,822.76	\$ 11,957,461.69	0.20 MGD		\$ 5,425,000.00	\$ 813,800.00	\$ 1,247,800.00	\$ 4,470,861.69	\$ 11,957,000.00	New Treatment Plant Capacity to Serve Addl Growth
S-38	2025	Travis County Regional WWTP - with Elgin - Phase 1 - 1.1 MGD and 39" trunk main	\$39,000,000.00	0.00425	240	\$ 428,229.08	\$ 102,774,979.01	0.20 MGD		\$ 54,600,000.00	\$ 398,000.00	\$ 9,349,700.00	\$ 38,427,279.01	\$ 102,775,000.00	Build plant at Regional Site, road and electrical improvements add \$500,000
CIP-1	2021	Wildhorse Creek Lift Station Expansion	\$ 867,081.50	0.00425	240	\$ 8,595.49	\$ 2,062,916.57	1,075 gpm, 2nd WW		\$ 1,040,497.80	\$ 156,100.00	\$ 95,000.00	\$ 75,900.00	\$ 1,367,000.00	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.
CIP-2	2023	Bell Farms Lift Station Expansion	\$ 866,000.00	0.00425	240	\$ 2,984.94	\$ 716,385.60	1,400 gpm, 2nd WW		\$ 1,125,800.00	\$ 45,000.00	\$ 30,000.00	\$ (484,414.40)	\$ 716,000.00	Presently at approximately 730 LUES. Current phase 1 capacity is 1264 LUES. Ultimate Capacity at phase 2 is 2172.
CIP-3	2023	Presidential Glen Lift Station Expansion	\$ 866,000.00	0.00425	240	\$ 2,984.94	\$ 716,385.60	2,275 gpm, 2nd WW		\$ 1,125,800.00	\$ 45,000.00	\$ 30,000.00	\$ (484,414.40)	\$ 716,000.00	Presently at approximately 1281 LUES. Actual phase 1 capacity with current wastewater flows is in excess of 1500 LUES. Ultimate Capacity at phase 2 is 3517.
CIP-4	2024	US 290 WW Line Expansion	\$ 603,378.00	0.00425	240	\$ 7,231.64	\$ 1,735,594.12	12" & 15"	1,566 & 2,760	\$ 814,560.30	\$ 122,200.00	\$ 149,900.00	\$ 648,933.82	\$ 1,736,000.00	Presently at approximately 264 PG+308 SW = 572 LUEs out of 1800 LUE capacity; expansion will double capacity.
CIP-6	2020	Travis County Rural Center Lift Station, force main	\$ 1,176,592.00	0.00425	240	\$ 10,515.32	\$ 2,523,676.39	500 gpm	500	\$ 1,353,080.80	\$ 127,000.00	\$ 100,000.00	\$ 943,595.59	\$ 2,524,000.00	Lift Station and Force Main from Rural Center to existing wastewater line



Wastewater LUEs are defined as producing 275 gallons of wastewater per day per single family residence as determined in the the City of Manor Wastewater Master Plan.

Total: \$ 218,834,000.00

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

Item 2.

Water Infrastructure

Criterion	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

Criterion	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

Item 2.

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

GBA

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

Item 2.

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

Item 2.

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

Item 2.

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

Item 2.

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 DEVELOPMENT

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	1
	Displacement	
3/4	Positive	1.5
	Displacement	
1	Positive	2.5
	Displacement	
1-1/2	Positive	5
	Displacement	
2	Positive	8
	Displacement	
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

GBA

City of Manor
Water and Wastewater
Impact/Tap Fee Comparison Chart - APRIL 2023

City	Water Impact Fee ¹	Wastewater Impact Fee ¹	Water Tap Fee ¹	Wastewater Tap Fee ¹	Total
Austin	\$ 4,700.00	\$ 2,500.00			\$ 7,200.00
Bastrop	\$ 8,182.00	\$ 5,089.00	\$ 350.00	\$ 300.00	\$ 13,921.00
Bartlett - 11	Vary	Vary	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00
Belton ³	None	None	\$ 1,000.00	\$ 800.00	\$ 1,800.00
Buda	\$ 3,595.00	\$ 3,515.00	\$ 400.00	\$ 450.00	\$ 7,960.00
Elgin	\$ 3,790.00	\$ 2,348.00	\$ 2,000.00	\$ 2,000.00	\$ 10,138.00
Florence ³	\$ 2,527.00	\$ 1,144.00	\$ 1,000.00	\$ 800.00	\$ 5,471.00
Georgetown ⁷	\$ 11,000.00	\$ 6,129.00	\$ 850.00	\$ 800.00	\$ 18,779.00
Harker Heights ⁶	No CIF Program for Water	\$ 6,133.00	\$ 275.00	\$ 275.00	\$ 6,683.00
Holland	\$ 1,000.00	\$ 1,000.00	\$ 2,000.00	\$ 2,000.00	\$ 6,000.00
Jarrell ²	\$ 4,000.00	\$ -	\$ 750.00	\$ -	\$ 4,750.00
Kyle	\$ 3,535.00	\$ 2,826.00	\$ 217.35	\$ 217.35	\$ 6,795.70
Liberty Hill ⁸	\$ 7,037.00	\$ 4,000.00	\$ 3,500.00	\$ 600.00	\$ 15,137.00
Leander	\$ 4,309.00	\$ 2,820.00	\$ 840.00	\$ 750.00	\$ 8,719.00
Manor	\$ 1,577.00	\$ 4,470.00	\$ 750.00	\$ 750.00	\$ 7,547.00
Manor - proposed	\$ 2,022.00	\$ 7,193.50	\$ 750.00	\$ 750.00	\$ 10,715.50
Pflugerville	\$ 7,897.00	\$ 8,184.00	\$ 250.00	\$ 250.00	\$ 16,581.00
Round Rock - 12	\$ 4,025.00	\$ 2,099.00	Vary	Vary	\$ 6,124.00
Salado ^{4,5}	Vary	\$ 5,152.00	\$ 3,400.00	\$ 4,000.00	\$ 12,552.00
Taylor -13	\$ 4,717.00	\$ 2,654.00	\$ 1,375.00	\$ 1,340.00	\$ 10,086.00
Temple ³	No CIF Program	No CIF Program	Varies	Varies	\$ -
Troy	No CIF Program	No CIF Program	\$ 900.00	\$ 725.00	\$ 1,625.00
Waco ⁹	No CIF Program	No CIF Program	quoted on per cost basis	quoted on per cost basis	\$ -
Average	\$ 4,619.56	\$ 3,736.47	\$ 1,137.23	\$ 937.23	\$ 7,851.49
Average CIF Program Cities	\$ 4,913.82	\$ 3,446.33	\$ 1,510.45	\$ 1,201.36	\$ 9,836.50

Notes:

- 1 - Fees for a standard single family residential house (1 LUE) with a standard 5/8" x 3/4" meter and 4" ww service; water fee is for production and distribution
- 2 - Jarrell water supplied by Jarrell Schwertner Water Supply Corporation, Impact Fee includes Capital Recovery and Tap Fee; City of Jarrell provides water service to portions of City
- 3 - prices based on project; no set amount available
- 4 - Tap fee includes: \$100 membership fee, \$300 tap fee and \$700 installation fee
- 5 - Salado does not have a sewer system, \$6,300 represents low price for a septic system; Salado Water Supply Corporation supplues water
- 6 - Harker Heights charges for water and sewer connections on a cost basis, fees range from minimum of \$200 to over \$1,000; flat fee to connect to utility system, connection fee \$275.00 - Wastewater Impact Fee only in select areas
- 7 - Georgetown water and sewer tap fees include a \$500 each engineering and inspection fee; Imapct fee effective January 2023
- 8 - Liberty Hill charges \$6,000 fee for gravity section of City
- Liberty Hill WSC charges \$100 membership fee, plus average of \$400-\$700 for tap
- 9 - Waco quotes on an individual basis
- 10- City supplied water
- 11 - varies based on level of project and distance to tap location - New to impact fees; currently have new projects that will be "test" subjects to process
- 12 - fee information - <https://www.roundrocktexas.gov/departments/planning-and-development-services/building-inspection/new-single-family-construction/residential/>; no tap fee, built in cost with total construction that the contractor bills his client
- 13 - Vary Impact Fee - <http://www.ci.taylor.tx.us/DocumentCenter/View/6981>



AGENDA ITEM SUMMARY FORM

PROPOSED MEETING DATE: May 10, 2023

PREPARED BY: Scott Dunlop, Director

DEPARTMENT: Development Services

AGENDA ITEM DESCRIPTION:

Consideration, discussion, and possible action on a Roadway Impact Fee Service Area Map.

BACKGROUND/SUMMARY:

The Roadway Impact Fee Service Area Map has been updated to show city, county, and state roads. A third service area has also been added.

LEGAL REVIEW: *Not Applicable*

FISCAL IMPACT: *NO*

PRESENTATION: *NO*

ATTACHMENTS: *YES*

- Service Area Maps

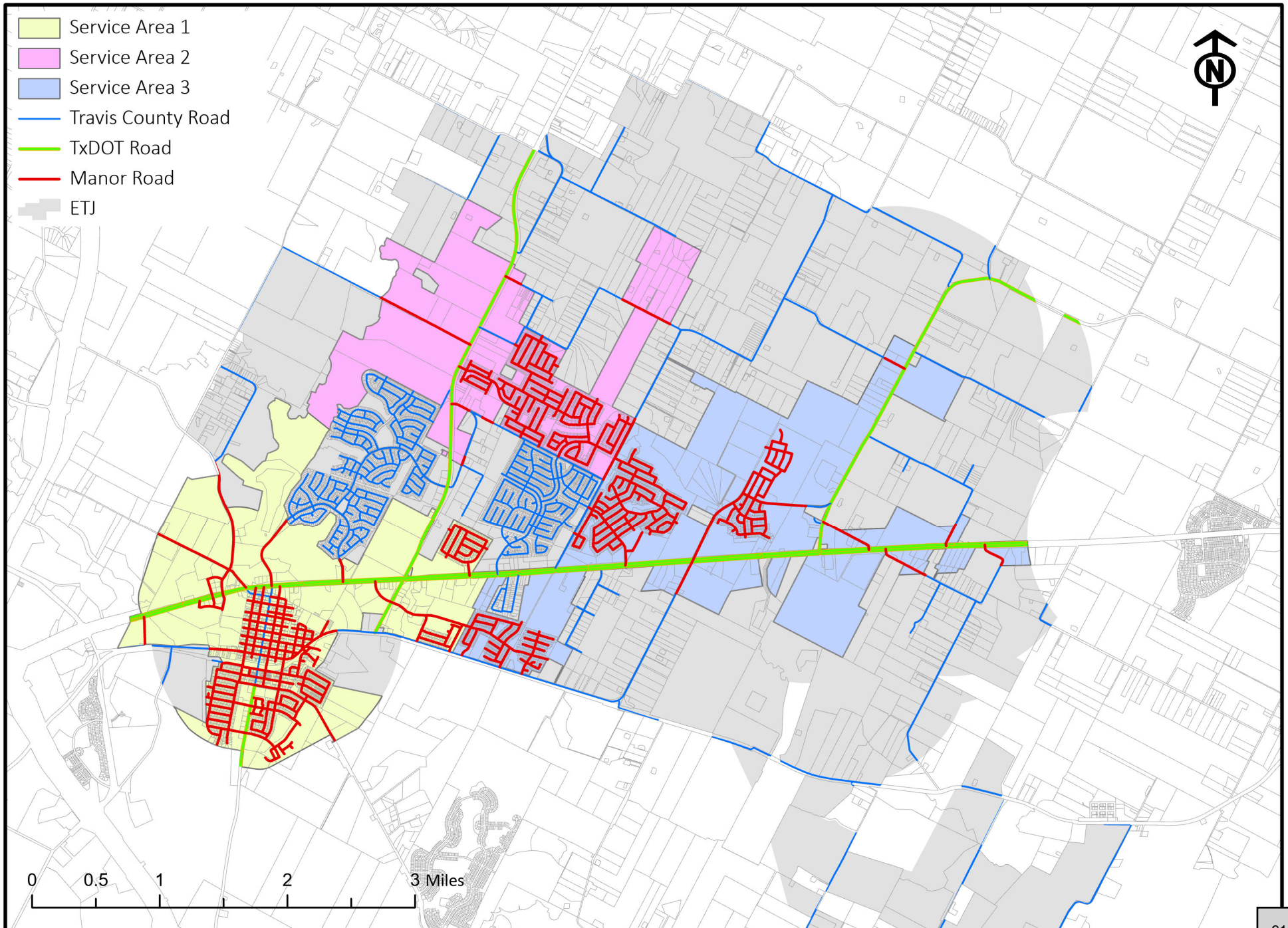
STAFF RECOMMENDATION:

It is the City Staff's recommendation that the Community Impact Fee Advisory Committee discuss the Roadway Impact Fee Service Area Map.

PLANNING & ZONING COMMISSION: **Recommend Approval** **Disapproval** **None**

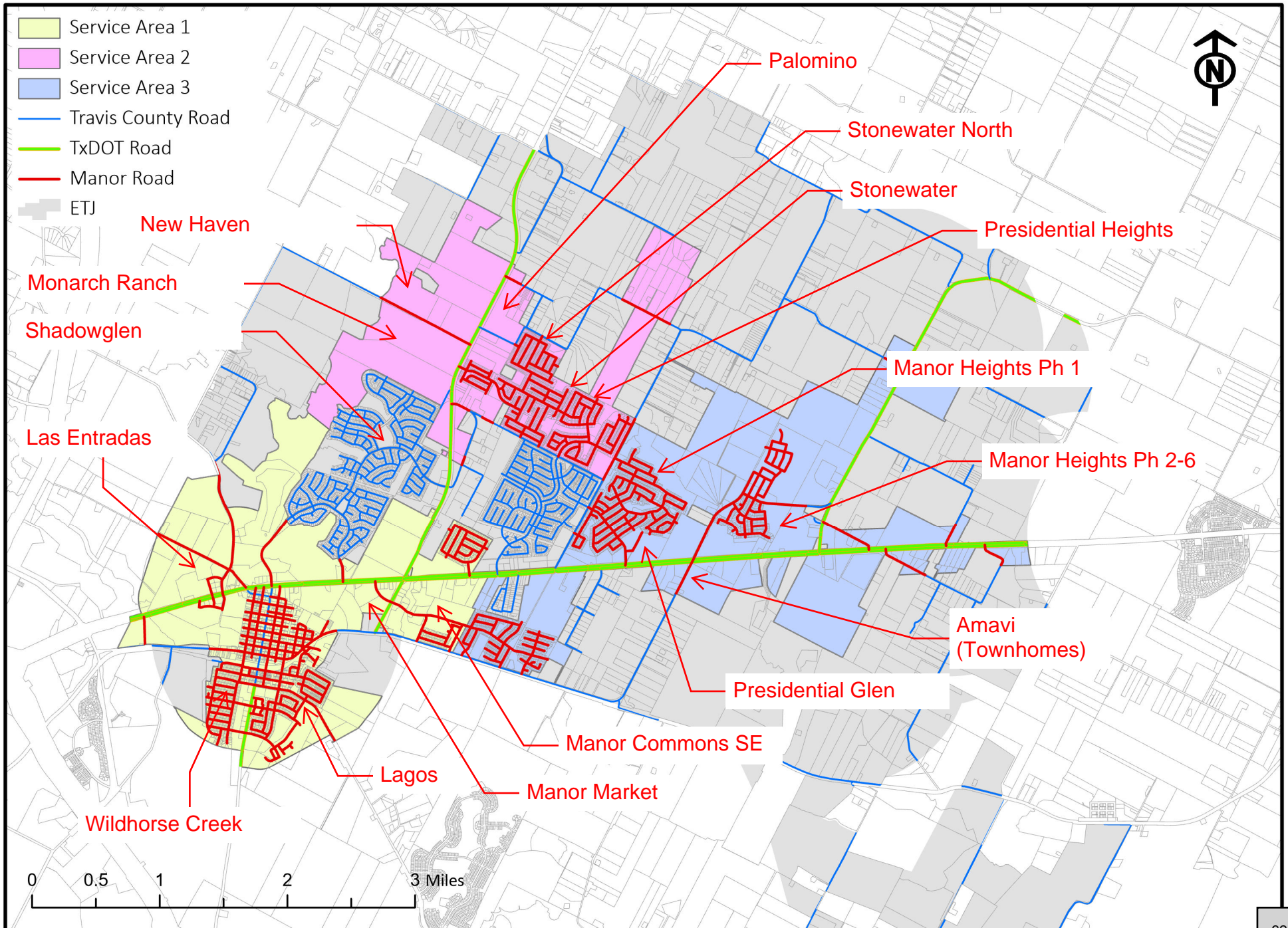
Manor Road Impact Fee Map

Item 3.



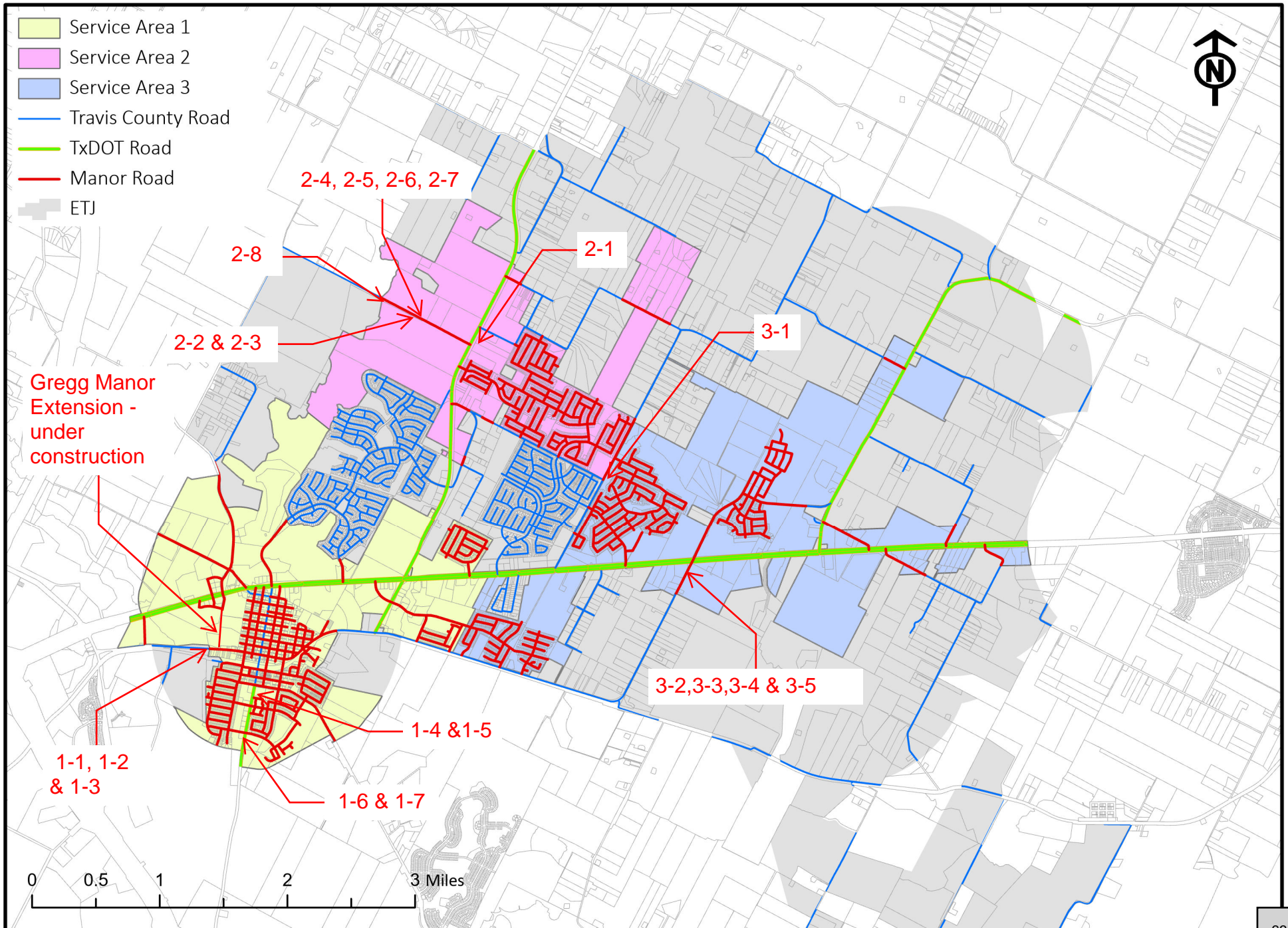
Manor Road Impact Fee Map

Item 3.



Manor Road Impact Fee Map

Item 3.





AGENDA ITEM SUMMARY FORM

PROPOSED MEETING DATE: May 10, 2023

PREPARED BY: Scott Dunlop, Director

DEPARTMENT: Development Services

AGENDA ITEM DESCRIPTION:

Consideration, discussion, and possible action on calculating service units for the Roadway Impact Fee

BACKGROUND/SUMMARY:

Updated details on how the roadway impact fee is calculated and the variables those go into the model.

LEGAL REVIEW: *Not Applicable*

FISCAL IMPACT: *NO*

PRESENTATION: *NO*

ATTACHMENTS: *YES*

- Service Unit calculation memo
- Land Use/Vehicle Mile Equivalency Table

STAFF RECOMMENDATION:

It is the City Staff's recommendation that the Community Impact Fee Advisory Committee discuss calculating service units for the Roadway Impact Fee

PLANNING & ZONING COMMISSION:

Recommend Approval

Disapproval

None

SERVICE UNIT CALCULATION – First Step

The basic service unit for roadway impact fees is the vehicle-mile of travel. This would be during peak afternoon traffic hours.

In order to determine the cost per service unit, the estimated growth in vehicle-miles of travel for each service area will need to be calculated for a 10-year period.

The growth in vehicle-miles will be calculated from 2023 to 2033 and will be based on estimated changes in residential as well as commercial units during the proposed period.

The growth rate used will be 7% to be consistent with the growth rate for the water and wastewater impact fees. The Land Use Assumption Map used for the Water and Wastewater Impact fees calculations will be used for the Roadway Impact Fee Service Areas.

All currently developed and developable land will be categorized as either residential or non-residential for the Roadway Impact Fee program. For residential land uses, the existing and projected number of dwelling units will be estimated for each service area.

The number of dwelling units in each service area will be multiplied by a transportation demand factor in order to compute the vehicle-miles of travel that will occur during the afternoon peak hour for the service area. This demand factor will be used to calculate the average amount of demand created by the residential land uses in each of the service areas.

There will be three (3) categories of non-residential – retail, service and basic.

Retail would be land use activities that provided for the retail sale of goods. These would be such things as grocery stores and restaurants

Service is activities that provide personal and professional services and would include government and professional offices as well as educational uses.

Basic would be activities that produce goods and services that would be exported out of the local economy. This would be such things as manufacturing, construction, transportation, wholesale, trade, warehousing and other industrial uses.

For non-residential units and using the Land Use Assumption Map, the estimated building square footages will be used for the service unit calculations. Typically when non-residential projects are proposed, the square footage of the proposed project is provided which can be used to assess the roadway impact fee for the proposed project. A transportation demand factor will be applied to non-residential units as well.

The proposed transportation demand factors will come from the ITE Trip Generation Manual, 11th Edition and the National Household Travel Survey performed by the Federal Highway Administration (FHWA).

The ITE Trip Generation Manual, 11th Edition provides the number of trips that are produced by the proposed land use for each dwelling unit, square foot of building, or other corresponding unit.

For retail projects, the rate is typically adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past the site any way, such as a trip between work and home.

For example, a stop at a nearby grocery store or home improvement store on the way home from work would not create a new trip as that person would still have been driving on that roadway to reach home. These types of trips are called pass-by trips, and since the demand would be calculated in the typical trip home, it would not be double counted as traffic for the grocery store.

The next component of the transportation demand factor accounts for the length of each trip. The average trip length for each category is based on the Capital Area Metropolitan Planning Organization (CAMPO) long-range transportation model and supplemented with the National Household Travel Survey conducted by the FHWA.

Transportation Demand Factor:

Variables:

$$TDF = T * (1 - P_b) * L_{\max}$$

$$\text{where... } L_{\max} = \min(L * OD \text{ or } 6)$$

- TDF = Transportation Demand Factor,
- T = Trip Rate (peak hour trips / unit),
- P_b = Pass-By Discount (% of trips),
- L_{max} = Maximum Trip Length (miles),
- L = Average Trip Length (miles), and
- OD = Origin-Destination Reduction (50%)

For the impact fee, the maximum trip length will vary between the service areas. In Service Area 1 the maximum trip length will be 2 miles. For Service Area 2 the maximum trip length will be 3 miles. For Service Area 3 the maximum trip length will be 4 miles.

The Origin-Destination Reduction (OD) is used to adjust the average trip length in the computation of the maximum trip length. This will prevent trips from being counted twice as both residential and non-residential. If this was not adjusted, then a trip from home to work with a stop at a store would result in this being counted as two trips. Only half of the trip would be counted as residential and the other half would be counted as non-residential.

SERVICE UNIT CALCULATION – Next Steps

1. Calculate the number of existing and future single-family units for each service area. (Using 7% growth rate)
2. Calculate the number of existing and future multifamily units for each service area. (Using 7 growth rate)
3. Calculate the square footage of existing and future non-residential development. This would be for retail, service, and basic.
4. Using the calculated demand factor, the total vehicle miles will be calculated for each service area. This would be for the estimated 10-year growth.

Variable	Residential Single Family	Residential Multifamily	Basic	Service	Retail
T	0.94	0.51	0.65	1.44	2.24
P _b	0%	0%	0%	0%	35%
L	8.59	8.59	12.89	6.76	6.35
L _{max}	4.30	4.30	6.00	3.38	3.18
TDF	4.04	2.19	3.90	4.87	4.62
	The max length is less than 6 miles for each of the service areas, so the lower trip length is used rather than 6 miles.				

Variables:

$$TDF = T * (1 - P_b) * L_{\max}$$

$$\text{where... } L_{\max} = \min(L * OD \text{ or } 6)$$

TDF = Transportation Demand Factor,

T = Trip Rate (peak hour trips / unit),

P_b = Pass-By Discount (% of trips),

L_{max} = Maximum Trip Length (miles),

L = Average Trip Length (miles), and

OD = Origin-Destination Reduction (50%)

LAND USE/VEHICLE MILE EQUIVALENCY TABLE (LUVMET)									
Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Trip Rate	Trip Length (mi)	Adj. for O-D	Adj. Trip Length (mi)	Max Trip Length (mi)(Max 6.00)	Veh-Mile Per Dev-Unit
PORT AND TERMINAL									
Truck Terminal	030	1,000 SF GFA	1.87	1.87	10.70	50%	5.35	5.35	10.0
INDUSTRIAL									
Light Industrial	110	1,000 SF GFA	0.63	0.63	12.89	50%	6.45	6.00	3.8
Manufacturing	140	1,000 SF GFA	0.67	0.67	12.89	50%	6.45	6.00	4.0
Warehouse	150	1,000 SF GFA	0.19	0.19	12.89	50%	6.45	6.00	1.1
RESIDENTIAL									
Single-Family Detached Housing	210	Dwelling Unit	0.99	0.99	8.59	50%	4.30	4.30	4.3
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.56	0.56	8.59	50%	4.30	4.30	2.4
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.44	0.44	8.59	50%	4.30	4.30	1.9
Mobile Home Park / Manufactured Home	240	Dwelling Unit	0.46	0.46	8.59	50%	4.30	4.30	2.0
Senior Adult Housing-Attached	252	Dwelling Unit	0.26	0.26	8.59	50%	4.30	4.30	1.1
Assisted Living	254	Beds	0.26	0.26	8.59	50%	4.30	4.30	1.1
LODGING									
Hotel	310	Room	0.60	0.60	5.41	50%	2.71	2.71	1.6
RECREATIONAL									
Recreational Community Center	495	1,000 SF GFA	2.31	2.31	6.35	50%	3.18	3.18	7.4
Miniature Golf Course	431	Hole	0.33	0.33	6.35	50%	3.18	3.18	1.1

Multiplex Movie Theater	445	Screens	13.73	13.73	6.35	50%	3.18	3.18	43.66
INSTITUTIONAL									
Religious Place of Worship	560	1,000 SF GFA	0.49	0.49	6.30	50%	3.15	3.15	1.5
Day Care Center	565	1,000 SF GFA	11.12	6.23	3.39	50%	1.70	1.70	10.5
Elementary and Middle School (K-8)	520/2	Students	0.17	0.17	3.39	50%	1.70	1.70	0.3
High School	530	Students	0.14	0.14	3.39	50%	1.70	1.70	0.2
MEDICAL									
Clinic	630	1,000 SF GFA	3.28	3.28	6.76	50%	3.38	3.38	11.0
Hospital	610	1,000 SF GFA	0.97	0.97	6.76	50%	3.38	3.38	3.3
Nursing Home	620	Beds	0.22	0.22	6.76	50%	3.38	3.38	0.7
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	2.47	6.76	50%	3.38	3.38	8.4
OFFICE									
General Office Building	710	1,000 SF GFA	1.15	1.15	6.76	50%	3.38	3.38	3.9
Medical-Dental Office Building	720	1,000 SF GFA	3.46	3.46	6.76	50%	3.38	3.38	11.6
Single Tenant Office Building	715	1,000 SF GFA	1.71	1.71	6.76	50%	3.38	3.38	5.8
Office Park	750	1,000 SF GFA	1.07	1.07	6.76	50%	3.38	3.38	3.6
COMMERCIAL - Automobile Related									
Automobile Care Center	942	1,000 SF GFA	3.11	1.87	5.41	50%	2.71	2.71	5.1
Automobile Parts Sales	843	1,000 SF GFA	4.91	2.80	5.41	50%	2.71	2.71	7.6
Gasoline/Service Station	944	Vehicle Fueling Position	14.03	8.14	1.20	50%	0.60	0.60	4.9
Gasoline/Service Station w/ Conv Market and Car Wash	945	Vehicle Fueling Position	13.99	6.16	1.20	50%	0.60	0.60	3.7
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	2.91	5.41	50%	2.71	2.71	7.9
Self-Service Car	947	Stall	5.54	3.32	1.20	50%	0.60	0.60	2.0
Tire Store	848	1,000 SF GFA	3.98	2.87	5.41	50%	2.71	2.71	7.8

COMMERCIAL - Dining									
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.67	16.34	3.39	50%	1.70	1.70	27.7
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	28.34	14.17	3.39	50%	1.70	1.70	24.0
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.77	5.57	5.41	50%	2.71	2.71	15.0
Quality Restaurant	931	1,000 SF GFA	7.80	4.37	5.41	50%	2.71	2.71	11.8
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	43.38	13.01	1.20	50%	0.60	0.60	7.8
COMMERCIAL - Other Retail									
Nursery (Garden)	817	1,000 SF GFA	6.94	4.86	6.35	50%	3.18	3.18	15.4
Home Improvement Superstore	862	1,000 SF GFA	2.33	1.21	6.35	50%	3.18	3.18	3.9
Pharmacy/Drug store w/o Drive-Thru Window	880	1,000 SF GFA	8.51	4.00	6.35	50%	3.18	3.18	12.7
Pharmacy/Drug store w/ Drive-Thru Window	881	1,000 SF GFA	10.29	5.25	6.35	50%	3.18	3.18	16.7
Shopping Center	820	1,000 SF GLA	3.81	2.51	6.35	50%	3.18	3.18	8.0
Supermarket	850	1,000 SF GFA	9.24	5.91	6.35	50%	3.18	3.18	18.7
Toy/Children's Superstore	864	1,000 SF GFA	5.00	3.50	6.35	50%	3.18	3.18	11.1
Department Store	875	1,000 SF GFA	1.95	1.37	6.35	50%	3.18	3.18	4.4
SERVICES									
Walk-In Bank	911	1,000 SF GFA	12.13	7.28	3.39	50%	1.70	1.70	12.3
Drive-In Bank	912	Drive-in Lanes	27.15	17.65	3.39	50%	1.70	1.70	30.0
Hair Salon	918	1,000 SF GLA	1.45	1.02	3.39	50%	1.70	1.70	1.7