**ORDINANCE NO. 2020-10**

**AN ORDINANCE OF THE TOWN OF ARGYLE, TEXAS, PROVIDING FOR THE ADOPTION OF TEN-YEAR LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLANS FOR THE TOWN OF ARGYLE AND AMENDMENTS TO IMPACT FEES; AMENDING CHAPTER 10, SUBDIVISIONS, ARTICLE 10.02, TEN-YEAR LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PROGRAM THE CODE OF ORDNANCES OF THE TOWN; PROVIDING FOR PURPOSE AND POLICY; PROVIDING FOR DEFINITIONS; PROVIDING FOR PERIODIC UPDATES; PROVIDING FOR IMPACT FEES; PROVIDING THAT PAYMENT IS REQUIRED, EXCEPTIONS; PROVIDING FOR ASSESSMENT AND COLLECTION; PROVIDING FOR CALCULATION; PROVIDING FOR CREDITS; PROVIDING FOR DISPOSITION AND USE, ACCOUNTING; PROVIDING FOR APPEALS; PROVIDING FOR REFUNDS; PROVIDING FOR LAND USE ASSUMPTIONS; PROVIDING FOR SERVICE AREAS; PROVIDING FOR LAND USE EQUIVALENCY TABLES; PROVIDING FOR CAPITAL IMPROVEMENTS PLAN; PROVIDING FOR UPDATED AND EFFECTIVE SCHEDULES FOR WASTEWATER FACILITIES AND ROADWAY FACILITIES; PROVIDING EXHIBITS ADOPTED; PROVIDING PROVISIONS CUMULATIVE; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR EFFECTIVE DATE; PROVIDING FOR INCORPORATION OF AMENDED ORDINANCE.**

**WHEREAS,** as authorized by Chapter 395 of the Local Government Code as amended, the Town Council of the Town of Argyle, Texas, previously adopted updated Land Use Assumptions and established revised Impact Fees for roadways and wastewater facilities to serve new development in the Town, as found in Article 10 of the Town of Argyle's Code of Ordinances, approved and adopted by the Town Council of the Town of Argyle, Texas; and

**WHEREAS,** a periodic review and update of the Land Use Assumptions and Capital Improvements Plan is required every five (5) years by Chapter 395 of the Local Government Code; and

**WHEREAS,** the Town has retained qualified consultants to prepare updates to the Land Use Assumptions, Capital Improvements Plans, Impact Fees, and ordinance provisions in order to meet the requirements of Chapter 395 of the Local Government Code; and

**WHEREAS,** notice has been published and public hearings held concerning the revised Land Use Assumptions, Capital Improvements Plans for roadway and wastewater facilities, and Impact Fees, as prepared by a qualified professional engineer; and

**WHEREAS,** the Town's Capital Improvements Advisory Committee has reviewed the proposed updates to the Town's Impact Fee Program and found the updated Land Use Assumptions, the Wastewater and Roadways Capital Improvements Plans and the

Maximum Fee Schedule to be accurate projections of growth, development, required public improvements and associated costs; and

**WHEREAS,** the Town Council, by Resolution, authorized staff to proceed with revisions and review of the Land Use Assumptions, Wastewater and Roadways Capital Improvements Plans, and Impact Fees, and providing for hearings to be conducted and the time, date and place of the hearing to be given in accordance with the applicable law, and such notices have been given; and

**WHEREAS,** a public hearing was held on March 24, 2020 and April 20, 2020, to receive public input regarding Impact Fees; and

**WHEREAS,** the Town's Capital Improvements Advisory Committee filed written comments on the proposed Impact Fees before the fifth business day before the date of the public hearing on the impositions of the fees; and

**WHEREAS,** all of the provisions of Chapter 395 of the Local Government Code necessary for the approval of the provisions contained herein have been complied with; and

**WHEREAS,** all statutory and constitutional requirements for the passage of this Ordinance have been adhered to, including, but not limited to, the Open Meetings Act; and

**WHEREAS,** the Town Council declares the adoption of this ordinance in its best interest of the health, safety and welfare of the public; and

**WHEREAS,** upon full consideration of the recommended changes and updates, and all matters attendant and related thereto, the Town Council is of the opinion that it is in the best interests of the Town and its citizens that revisions to the Land Use Assumptions, Wastewater and Roadway Capital Improvements Plans, and Impact Fees should be approved and adopted.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF ARGYLE, TEXAS:**

**Section 1.** **THAT** all matters stated hereinabove are found to be true and correct and are incorporated herein by reference.

**Section 2.** **THAT** the revised Land Use Assumptions and Capital Improvements Plan, copies of which are attached hereto as Exhibits I and II and incorporated herein by reference, are hereby adopted, replacing and superseding any other Land Use Assumptions or Capital Improvements Plan previously approved and adopted by the Town.

**Section 3.** **THAT** Article 10.02, "Ten-Year Land Use Assumptions and Capital Improvements Program" of Chapter 10, "Subdivisions" of the Code of Ordinances of the Town of Argyle, Texas, is hereby amended in its entirety and the following Article 10.02 is hereby adopted to be and read in its entirety and as follows:

**"ARTICLE 10.02. - TEN-YEAR LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PROGRAM**

## DIVISION 1. - GENERALLY

### Sec. 10.02.001 - Adopted.

The Ten-Year Land Use Assumptions and Capital Improvements Program for the Town of Argyle, Texas dated February 2020, as amended, on file in the office of the Town Secretary, is hereby approved and adopted as the Town Capital Improvements Plan.

### Sec. 10.02.002 - Purpose and Policy.

This article is adopted pursuant to the provisions of Chapter 395, Texas Local Government Code, as well as under the authority of Article 11 of the Texas Constitution. This article implements a policy of the Town to impose fees upon each new development project to pay the costs of constructing capital improvements and facility expansions necessary to serve new development.

### Sec. 10.02.003 - Definitions.

For the purposes of this article, the following words and phrases shall have the meanings respectively ascribed to them by this section:

*Advisory committee* means the Capital Improvements Advisory Committee.

*Assessment* means the determination of the amount of the maximum Impact Fee per service unit which can be imposed on new development pursuant to this article.

*Capital Improvement* means any roadway facilities that have a life expectancy of three or more years and are owned and operated by or on behalf of the Town.

*Capital Improvements Plan* means a plan contemplated by this article that identifies capital improvements or facility expansions for which Impact Fees may be assessed.

*Credit* means the amount of the reduction of an Impact Fee for fees, payments or charges for or construction of the same type of facility.

*Facility Expansion* means the expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

*Final Plat approval or approval of a Final Plat* means the point at which the applicant has complied with all conditions of approval and the plat has been released for filing with the county clerk.

*Impact Fee* means a charge or assessment imposed as set forth in this article against new development. The term does not include:

(1) Required dedications of land for public parks or payments in lieu thereof;

(2) Dedication of rights-of-way or easements or construction or dedication of on-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development; or
(3) Lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or construction of water or sewer mains or lines.

*Land Use Assumptions* means a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a ten-year period which has been adopted by the Town and upon which the Capital Improvements Plan is based.

*New Development* means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of a structure; or any use or extension of the use of land, any of which increases the number of service units.

*Off-Site* means located entirely on property which is not included within the bounds of the plat being considered for Impact Fee assessment.

*On-Site* means located at least partially on the plat which is being considered for Impact Fee assessment.

*Roadway Facilities* means arterial or collector streets or roads that have been designated on the Town's officially adopted Thoroughfare Plan, together with all necessary appurtenances. The term may include any roadways or associated improvements designated on the state highway system. The term includes but is not limited to interests in land, traffic lanes, curbs, gutters, intersections, improvements, traffic-control devices, turn lanes, drainage facilities associated with the roadway or street lighting.

*Service Area* means each individual area designated in the Land Use Assumptions served by the roadway facilities designated in the Capital Improvements Plan.

*Service Unit* means the service unit is the evaluation unit for determining trip units based on the land use proposed, as tabulated in Exhibit C as shown in the fee schedule found in Appendix A of this Code, or water meter size for Wastewater Impact Fees.

**Sec. 10.02.004 - Advisory Committee.**

(a) The advisory committee shall consist of the Capital Improvements Advisory Committee, as appointed by the Town Council. If any Impact Fee is to be applied in the Extraterritorial Jurisdiction of the Town, a representative from that area shall be appointed by the Town Council.

(b) The advisory committee serves in an advisory capacity and is established to:

(1) Advise and assist in the adoption of Land Use Assumptions;

(2) Review the Capital Improvements Plan and file written comments;

(3) Monitor and evaluate implementation of the Capital Improvements Plan;

(4) File semiannual reports with respect to the progress of the Capital Improvements Plan and report to the Town Council any perceived inequities in implementing the plan or imposing the Impact Fee; and

(5) Advise the Town staff and Council of the need to update or revise the Land Use Assumptions, Capital Improvements Plan, and Impact Fee.

(c) All professional reports concerning the development and implementation of the Capital Improvements Plan shall be made available to the advisory committee.

(d) The advisory committee shall adopt and use its own rules of procedure.

**Sec. 10.02.005 - Periodic updates.**

The Land Use Assumptions and Capital Improvements Plan upon which Impact Fees are based shall be updated as required by state law. Alternatively, the Town Council may, pursuant to the provisions of Section 395.0575 of the Local Government Code, make a determination that no such update is required.

**Secs. 10.02.006—10.02.030 - Reserved.**

**DIVISION 2. - IMPACT FEES**

**Sec. 10.02.031 - Payment Required; Exceptions.**

(a) No building permit shall be granted for new construction of any property unless and until Impact Fees required by this article are collected or a contract providing for payment as approved by the Town is entered into.

(b) No wastewater tap shall be granted for any new or existing structure unless or until Wastewater Impact Fees required by this article are collected or a contract providing for payment as approved by the Town is entered into.

(c) For new development which was platted in accordance with the Town's procedures prior to April 20, 2020, the Impact Fee assessed on the date of final plat approval shall apply. For all new developments that receive final plat approval after April 20, 2020, the existing Impact Fees shall apply to any new service unit for which a valid building permit is issued up to December 31, 2020. For all new developments that receive final plat approval after April 20, 2020 and for which a valid building permit is issued on and after January 1, 2021, the revised and updated Impact Fees shall apply.

**Sec. 10.02.032 - Assessment and Collection.**

(a) Roadway Impact Fees and Wastewater Impact Fees shall be assessed at the time of final plat approval. For properties on which new development occurs or is proposed to occur without platting, the City shall assess the Roadway Impact Fee and the Wastewater Impact Fee at any time during the development and building process.

(b) For all properties inside the town limits, Wastewater Impact Fees and Roadway Impact Fees shall be collected at the time the Town issues a building permit. For all properties located outside of the town limits, the Town shall collect the Wastewater Impact Fee at the time an application is filed for an individual meter connection to the Town's water or wastewater system. Roadway Impact Fees shall not be collected for new development in the extraterritorial jurisdiction of the Town.

(c) Additional Impact Fees or increases in fees shall not be assessed unless the number of service units to be developed on the tract increases. Should the service units be increased, Impact Fees shall be increased in an amount equal to the current Impact Fee per service unit multiplied by the difference in number of service units. Such fees will be assessed at the time of issuance of the building permit authorizing modifications. No Impact Fee or Impact Fee refund shall be made for modifications that result in a decreased number of service units.

(d) The owner of the property for which there is a recorded plat may enter into a written agreement with the Town providing for the time and method of payment of Impact Fees, which agreement shall prevail over any contrary provision of this article.

(e) The maximum Impact Fee per service unit for system facilities, as may be amended from time to time, hereby is declared to be an approximate and appropriate measure of the impacts generated by a new unit of development on the Town's system facilities. To the extent that the Impact Fee charged against a new development, as may be amended from time to time, is less than the maximum Impact Fee per service unit, such difference hereby is declared to be founded on policies unrelated to measurement of the impacts of the new development on the Town's system facilities. The maximum Impact Fee rate may be used in evaluating any claim by a property owner that the dedication or construction of a capital improvement imposed as a condition of development approval pursuant to the Town's subdivision or development regulations is disproportionate to the impacts created by the development on the Town's system facilities.

**Sec. 10.02.033 - Calculation.**

(a) Roadway Impact Fees shall be determined by multiplying the number of trip units in the proposed development by the amount per trip due under Exhibit B, "Roadway Service Unit Equivalency Table" as shown in the fee schedule found in Appendix A of this Code, which is attached hereto and incorporated herein for all purposes. The number of trip units shall be determined by using the conversion table contained in the Capital Improvements Plan under Exhibit B "Roadway Service Unit Equivalency Table," as shown in the fee schedule found in Appendix A of this code.

(b) Wastewater Impact Fees shall be determined by the size of the water meter indicated in Exhibit C "Wastewater Service Unit Equivalency Table," as shown in the fee schedule found in Appendix A of this Code.

(c) The determination of Impact Fees shall be reduced by any allowable credits for capital improvements as approved by the Town Council.

(d) The total amount of unpaid Impact Fees shall be attached to the development application, or, if to be paid at some later date, to the request for other permit or connection.

**Sec. 10.02.034 - Credits.**

(a) Any construction of, contributions to, or dedications of any facility appearing on the Capital Improvements Plan which is required to be constructed by the Town as a condition of development shall be credited against the Impact Fees otherwise due for the same category of Impact Fees otherwise due from the development.

(b) As an alternative to the credit, the Town and the owner may enter into an agreement providing that the owner will be reimbursed for all or a portion of the costs of such facilities from Impact Fees as received from other new developments that will use such capital improvements or facility expansions.

(c) An owner shall be entitled to a credit against any category of Impact Fee as provided in any written agreement between the Town and the owner.

(d) No credit for construction of any facility shall exceed the total amount of Impact Fees due from the development for the same category of improvements.

**Sec. 10.02.035 - Disposition and Use; Accounting.**

(a) All Impact Fees collected shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the fee is adopted.

(b) Interest earned shall be credited to the account and shall be subject to the same restrictions on expenditures as the funds generating such interest.

(c) Impact Fees and the interest earned thereon may be spent only for the purposes for which such fees were imposed as shown in the Capital Improvements Plan.

(d) The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

**Sec. 10.02.036 - Appeals.**

(a) The property owner or applicant for new development may appeal the following decisions to the Town Council:

(1) The applicability of an Impact Fee to the development;

(2) The amount of the Impact Fee due;

(3) The availability or the amount of an offset or credit;

(4) The application of an offset or credit against an Impact Fee due;

(5) The amount of a refund due, if any.

(b) The burden of proof shall be on the applicant to demonstrate that the amount of the fee or the amount of the offset or credit was not calculated according to the applicable schedule of Impact Fees or the guidelines established for determining offsets and credits.

(c) The applicant must file a notice of appeal with the Town Secretary within thirty (30) days following the decision. If the notice of appeal is accompanied by a bond or other sufficient surety satisfactory to the Town Attorney in an amount equal to the original determination of the Impact Fee due, the development application may be processed while the appeal is pending.

**Sec. 10.02.037 - Refunds.**

(a) On the request of an owner of property on which an Impact Fee has been paid, Impact Fees shall be refunded if existing facilities are available and service is denied or if the Town failed to commence construction of facilities required for service within a reasonable time from that projected in the Capital Improvements Plan, but not in any event in more than five (5) years from the date of payment of the fee.

(b) Upon completion of capital improvements or facility expansions identified in the Capital Improvements Plan, the Impact Fee shall be recalculated utilizing actual costs. If Impact Fee based on actual cost is less than the Impact Fee paid, the Town shall refund the difference if such difference exceeds the Impact Fee paid by more than ten percent (10%).

(c) Any Impact Fee funds not expended within ten (10) years after payment shall be refunded.

(d) Refunds shall bear interest calculated from the date of collection to the date of refund at the statutory rate set by law.

(e) All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the Impact Fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.

(f) The owner of the property on which an Impact Fee has been paid or another political subdivision or governmental entity that paid the Impact Fee has standing to sue for a refund under this section."

**Section 4.** **Land Use Assumptions.** The Land Use Assumptions for the Town of Argyle are hereby updated for wastewater facilities, and are hereby established for roadway facilities, as provided in Exhibit A of this amendatory ordinance, which is attached hereto and incorporated hereby by reference as if fully set forth.

**Section 5.** **Service Areas.** The service areas for wastewater facilities are hereby updated for wastewater facilities, as provided in Exhibit B, and are hereby established for roadway facilities, as provided in Exhibit C, which exhibits are attached hereto and incorporated hereby by reference as if fully set forth.

**Section 6.** **Land Use Equivalency Tables.** The Land Use Equivalency Table is hereby updated for wastewater facilities, as provided in Exhibit D, and is hereby established for

roadway facilities, as provided in Exhibit E, which exhibits are attached hereto and incorporated hereby by reference as if fully set forth.

**Section 7.** **Capital Improvements Plans.** The Wastewater Capital Improvements Plan is hereby updated, as provided in Exhibit F, and the Roadway Capital Improvements Plan is hereby established, as provided in Exhibit G, which exhibits are attached hereto and incorporated hereby by reference as if fully set forth.

**Section 8.** **Schedule One.** Schedule 1 for wastewater facilities is hereby updated, and Schedule 1 for roadway facilities is hereby established, setting forth the maximum Impact Fees per service unit to be assessed against new development for wastewater and roadway facilities, which schedule is attached hereto as Exhibit H, and is incorporated herein by reference as if fully set forth.

**Section 9.** **Schedule Two.** Schedule 2 for wastewater facilities is hereby updated, and Schedule 2 for roadway facilities is hereby established, setting forth the maximum Impact Fees per service unit to be assessed against new development for wastewater and roadway facilities, which schedule is attached hereto as Exhibit H, and is incorporated herein by reference as if fully set forth.

**Section 10.** **Exhibits A through I Adopted.** The following Exhibits are hereby updated and adopted by the Town of Argyle as attached to this Ordinance:

Exhibit A - Land Use Assumptions
Exhibit B - Wastewater Service Area Map
Exhibit C - Roadway Service Area Map
Exhibit D - Wastewater Service Unit Equivalency Table
Exhibit E - Roadway Service Unit Equivalency Table
Exhibit F - Wastewater Capital Improvements Plan
Exhibit G - Roadway Capital Improvements Plan
Exhibit H - Schedule 1 & 2 Wastewater and Roadway Facilities
Exhibit I - Wastewater and Roadway Impact Fee Study dated February 2020

**Section 11.** **Provisions Cumulative; Conflicts.** This Ordinance shall be and is hereby declared to be cumulative of all other ordinances of the Town of Argyle, and this Ordinance shall not operate to repeal or affect any of such other ordinances except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this Ordinance, in which event such conflicting provisions, if any in such other ordinance or ordinances are hereby superseded.

**Section 12.** **Severability.** If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional, such holding shall not affect the validity of any other section, subsection, sentence, clause or phrase of this Ordinance the remaining portions of this Ordinance.

**Section 13.** **Effective Date.** This Ordinance shall be in full force and effect immediately upon its passage and approval.

**Section 14.** **Incorporation of Amended Ordinance.** On and after the effective date of this Ordinance, the Code of Ordinances, Town of Argyle, Texas, Appendix A, shall be amended accordingly by this Ordinance.

**PASSED, APPROVED AND ADOPTED BY THE TOWN COUNCIL OF THE TOWN OF ARGYLE, TEXAS, ON THIS THE 20th DAY OF APRIL, 2020.**

APPROVED:

Donald Moser, Mayor

ATTEST:

Erika McComis, Town Secretary

TOWN OF ARGYLE STATE OF TEXAS

APPROVED AS TO FORM:

Patricia Adams, Town Attorney

EXHIBIT "A"

**TABLE 2.3**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Future Landuse Designations**

| Designation | Density Residential | Density Commercial | % Residential | % Commercial | % Public |
|---|---|---|---|---|---|
| PD- Commercial Planned Development | 0 | > 0.7 F.A.R. | 0 | 95 | 5 |
| T5 - Regional Center | 5 - 6 DU/AC | >0.4 F.A.R. | 35 | 55 | 10 |
| T4 - Village Center | 5 - 6 DU/AC | >0.4 F.A.R. | 50 | 40 | 10 |
| T3A - Low Density Railroad Transition | 1 AC min | >0.35 F.A.R. | 75 | 10 | 15 |
| T3 - Low Density Transition | 1 AC min | >0.35 F.A.R. | 75 | 10 | 15 |
| T2 - Rural Residential | 5 AC/DU | | 95 | | 5 |
| T1 - Rural or Conservation Residential | 10 AC/DU | | 90 | | 10 |
| C1 - Rural Corridor | 10 AC/DU | | 90 | | 10 |
| C2 - Approach Corridor | < 1 DU/AC | | 90 | | 10 |
| C3 - Centers Corridor | 5 - 6 DU/AC | > 0.5 F.A.R. | 30 | 60 | 10 |

EXHIBIT "A"

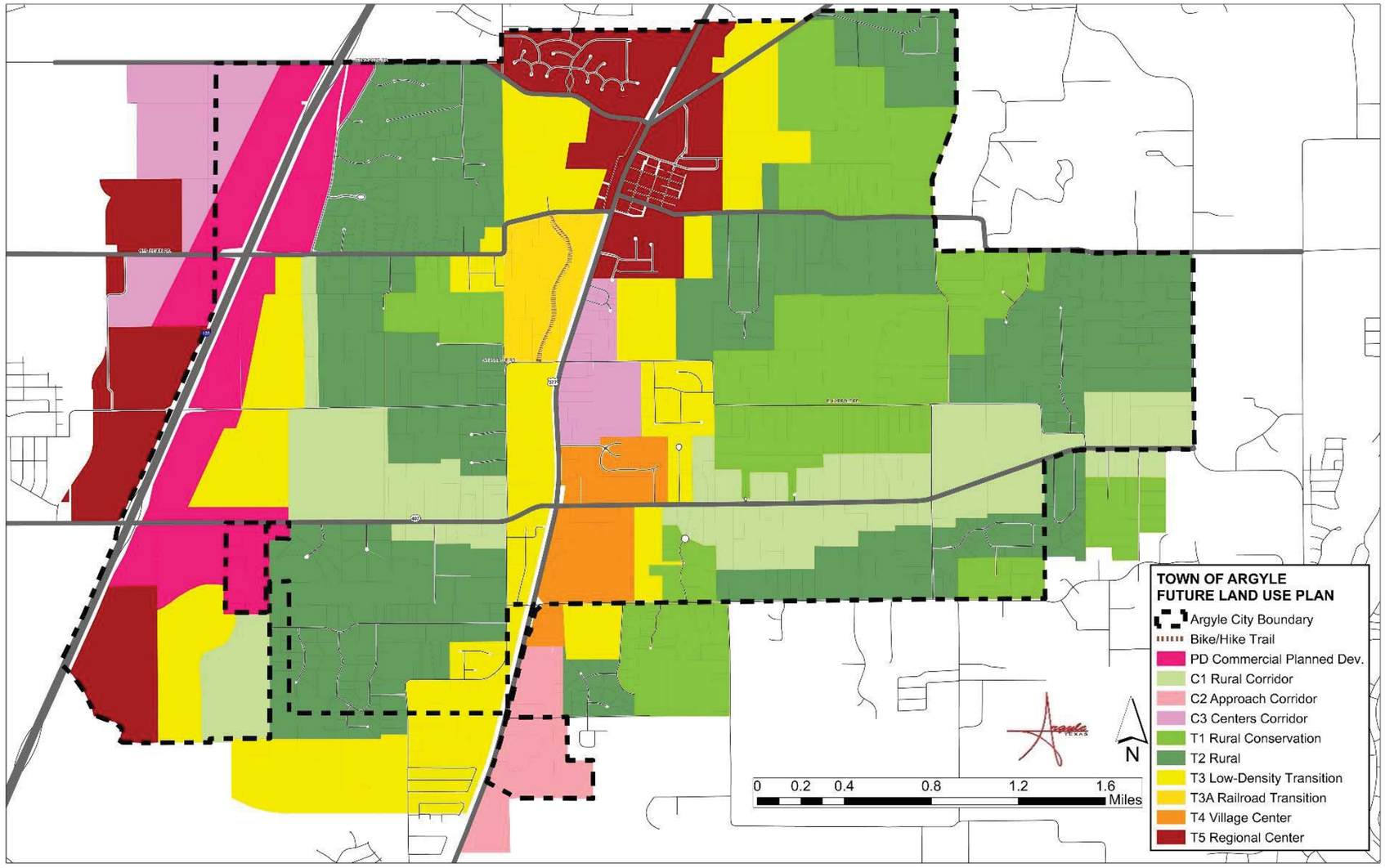
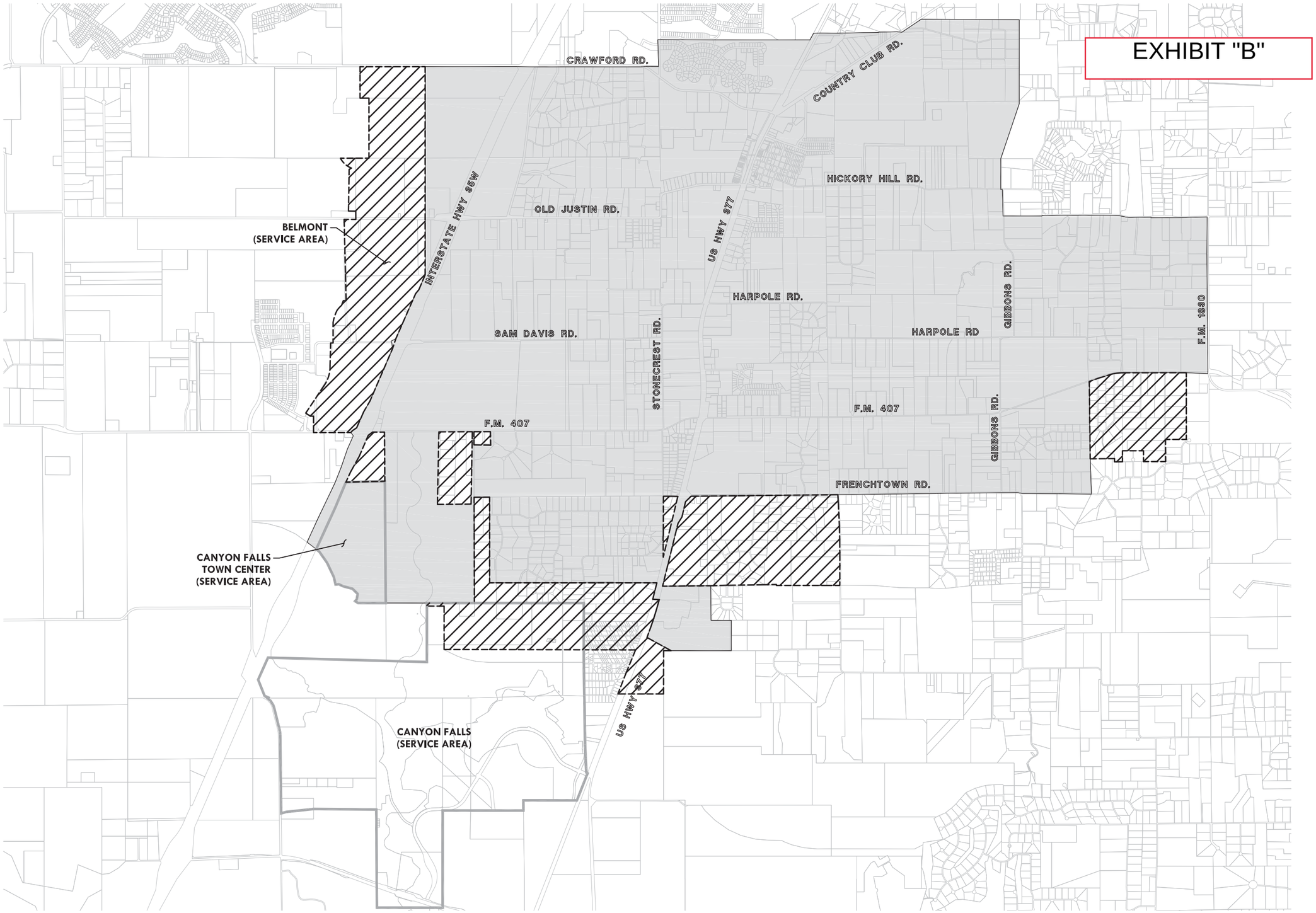



*Figure 1 Town of Argyle Future Land Use Plan*



**FIGURE 2.3**
**Town of Argyle**
**Wastewater and Roadway**
**Impact Fees**
**Future Land Use Plan**

# EXHIBIT "B"

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CITY LIMITS

ETJ


teague nall & perkins
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TBPE Registration No. F-230
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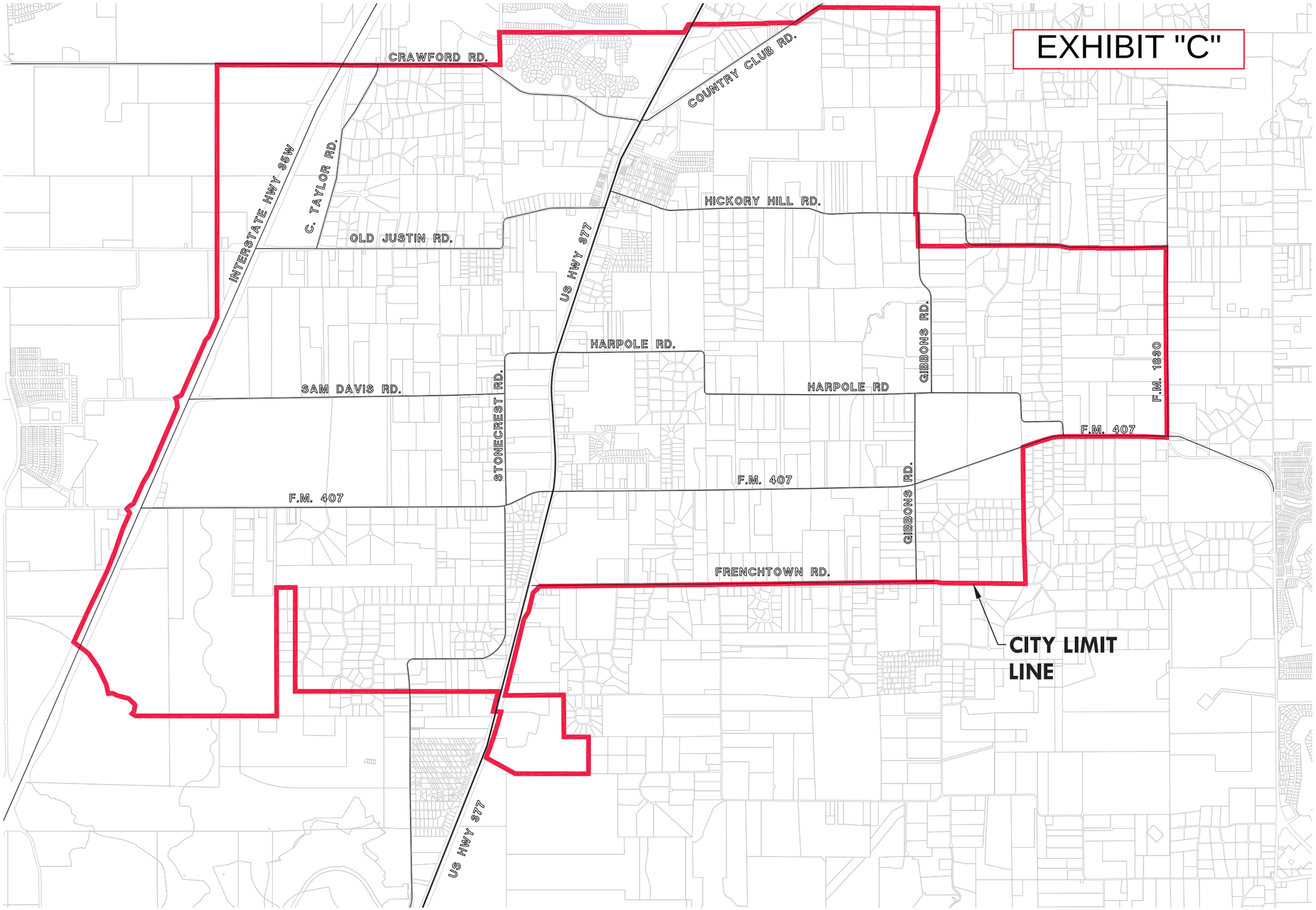
**FIGURE** E2
**Town of Argyle**
**Wastewater System Impact Fees**
**Wastewater Service Area Plan**

# EXHIBIT "C"

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1250 0 625 1250 2500


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**FIGURE** E1
**Town of Argyle**
**Roadway System Impact Fees**
**Roadway Service Area Plan**


Drawing: Q:\PROJECTS\ARG1922A\cost\exhibits\Figure 2.1 Roadway Map.dwg at Nov 19, 2019-6:17pm by rharris
Layout: Layout1 Xrefs: 22x34 Exhibit Border.dwg

EXHIBIT "D"

**Wastewater Impact Fees**

Service Unit Equivalents

| Water Meter Size | Equivalency Factor |
|---|---|
| | |
| 3/4" or Smaller | 1.00 |
| 1" | 2.7 |
| 1-1/2" | 3.3 |
| 2" | 10.7 |
| 3" | 23.3 |
| 4" | 40.0 |

EXHIBIT "E"

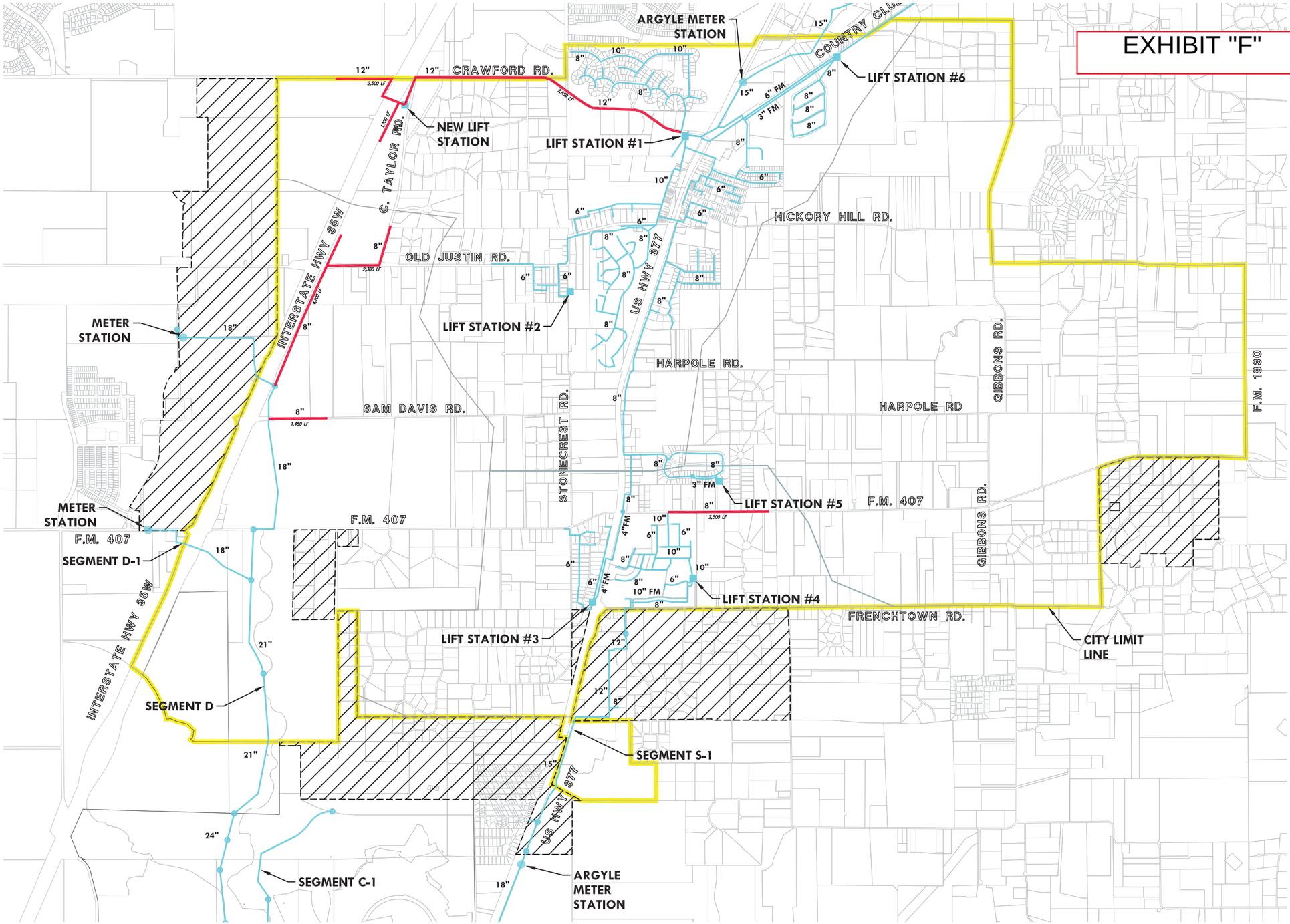
**TABLE 4.1**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Land Use Vehicle-Mile Equivalency**

| Category | Land Use | Unit | Service Unit Factor (VM/Unit) |
|---|---|---|---|
| **Residential** | | | |
| | Single Family | DU | 3.12 |
| | Apt/Townhouse | DU | 1.76 |
| | Retirement Community | DU | 0.71 |
| | Independent Sr Living | DU | 0.66 |
| | Others not specified | DU | 3.12 |
| | | | |
| **Office** | | | |
| | General Office | 1000 GFA | 4.60 |
| | Corporate Headquarters | 1000 GFA | 4.33 |
| | Medical-Dental | 1000 GFA | 13.32 |
| | U.S. Post Office | 1000 GFA | 12.37 |
| | Business Park | 1000 GFA | 4.12 |
| | Research & Development | 1000 GFA | 3.45 |
| | Others not specified | 1000 GFA | 4.60 |
| | | | |
| **Commercial** | | | |
| | Retail/shopping center | 1000 GFA | 4.50 |
| | Quality restaurant | 1000 GFA | 6.23 |
| | Fast Food with drive thru | 1000 GFA | 17.38 |
| | High turnover restaurant | 1000 GFA | 8.08 |
| | Gas Station w/ convenience | 1000 GFA | 9.96 |
| | Convenience market w/gas | 1000 GFA | 6.11 |
| | Convenience market | 1000 GFA | 5.28 |
| | Grocery/supermarket | 1000 GFA | 5.55 |
| | Discount club | 1000 GFA | 3.81 |
| | Auto sales | 1000 GFA | 3.36 |
| | Video rental store | 1000 GFA | 4.59 |
| | Bank | 1000 GFA | 15.44 |
| | Pharmacy-Drug /w Drive | 1000 GFA | 1.64 |
| | Apparel store | 1000 GFA | 2.22 |
| | Movie theater | Screens | 18.20 |
| | Furniture store | 1000 GFA | 0.37 |
| | Home Improvement Super Store | 1000 GFA | 2.16 |
| | Hardware/paint store | 1000 GFA | 2.68 |
| | Building materals/lumber store | 1000 GFA | 2.49 |
| | Nusery(garden center) | 1000 GFA | 2.09 |
| | Nursery (wholesale) | 1000 GFA | 1.75 |
| | Hotel | Rooms | 1.16 |

| | | | |
|---|---|---|---|
| | Motel | Rooms | 0.93 |
| | All suites hotel | Rooms | 1.08 |
| | Auto care center | 1000 GFA | 3.13 |
| | Quick Lube shop | 1000 GFA | 3.11 |
| | Auto parts sales | 1000 GFA | 3.58 |
| | Tire Superstore | 1000 GFA | 3.86 |
| | Wholesale tire store | 1000 GFA | 2.93 |
| | Mini-warehouse/self storage | 1000 GFA | 0.81 |
| | Others not specified | 1000 GFA | 4.50 |
| | | | |
| **Industrial** | | | |
| | General light industrial | 1000 GFA | 3.03 |
| | Manufacturing | 1000 GFA | 3.17 |
| | Industrial park | 1000 GFA | 3.39 |
| | Warehousing | 1000 GFA | 1.97 |
| | Others not specified | 1000 GFA | 3.03 |
| | | | |
| Institutional | | | |
| | Private school (K-12) | Students | 0.33 |
| | Junior/community college | Students | 0.24 |
| | University/college | Students | 1.64 |
| | Day care center | 1000 GFA | 2.33 |
| | Hospital | 1000 GFA | 2.80 |
| | Nursing home | Beds | 0.54 |
| | Assisted living center | Beds | 0.54 |
| | Place of worshi | 1000 GFA | 0.75 |

VM = Vehicle Mile
DU = Dwelling Unit
GFA = Gross Floor Area
GLA = Gross Leasable Area

# EXHIBIT "F"




tnp

GRAPHIC SCALE
1250 0 625 1250 2500

## LEGEND

- ETJ
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER


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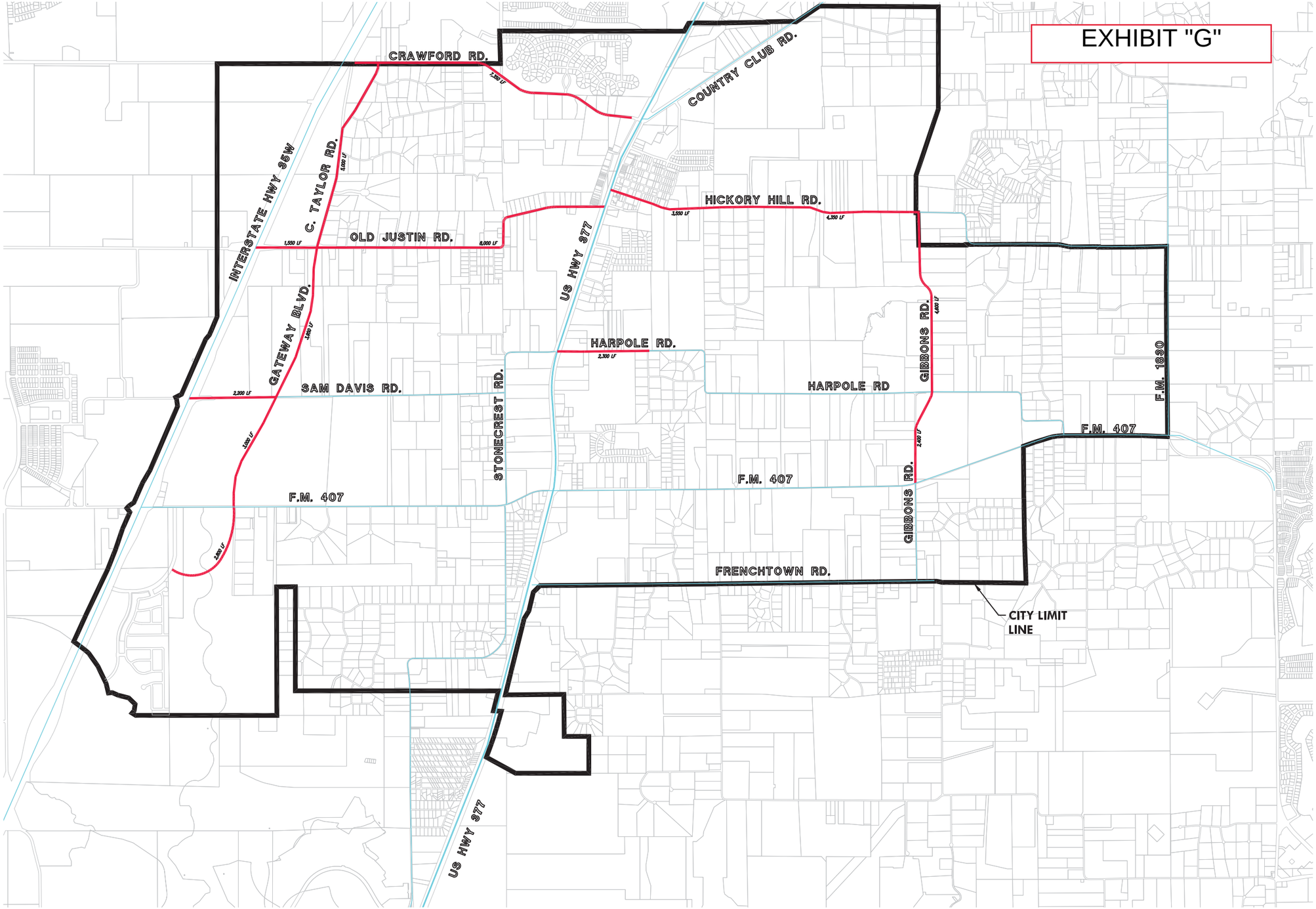
**FIGURE** E4
**Town of Argyle**
**Wastewater System Impact Fees**
**Capitol Improvements Plan**

# EXHIBIT "G"




tnp

GRAPHIC SCALE
1250 0 625 1250 2500

LEGEND

EXISTING ROAD

PROPOSED ROAD WORK


**teague nall & perkins**
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**FIGURE** E5
**Town of Argyle**
**Roadway System Impact Fees**
**Capital Improvement Plan**

EXHIBIT "H"

# Schedule 1
## Assessment Rates
## Wastewater and Roadway Facilities

| Type of Impact Fee* | 2010 Impact Fees | | Proposed Impact Fees | |
|---|---|---|---|---|
| | Current Impact Fees | Percentage of Maximum Allowable | Schedule 1 (Maximum Assessment Rate) | Schedule 1 (Maximum allowable at 50% of actual costs) |
| | | | | |
| **Wastewater Facilities**** | $2,914.00 | 50% | $4,904.00 | $2,452.00 |
| | | | | |
| **Roadway Facilities:** | | | | |
| Residential Uses | $801.28 | 33.6% | $3,264.00 | $1,632.00 |
| Non-Residential Uses | $595.50 | 25% | $3,264.00 | $1,632.00 |

*Water Impact Fees are assessed and collected by the Argyle Water Supply Corporation.

**All Wastewater Impact Fees are calculated per equivalent service unit (3/4-inch water meter).

# Schedule 2
## Collection Rates
## Wastewater and Roadway Facilities

| Type of Impact Fee* | 2010 Impact Fees | | Proposed Impact Fees | |
|---|---|---|---|---|
| | Current Impact Fees | Percentage of Maximum Allowable | Schedule 2 (as Proposed by Capital Improvements Advisory Committee) | Percentage of Maximum Allowable |
| | | | | |
| **Wastewater Facilities**** | $2,914.00 | 50% | $2,452.00 | 50% |
| | | | | |
| **Roadway Facilities:** | | | | |
| Residential Uses | $801.28 | 33.6% | $1,632.00 | 50% |
| Non-Residential Uses | $595.50 | 25% | $1,305.60 | 40% |

*Water Impact Fees are assessed and collected by the Argyle Water Supply Corporation.

**All Wastewater Impact Fees are calculated per

EXHIBIT "I"

# TOWN OF ARGYLE

# 2020 WASTEWATER AND ROADWAY IMPACT FEE STUDY

PREPARED BY

Teague Nall & Perkins, Inc

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Denton, Texas 76210
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February 2020

# TABLE OF CONTENT



## Tables

Figures

# I. EXECUTIVE SUMMARY

## Introduction

The Town of Argyle contracted with Teague Nall & Perkins to prepare a Wastewater and Roadway Impact Fee Study. The study is being prepared in order to meet requirements of the Texas Local Government Code, Chapter 395 for Towns that have or will have impact fees associated with community infrastructure. The impact fees are implemented so that a community has the ability to supplement funding of capital improvement projects (CIP) to meet the infrastructure capacity needs for the Town with regard to new development. Each ten-year period a study is developed so that the Town will have current data to evaluate and determine appropriate impact fees. In addition to preparing a new study every ten years, each subsequent fifth year an update to the study is required to assess the current impact fees. The Town can also choose to have the update performed earlier than five years if the Town deems it to be appropriate.

## Basis for Impact Fees

The basis for Impact fees is the capital improvements required to serve new development expected during the next ten (10) years from the time that impact fees are set or amended.

Impact fee revenues may not be used to repair, modernize or expand infrastructure needed to serve existing development or for operation and maintenance of capital infrastructure. Impact Fees collected which are not applied toward funding of authorized projects within (10) years of payment maybe subject to refunds.

## Demographics

Demographics used for the study include service area, land use assumptions, and population projections. Referring to Figure E1, the service area for the roadway impact fee study is the Town limits as required by the Local Government Code. The service area for the wastewater impact fee study is the Town limits and the ETJ as shown on Figure E2. The land use assumption used for the study is the Town's Future Land Use Plan as shown on Figure E3.

Table E1 shows the population projections to be used for the study. Table E1 was developed using North Central Council of Governments historical population data, aerial data, and recorded final plats. As shown on the table the average ten-year population increase per year is 2.43 percent. The last five-year average is 3.51 percent per year. Besides these historical averages, aerial data and recorded final plats indicate a potential short-term higher percentage increase per year in population. Based on the data collected, the first five years of the ten-year period will use a 6.1 percent increase in population per year while the last five years will use 3.5 percent per year. The ten-year population increase based on these percentages is 2486 resulting in an estimated population of 6656 by 2030.

**Wastewater Impact Fee**

In order to develop the wastewater impact fee according to Chapter 395 of the Texas Local Government Code population projections must be converted to wastewater service unit increases, capital improvement projects need to be developed including the project cost, and the representative portion of these costs allocated to the anticipate increase in service units. The wastewater service unit increase represented by the projected population increase is 805 Units. Figure E4 shows the proposed wastewater infrastructure improvements. The estimated project cost for the wastewater CIP is $9,837,277. The impact fee cost used to calculate the impact fee is $1,973,948. The impact fee cost includes eligible cost associated with the ten-year growth period, finance cost, fifty percent credit required by the Texas Local Government Code, and two subsequent impact fee study preparations. The resulting maximum wastewater impact fee per service unit is $2452.00 considering the fifty percent credit. The existing wastewater impact fee is $2914.00. Table E2 shows a comparison of wastewater impact fees from other local communities.

**Roadway Impact Fee**

The roadway impact fee is developed in the same way as the wastewater impact fee. Population projections are converted to roadway service unit increases, capital improvement projects are developed with associated project cost, and the representative portion of these cost are used to develop the impact fee cost. The roadway service unit increase represented by the projected population increase is 3016. Figure E5 shows the proposed roadway CIP's. The estimated project cost for roadway CIP is $33,265,000. The impact fee cost used to calculate the impact fee is $ 4,922,746. The impact fee cost includes eligible CIP cost associated with the ten-year growth period, finance cost, fifty percent credit required by the Texas Local Government Code, and two subsequent impact fee study preparations. The resulting maximum roadway impact fee per service unit is $1632 considering a 50% credit. The existing roadway impact fee for residential is $801.28 and $595.50 for non-residential. The 2010 proposed maximum roadway impact fee considering fifty percent credit was $1191 for both residential and non-residential. Table E3 shows a comparison of roadway impact fees from other local communities.

# TABLES

**TABLE E1**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Population Growth Projections**

| Year | Town Population | Growth Rate % |
|---|---|---|
| 2010 | 3282 | |
| 2011 | 3300 | 0.55 |
| 2012 | 3350 | 1.52 |
| 2013 | 3420 | 2.09 |
| 2014 | 3510 | 2.63 |
| 2015 | 3690 | 5.13 |
| 2016 | 3820 | 3.52 |
| 2017 | 3920 | 2.62 |
| 2018 | 4040 | 3.06 |
| 2019 | 4170 | 3.22 |
| Average | | 2.43 |
| Average Last 5 years | | 3.51 |
| | | |

**Proposed Growth Projection Determination**

| | |
|---|---|
| Approximate Lots Developed - 2019 | 478 |
| Population From Lots Over 5 Years (3 persons/lot) | 1434 |
| Growth Per Year First 5 Years (%/year) | 6.1 |
| Growth for Next 5 years (%/year) | 3.5 |
| Estimated 2030 Population | 6656 |
| Population Addition for 10-year Period | 2486 |
| Estimated Additional Lots for 10-year Period (3 persons/lot) | 829 |
| 85% Small Lot Requiring Sewer Service | 705 |
| 15% Large Lot w/ Onsite Sewer System | 124 |

# TABLE E2

**Wastewater Impact Fees - 2010 (at Adopted 50% max.)**

| | | 5/8" | 3/4" | 1" | 1-1/2" |
|---|---|---|---|---|---|
| 1 | **Argyle** | **$2,914.00** | **$2,914.00** | **$7,868.00** | **9, 616.18** |
| 2 | Southlake | $2,609.00 | $3,914.00 | $6,523.00 | $13,045.00 |
| 3 | Flower Mound-Long Prairie District Residential | $2,436.00 | $3,645.00 | $6,090.00 | $12,180.00 |
| 4 | Flower Mound-Long Prairie District Non-Residential | $1,218.00 | $1,827.00 | $3,045.00 | $6,090.00 |
| 5 | Prosper | $1,129.00 | $1,129.00 | $2,822.00 | $5,644.00 |
| 6 | Northlake | $964.00 | $1,446.00 | $2,410.00 | $4,821.00 |
| 7 | Keller | $918.00 | $1,560.60 | $2,478.60 | $3,029.40 |
| 8 | Colleyville | $643.00 | $965.00 | $1,068.00 | $3,215.00 |
| 9 | Melissa | $398.67 | $598.00 | $996.67 | $1,993.33 |

**Wastewater Impact Fees - 2020 (at Proposed 50% max.)**

| | | 5/8" | 3/4" | 1" | 1-1/2" |
|---|---|---|---|---|---|
| 1 | Southlake | $2,609.00 | $3,914.00 | $6,523.00 | $13,045.00 |
| **2** | **Argyle** | **$2,452.00** | **$2,452.00** | **$6,620.40** | **$8,091.60** |
| | **Argyle (Recommended by CIAC 1.7.20)** | **$2,452.00** | **$2,452.00** | **$6,620.40** | **$8,091.60** |
| 3 | Flower Mound-Long Prairie District Residential | $2,436.00 | $3,645.00 | $6,090.00 | $12,180.00 |
| 4 | Flower Mound-Long Prairie District Non-Residential | $1,218.00 | $1,827.00 | $3,045.00 | $6,090.00 |
| 5 | Prosper | $1,129.00 | $1,129.00 | $2,822.00 | $5,644.00 |
| 6 | Northlake | $964.00 | $1,446.00 | $2,410.00 | $4,821.00 |
| 7 | Keller | $918.00 | $1,560.60 | $2,478.60 | $3,029.40 |
| 8 | Colleyville | $643.00 | $965.00 | $1,068.00 | $3,215.00 |
| 9 | Melissa | $398.67 | $598.00 | $996.67 | $1,993.33 |

# TABLE E3

**Residential Roadway Impact Fees - 2010 (at Adopted 33.6% Max.)**

| | | Residential |
|---|---|---|
| 1 | Northlake Zone 1 (NW) | $6,094.10 |
| 2 | Prosper Service Area 1 | $6,053.00 |
| 3 | Colleyville Service Area 1 | $4,941.00 |
| 4 | Colleyville Service Area 2 | $4,941.00 |
| 5 | Prosper Service Area 2 | $4,589.00 |
| 6 | Melissa Service Area 1 | $3,915.12 |
| 7 | Northlake Zone 2- (NE) | $3,844.98 |
| 8 | Melissa Service Area 2 | $3,775.48 |
| 9 | Flower Mound- Service Area B | $3,714.78 |
| 10 | Keller Service Area 1 | $2,999.19 |
| 11 | **Town of Argyle** | **$2,500.00** |
| 12 | Keller Service Area 2 | $2,451.00 |
| 13 | Southlake- North Service Area | $2,292.00 |
| 14 | Southlake- South Service Area | $1,640.00 |
| 15 | Flower Mound- Service Area A | $1,424.10 |
| 16 | Northlake Zone 4 (SE) | $710.62 |
| 17 | Northlake Zone 3 (SW) | $691.60 |

**Residential Roadway Impact Fees - 2020 (Proposed Rates)**

| | | Residential |
|---|---|---|
| 1 | Northlake Zone 1 (NW) | $6,094.10 |
| 2 | Prosper Service Area 1 | $6,053.00 |
| | **Town of Argyle** | **$5,091.84 (at 50% of Max.)** |
| | **Town of Argyle** | **$5,091.84 (at 50% of Max.) as Recommended by CIAC 1.7.20** |
| 3 | Colleyville Service Area 1 | $4,941.00 |
| 4 | Colleyville Service Area 2 | $4,941.00 |
| 5 | Prosper Service Area 2 | $4,589.00 |
| 6 | Melissa Service Area 1 | $3,915.12 |
| 7 | Northlake Zone 2- (NE) | $3,844.98 |
| 8 | Melissa Service Area 2 | $3,775.48 |
| 9 | Flower Mound- Service Area B | $3,714.78 |
| | **Town of Argyle** | **$3,421.70 (at 33.6% of Max.)** |
| 11 | Keller Service Area 1 | $2,999.19 |
| | **Town of Argyle** | **$2,545.92 (at 25% of Max.)** |
| 12 | Keller Service Area 2 | $2,451.00 |
| 13 | Southlake- North Service Area | $2,292.00 |
| 14 | Southlake- South Service Area | $1,640.00 |
| 15 | Flower Mound- Service Area A | $1,424.10 |
| 16 | Northlake Zone 4 (SE) | $710.62 |
| 17 | Northlake Zone 3 (SW) | $691.60 |

## General Retail Roadway Impact Fees - 2010 (at Adopted 25% of Max.)

| | | General Retail (Based on a 10,000 sq. ft. building) |
|---|---|---|
| 1 | Northlake Zone 1 (NW) | $226,033.00 |
| 2 | Northlake Zone 2 (NE) | $142,623.00 |
| 3 | Prosper Service Area 1 | $49,620.00 |
| 4 | Southlake North Service Area | $48,300.00 |
| 5 | Prosper Service Area 2 | $37,620.00 |
| 6 | Southlake South Service Area | $34,560.00 |
| 7 | Flower Mound- Service Area B | $34,419.95 |
| **8** | **Town of Argyle** | **$26,797.00** |
| 9 | Northlake Zone 4 (SE) | $26,632.50 |
| 10 | Northlake Zone 3 (SW) | $25,657.60 |
| 11 | Keller Service Area 1 | $24,922.00 |
| 12 | Colleyville Service Area 2 | $21,580.00 |
| 13 | Keller Service Area 2 | $18,416.30 |
| 14 | Flower Mound- Service Area A | $13,218.75 |
| 15 | Melissa Service Area 2 | $9,969.31 |
| 16 | Colleyville Service Area 1 | $7,790.00 |
| 17 | Melissa Service Area 1 | $6,594.95 |

## General Retail Roadway Impact Fees - 2020 (at Various Rates of Max.)

| | | General Retail (Based on a 10,000 sq. ft. building) |
|---|---|---|
| 1 | Northlake Zone 1 (NW) | $226,033.00 |
| 2 | Northlake Zone 2 (NE) | $142,623.00 |
| | **Town of Argyle** | **$73,440.00 (at 50% of Max.)** |
| | **Town of Argyle** | **$58,752.00 (at 40% of Max.) as Recommended by CIAC 1.7.20** |
| 3 | Prosper Service Area 1 | $49,620.00 |
| | **Town of Argyle** | **$49,351.50 (at 33.6% of Max.)** |
| 4 | Southlake North Service Area | $48,300.00 |
| 5 | Prosper Service Area 2 | $37,620.00 |
| | **Town of Argyle** | **$36,720.00 ( at 25% of Max.)** |
| 6 | Southlake South Service Area | $34,560.00 |
| 7 | Flower Mound- Service Area B | $34,419.95 |
| 8 | Northlake Zone 4 (SE) | $26,632.50 |
| 9 | Northlake Zone 3 (SW) | $25,657.60 |
| 10 | Keller Service Area 1 | $24,922.00 |
| 11 | Colleyville Service Area 2 | $21,580.00 |
| 12 | Keller Service Area 2 | $18,416.30 |
| 13 | Flower Mound- Service Area A | $13,218.75 |
| 14 | Melissa Service Area 2 | $9,969.31 |
| 15 | Colleyville Service Area 1 | $7,790.00 |
| 16 | Melissa Service Area 1 | $6,594.95 |

## General Office Roadway Impact Fees - 2010 (at Adopted 25% of Max.)

| | | General Office (Based on a 10,000 sq. ft. building) |
|---|---|---|
| 1 | Prosper Service Area 1 | $51,320.00 |
| 2 | Prosper Service Area 2 | $38,910.00 |
| **3** | **Town of Argyle** | **$27,393.00** |
| 4 | Southlake North Service Area | $25,610.00 |
| 5 | Flower Mound- Service Area B | $24,949.10 |
| 6 | Keller Service Area 1 | $24,922.00 |
| 7 | Colleyville Service Area 2 | $21,580.00 |
| 8 | Keller Service Area 2 | $18,416.30 |
| 9 | Southlake South Service Area | $18,330.00 |
| 10 | Flower Mound- Service Area A | $9,599.75 |
| 11 | Melissa Service Area 2 | $8,816.26 |
| 12 | Colleyville Service Area 1 | $7,790.00 |
| 13 | Melissa Service Area 1 | $5,832.17 |
| 14 | Northlake Zone 1 (NW) | NA |
| 15 | Northlake Zone 2 (NE) | NA |
| 16 | Northlake Zone 3 (SW) | NA |
| 17 | Northlake Zone 4 (SE) | NA |

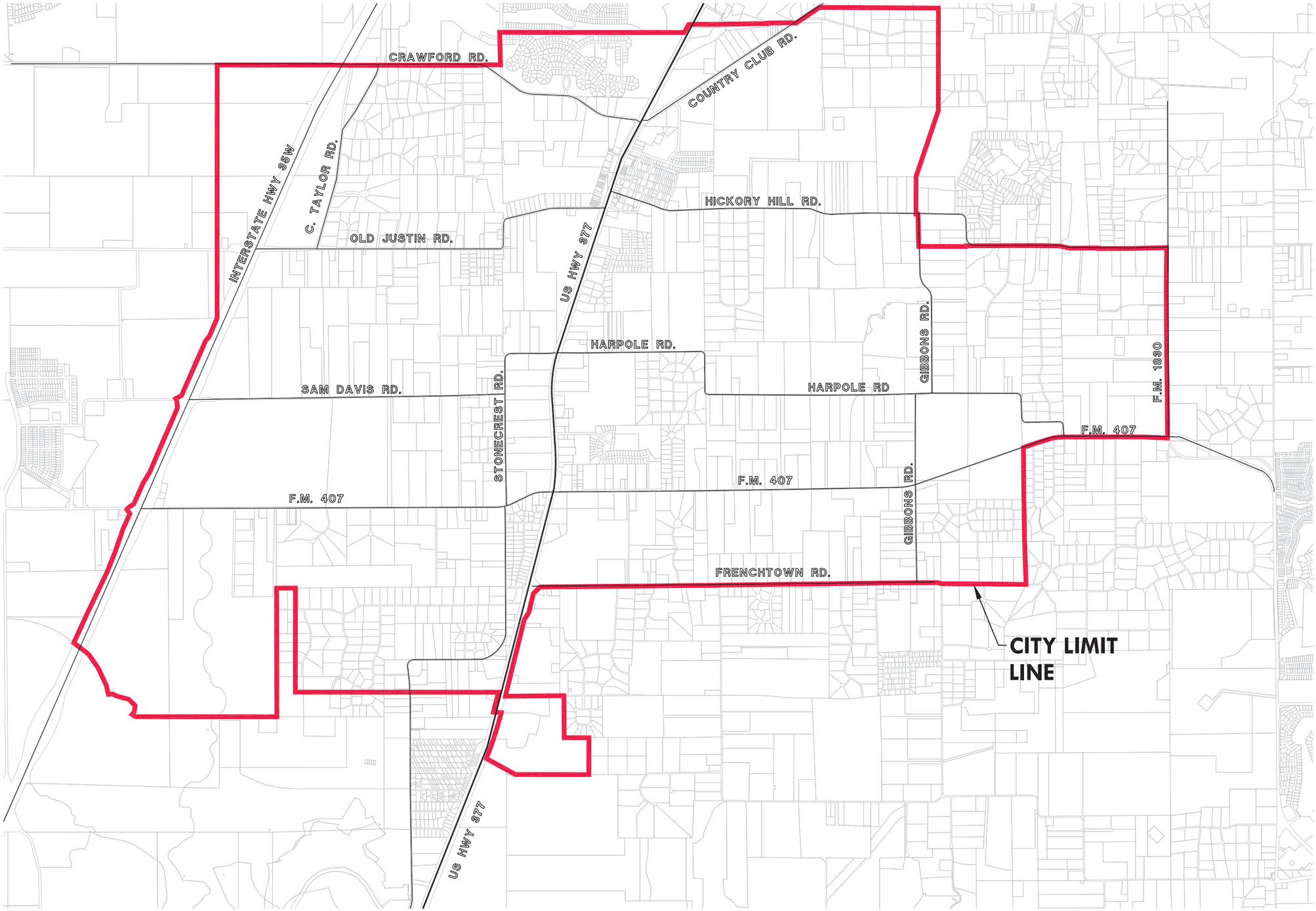
## General Office Roadway Impact Fees - 2020 (at Various Rates of Max.)

| | | General Office (Based on a 10,000 sq. ft. building) |
|---|---|---|
| | **Town of Argyle** | **$75,072.00 (at 50% of Max.)** |
| | **Town of Argyle** | **$60,057.60 (at 40% of Max.) as Recommended by CIAC 1.7.20** |
| 1 | Prosper Service Area 1 | $51,320.00 |
| | **Town of Argyle** | **$50,448.20 (at 33.6% of Max.)** |
| 2 | Prosper Service Area 2 | $38,910.00 |
| | **Town of Argyle** | **$37,536.00 (at 25% of Max.)** |
| 3 | Southlake North Service Area | $25,610.00 |
| 4 | Flower Mound- Service Area B | $24,949.10 |
| 5 | Keller Service Area 1 | $24,922.00 |
| 6 | Colleyville Service Area 2 | $21,580.00 |
| 7 | Keller Service Area 2 | $18,416.30 |
| 8 | Southlake South Service Area | $18,330.00 |
| 9 | Flower Mound- Service Area A | $9,599.75 |
| 10 | Melissa Service Area 2 | $8,816.26 |
| 11 | Colleyville Service Area 1 | $7,790.00 |
| 12 | Melissa Service Area 1 | $5,832.17 |
| 13 | Northlake Zone 1 (NW) | NA |
| 14 | Northlake Zone 2 (NE) | NA |
| 15 | Northlake Zone 3 (SW) | NA |
| 16 | Northlake Zone 4 (SE) | NA |

## Recent Development Projects - 2010 -2020 Impact Fee Comparison

| | | 2010 Roadway Impact Fee (at Adopted 25% of Max.) | 2020 Roadway Impact Fees (various rates) |
|---|---|---|---|
| 1 | Well Church (20,00 sq. ft. Religious Institution) | $9,158.79 | $25,100.16 (50% of max.) |
| | | | **$20,080.13 (40% of max.) as Recommended by CIAC 1.7.20** |
| | | | $16,867.25 (33.6% of max.) |
| | | | $12,550.08 (25% of max.) |
| 2 | Eagle Plaza (10,188 sq. ft. retail bldg.) | $27,303.68 | $74,827.20 (50% of max.) |
| | | | **$59,891.76 (40% of max.) as Recommended by CIAC 1.7.20** |
| | | | $50,283.70 (33.6% of max.) |
| | | | $37,413.60 (25% of max.) |
| 3 | BPS Jet (22,936 sq. ft. corp. office, warehouse, lab) | $47,514.35 | $130,200.96 (50% of max.) |
| | | | **$104,160.77 (40% of max.) as Recommended by CIAC 1.7.20** |
| | | | $87,494.72 (33.6% of max.) |
| | | | $65,100.48 (25% of max.) |
| 4 | Integrity Performance Sports (183,340 sq. ft. health club, restaurant, office) | $498,225.08 | $1,365,412.80 (50% of max.) |
| | | | **$1,092,330.24 (40% of max.) as Recommended by CIAC 1.7.20** |
| | | | $917,554.05 (33.6% of max.) |
| | | | $682,706.40 (25% of max.) |

# FIGURES

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GRAPHIC SCALE
1250 0 625 1250 2500

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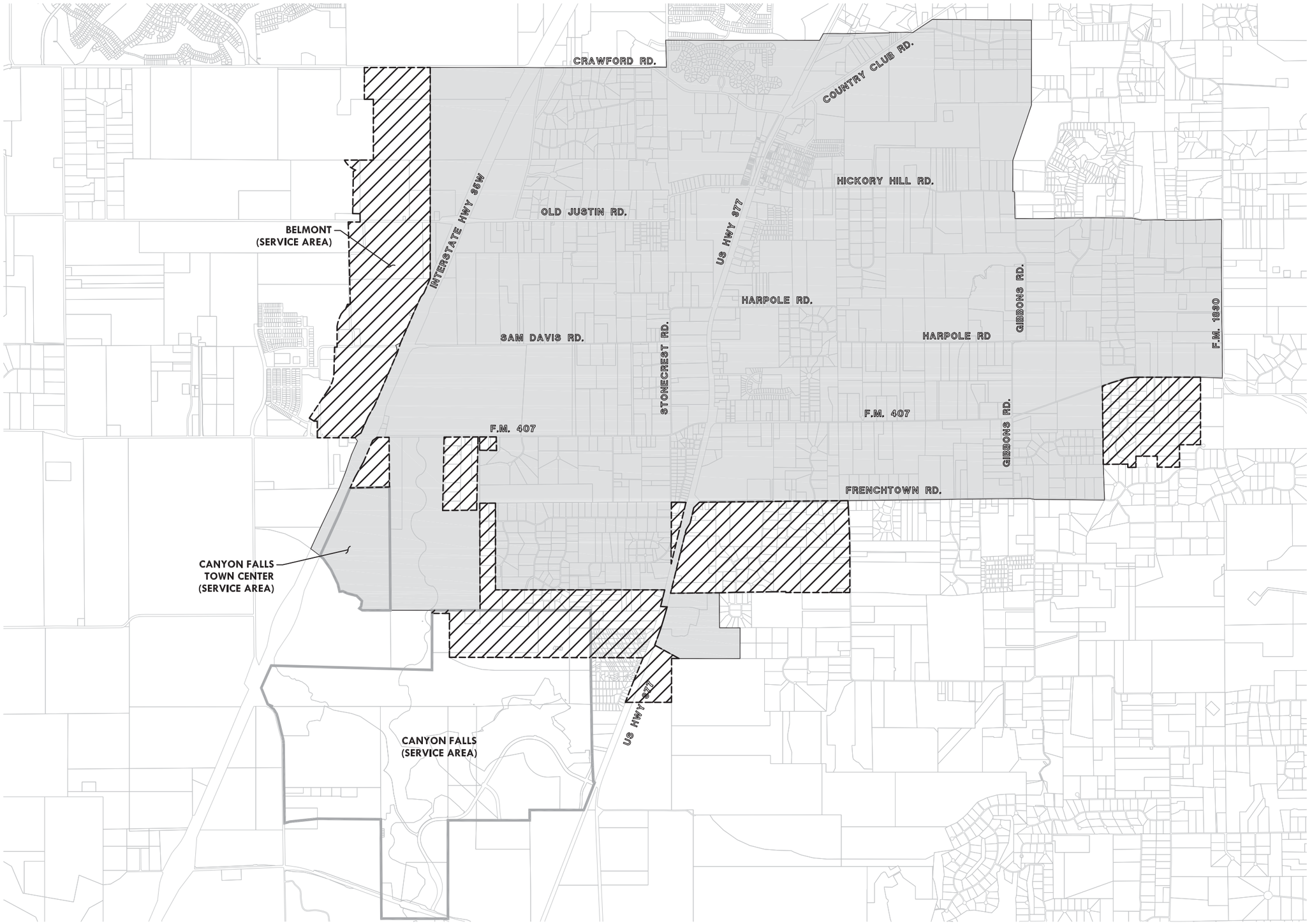
**FIGURE** E1
**Town of Argyle**
**Roadway System Impact Fees**
**Roadway Service Area Plan**

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GRAPHIC SCALE
1500 0 750 1500 3000

CITY LIMITS

ETJ


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**FIGURE** E2
**Town of Argyle**
**Wastewater System Impact Fees**
**Wastewater Service Area Plan**

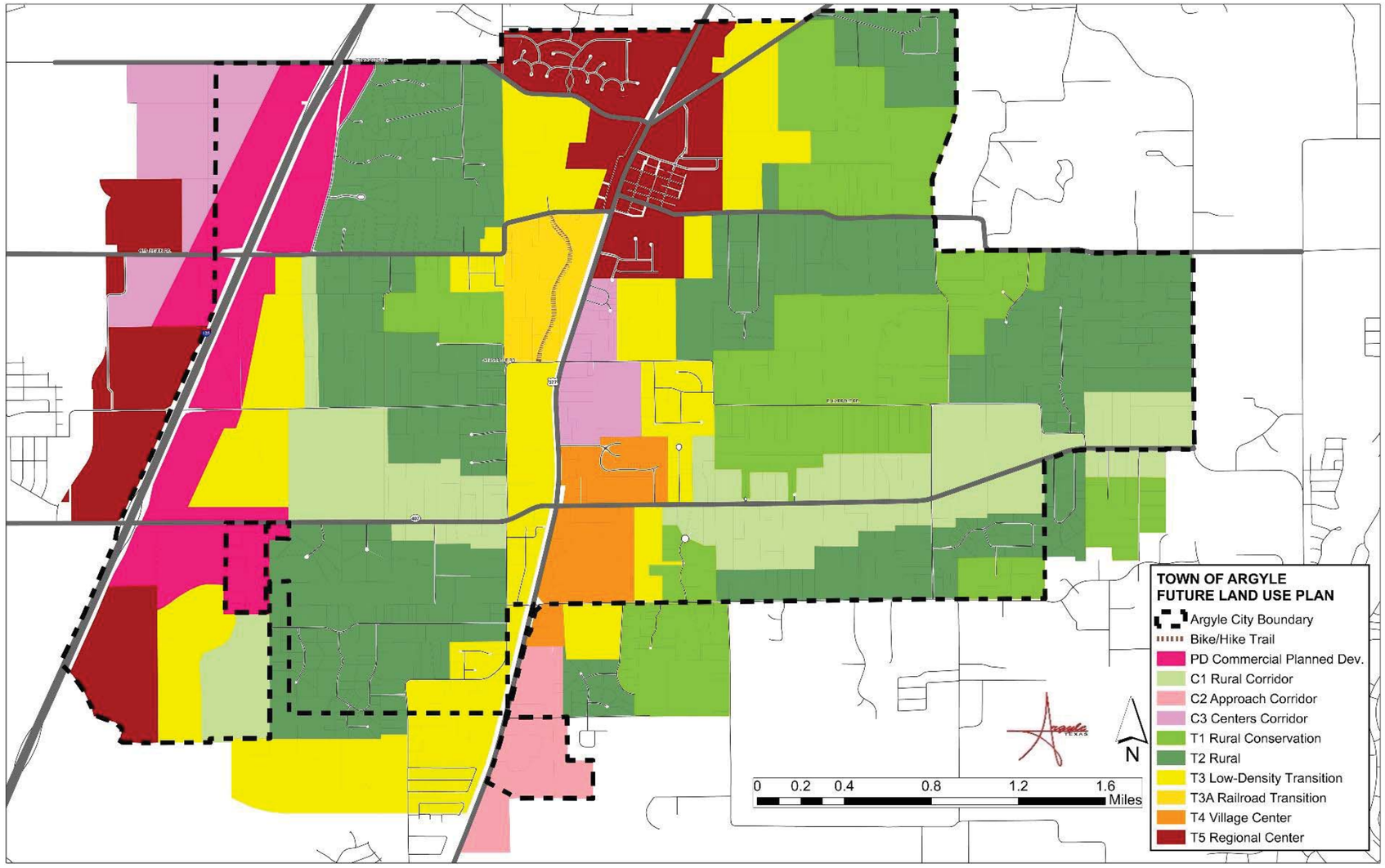
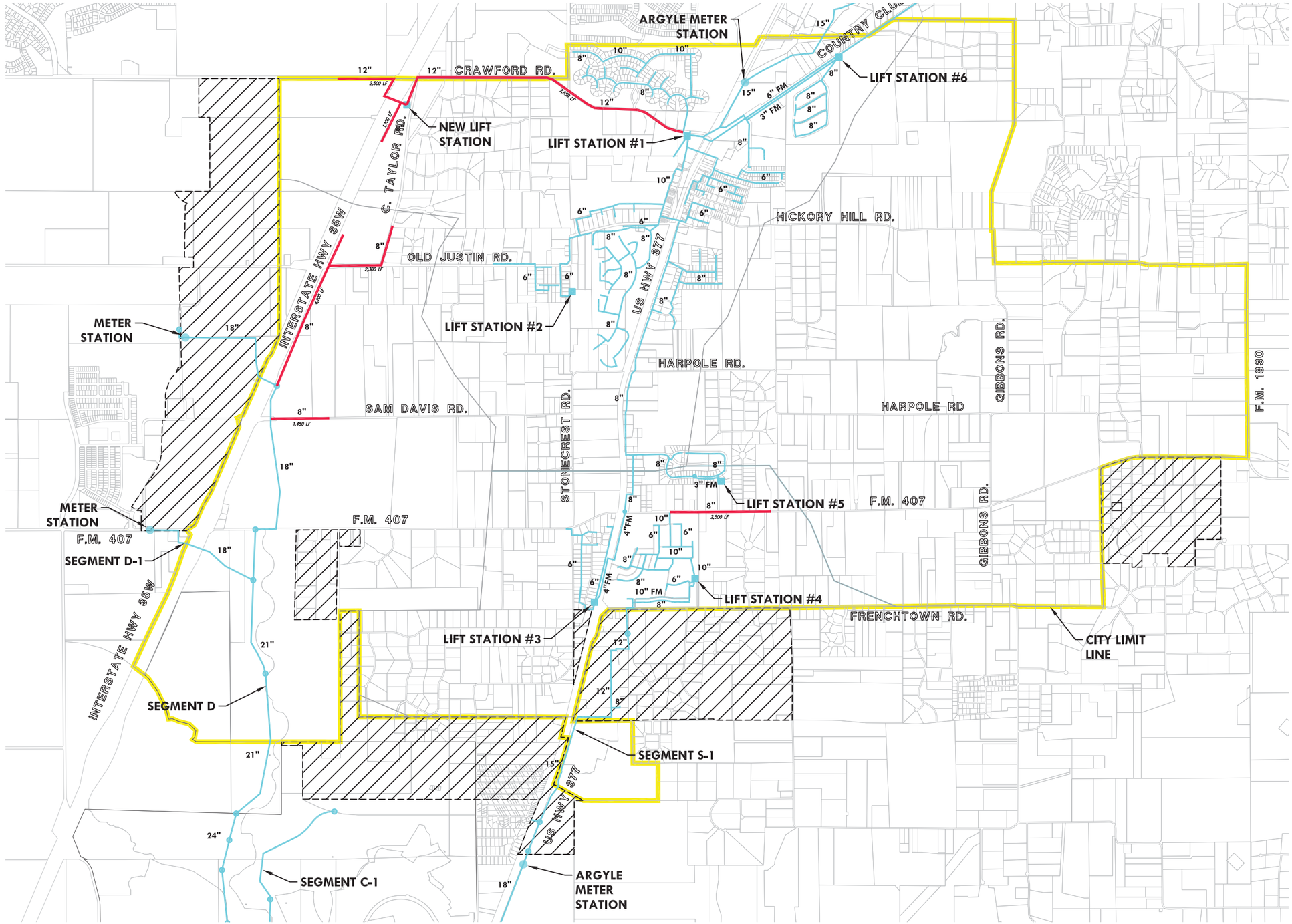



*Figure 1 Town of Argyle Future Land Use Plan*



**FIGURE** E3
**Town of Argyle**
**Wastewater and Roadway**
**Impact Fees**
**Future Land Use Plan**

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**LEGEND**

- ETJ
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER


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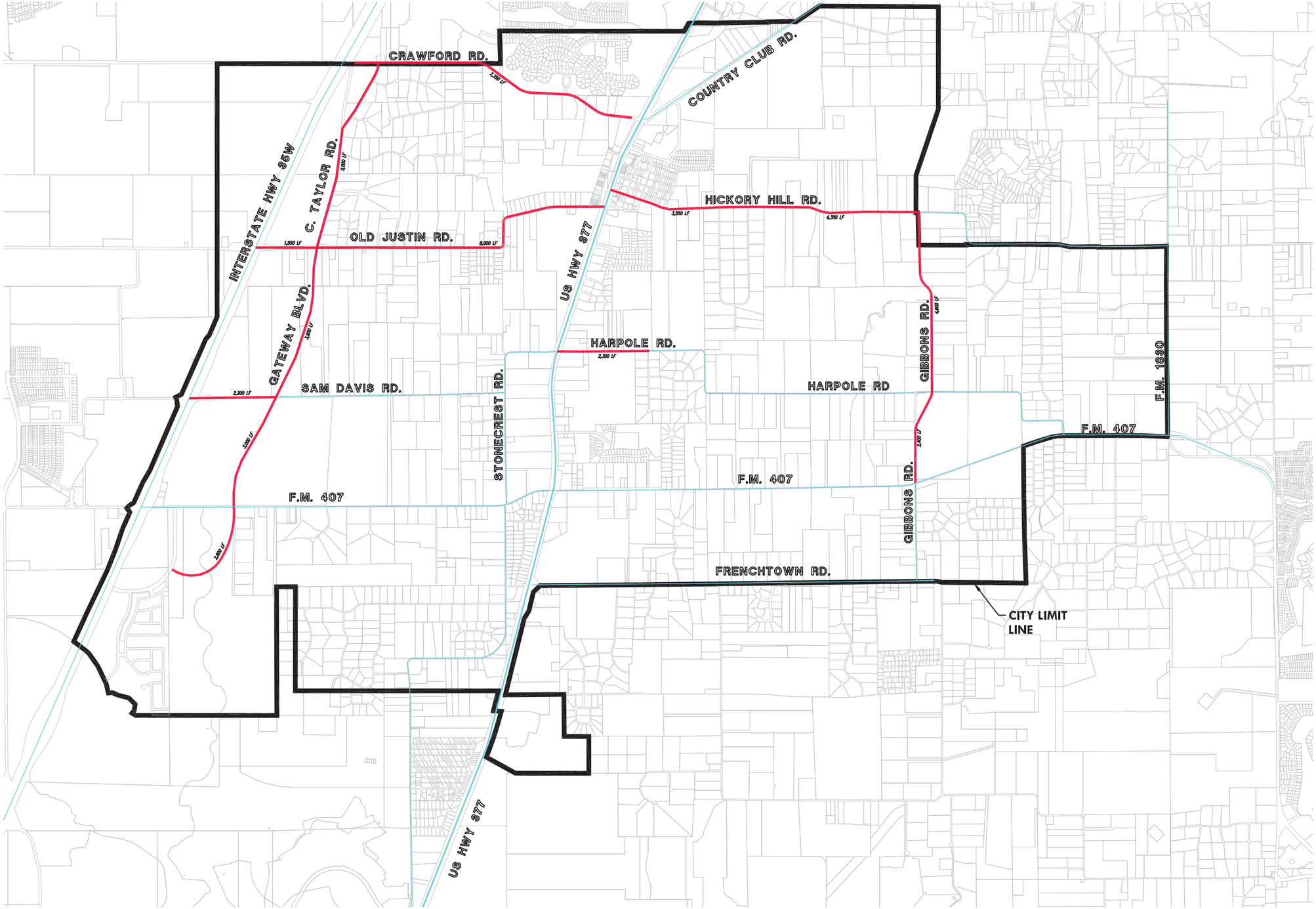
**FIGURE** E4
**Town of Argyle**
**Wastewater System Impact Fees**
**Capitol Improvements Plan**

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GRAPHIC SCALE
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LEGEND

EXISTING ROAD

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**FIGURE** E5
**Town of Argyle**
**Roadway System Impact Fees**
**Capital Improvement Plan**

## II. IMPLEMENTATION OF IMPACT FEES

### Authorization

The Texas Local Government Code, Chapter 395 authorizes political subdivisions to impose impact fees on land within its corporate boundaries and extraterritorial jurisdiction (ETJ). The basis for Impact fees is the capital improvements required to serve new development expected during the next ten (10) years from the time that impact fees are set or amended.

Impact fee revenues may not be used to repair, modernize or expand infrastructure needed to serve existing development or for operation and maintenance of capital infrastructure. Impact Fees collected which are not applied toward funding of authorized projects within (10) years of payment maybe subject to refunds.

During the 2001 session of the Texas Legislature, the impact fee law was amended. The change in the law became effective September 1, 2000. Significant changes included the following:

- A credit for ad valorem taxes and utility service billing revenues must be calculated or, as an alternative, a 50% credit against the maximum assessable impact fee calculated.
- A comparison of the proposed fees to a standard calculation for a maximum fee
- Fees are to be collected at issuance of the building permit
- Must submit annual certification of compliance to the Attorney General by September 30th.
- Forfeit ten (10) percent of fees to the State as a penalty if a positive certification is not filed timely.
- Must hold a Public Hearing to approve the Land Use Plan and Capital Improvements Plans with advertisement 30 days prior to the hearing.
- Must hold a Public Hearing to set impact fees with advertisement 30 days prior to the hearing.

The Local Government Code now requires that a town update the information supporting its impact fees every five (5) years, after fees have been adopted. The information that must be included in the update includes the following:

- Impact Fee revenues collected and expended to fund eligible capital improvements
- Land use assumptions
- Capital Improvement plans
- Applicable impact fees to be assessed

## Historical Impact Fee Studies

The Town of Argyle Wastewater and Roadway Impact Fees were last reviewed in 2015. Ordinance No. 2015-08 approved the findings of the review. In the 2015 review of impact fees no changes were made to land use assumptions, capital improvements or wastewater or roadway impact fees. Prior to 2015, a detailed evaluation was performed in 2010, and the findings of the 2010 Impact Fee study for wastewater and roadway were approved by Ordinance No. 2010-10. Table 2.1 provides the current Wastewater and Roadway Impact fees. The current Wastewater impact fee is $2,914 per service unit. The current Roadway impact fee is $801.28 for residential and $595.50 for non-residential. Table 2.2 provides a comparison of the Town of Argyle impact fees with other communities within the region.

## Historical Impact Fee Revenues and Expenditures

As of January 31, 2020, the unaudited balances for the impact fees are as follows:

Wastewater Impact Fee Account: $686,847.27

Roadway Impact Fee Account: $1,387,501.46

The Town will be using the Roadway Impact Fee funds for the Crawford Road CIP. The Wastewater Impact Fee funds will be used for CIP's shown in this study.

## Service Area and Land Use

The Town limits is the current service area for the roadway impact fee study. See Figure 2.1. The current service area for wastewater impact fee study is the Town limits plus the ETJ, see Figure 2.2. These two assumptions will continue to be used for this study.

The land use assumptions for the impact fee program are from the Town's Comprehensive plan. The Future Land Use plan and associated designations and land use allocations will be used for growth projections. See Figure 2.3 and Table 2.3.

## Population Growth

Table 2.4 shows existing population data taken from the North Central Texas Council of Governments (NCTCOG). The average population growth over the last ten years was 2.43 percent. Average growth over the last five years has been 3.51 percent. In addition to the steady growth within the Town, there appears to be potential for a surge in growth over the next four to five years. Based on 2018 aerial data and approved plats, approximately 478 single-family residential lots are in the process of development. Population increases from these lots are not included within the current 2019 estimates. Based on an assumed average three persons per household, the population increase from these lots equates to an additional 1,434 persons. Distributing this population over a five-year period equates to a

6.1 percent increase in population per year. In addition to this population increase, additional population increase will most likely occur for the remainder of the ten-year period. For the purposes of estimating the ten-year population growth, the first five years will be estimated using a 6.1 percent per year increase and the last five years using a 3.5 percent per year increase. Based on these assumptions, the population estimate for 2030 is 6,656. Using three persons per household, this population increase would translate to 829 new single-family dwellings within the Town by 2030. After this ten-year period, there may be a slowing in residential growth based upon availability of developable property associated with the future land use plan. Most of the remaining developable properties after the current ten -year period will be one to 10 acre in sizes and will not require public sewer service. It will be important to assess population growth at the next five-year increment and next ten-year increment.

Population increases within the ETJ are also anticipated during the ten-year period. Referring to Figure 2.2, most of the service area within the ETJ falls within the Belmont and Canyon Falls development boundaries. These two service areas are not included within the analysis because they have contributed to the Trinity River Authority (TRA) Graham Branch Wastewater Transportation System infrastructure cost and have their own reimbursement program. Building permits and associated impact fees are not obtained for these areas by the Town. Since these two areas comprise most of the developable area within the ETJ, population increases attributed to the ETJ will not be considered.

**Population Distribution**

The Future Land Use Plan has a variety of land uses, with the majority of the single-family residential land uses being rural type development. The rural nature of the Town is by design. The rural land use lot size ranges from one acre to ten acres minimum. With these lot sizes, new development within the rural areas will have private onsite wastewater treatment systems and therefore are exempt from Wastewater Impact Fees. Roadway impact fees can be applied for these properties. Another characteristic of the rural land use areas is low population density. These areas will not contribute greatly to the anticipated population increase. The following table shows the percentage of building permits issued for properties using private onsite wastewater systems for FY 16-19.

| Year | Building Permits W/ Private Onsite Sewer |
|---|---|
| 2016 | 9% |
| 2017 | 7.6% |
| 2018 | 20.7% |
| 2019 | 10.3% |

Based on these percentages, 85 percent of the anticipated population increase in the next ten years will be attributed to lot sizes requiring public sewer and 15 percent of the

population increase will be attributed to lot sizes having onsite private sewer. With this distribution, 124 housing units would be in the rural land use area, and 705 housing units would be in the areas requiring a public sewer system. In the next ten-year period these percentages most likely will change. There will be fewer developable lots requiring public sewer.

There are approximately 734 existing developed rural lots and 725 small lots within the Town limits and ETJ, excluding the Belmont and Canyon Falls service areas. With these existing lot counts, the 2030 estimated lot counts would be 858 rural lots and 1430 lots requiring public wastewater facilities.

## III. WASTEWATER IMPACT FEE ANALYSIS

### General

The wastewater impact fees are implemented so that a community has the ability to supplement funding of CIP projects to meet the wastewater capacity needs for the Town with regard to new development. The planning period for the impact fees is ten years, with an update required in no more than 5 years. In order to develop the wastewater impact fee according to Chapter 395 of the Texas Local Government Code population projections must be converted to wastewater service unit increases, capital improvement projects need to be developed including the project cost, and the representative portion of these costs allocated to the anticipate increase in service units.

### Wastewater Service Units

The most common method for determining wastewater service units is to base the service unit on a single family dwelling and the size of water meter used for a single family dwelling. All other types of land use and associated meter sizes can be correlated to the single family dwelling based upon meter size. For the Town of Argyle 5/8" x3/4" meters are used for single family dwellings and for the most part 1" meter sizes for commercial/retail developments. Using the Town's standard equivalency tables, the service unit equivalent (SFE) for a 1" meter is 2.7 SFE as shown in Table 2.1.

Another method that can be used is correlating the amount of wastewater contributed by a single family dwelling to other types of land use wastewater contribution. For this type of correlation, it is best to use winter time water demand data which will closely represent the amount of wastewater contribution. This method has been used for schools and churches for the impact fee study. The standard wastewater contribution used for the single family dwelling is 320 gallons per day (GPD). This value is used for the wastewater agreements the Town has with the City of Denton and the Trinity River Authority (TRA).

Table 3.1 shows the existing estimated service units and the proposed service units for 2030. The total projected increase in service units is 805, which is an 87 percent increase

over the ten-year period. This also computes to be approximately 6.49 percent increase in service units per year over the next 10 years. The increase in residential service units is based upon the estimated population growth. The increase in commercial/retail service units, corresponding to the one-inch meter size, is based upon two new commercial/retail businesses per year over the ten-year period. School service unit increases are based upon one student for each single family residential service unit increase. Church service units were increased by 3.4 percent per year for the ten-year period.

**Wastewater Capital Improvement Plan**

Figures 3.1 and 3.2 show the existing wastewater infrastructure for the Town of Argyle. There are 4 wastewater service basins within the existing wastewater system. The wastewater service basins include the Denton basin, the TRA West basin, the TRA East basin, and the Future basin. The Denton basin flows to the City of Denton wastewater collection system and is treated by the City of Denton. The TRA West and TRA East basins flow to the TRA transmission lines and wastewater is treated at the TRA treatment plant. The Future basin encompasses area that is within the rural land use zone which currently have private onsite wastewater systems. Each of these wastewater service basins are separated by natural topographic ridge lines.

Figure 3.3 shows the proposed wastewater system CIP. The location and type of improvements anticipated are consistent with the 2010 impact fee study and reflect remaining improvements to be constructed. The majority of required capacity building infrastructure for future development has been constructed with the Graveyard line and the TRA Lines. Table 3.2 shows the Wastewater CIP Project Cost summary and the eligible cost associated with the current ten-year period. Table 3.3 shows the detailed improvement cost for each of the projects. The following describes each one of the CIP projects:

- Crawford Rd Wastewater CIP – Table 3.3 – Project Cost: $4,616,438
  The 12” wastewater collection and Lift station CIP project will provide capacity for the development adjacent to IH 35 in the northwest portion of the Town limits. This CIP is included within the Denton basin.

- Old Justin Road Wastewater CIP – Table 3.3 – Project Cost: $ 1,635,907
  The 8” wastewater collection CIP project will provide capacity for the development adjacent to IH 35, C. Taylor Rd, and future Gateway Blvd. This CIP project will flow into the TRA West basin.

- Sam Davis Rd Sewer CIP – Table 3.3 – Project Cost: $ 333,144
  The 8” wastewater collection CIP project will provide capacity for PD Commercial Planned Development land use area adjacent to Sam Davis Road. This CIP project will flow into the TRA West basin.

- FM 407 Wastewater CIP – Table 3.3 – Project Cost: $715,669

The 8” wastewater collection CIP project will provide capacity for the development of the C3 Rural Corridor fronting FM 407. This CIP project will flow into the TRA East basin.

**Additional Wastewater Capacity Building**

As mentioned above, the Town has two separate basins with wastewater capacity for future development. These two basins are the Denton Basin and the TRA Basin. The main collection system for the Denton basin is the Graveyard line. The main collection system for the TRA basin are TRA Line Segment A, B, C, and D.

The capacity developed for the Denton Basin using the Graveyard collection system is 1600 Single Family Equivalents (SFE) or 512000 gallons per day based on 320 gallons per day per SFE. The Town also has an additional 560 SFE capacity in the original Country Club pressure sewer line that also discharges into the City of Denton wastewater collection system. The existing lift station no. 1 and the pressure sewer line are not currently in use but could be put back in service if needed. The Town’s participation cost for the Graveyard collection system improvements was $1,152,535.42, including both interest and principal payments. This cost has been retired and is not an eligible cost for the project.

The TRA collection system has capacity for the Town and other properties within the basin. The total Town capacity for the TRA Basin is 1.996 MGD or 3119 Living Unit Equivalents. A Living Unit Equivalent is a SFE multiplied by 2.0 to account for a peaking factor and Infiltration/Inflow. The Town’s TRA West Basin capacity is 1.373 MGD and the Town’s TRA East Basin capacity is 0.623 MGD. The following shows the capacities for the Town per TRA Line Segment:

Development Line Segment S-1 – 0.623 MGD, 973 LUE’s, 1946 SFE

TRA Line Segment B – 0.623 MGD, 973 LUE’s, 1946 SFE

TRA Line Segment C – 1.373 MGD, 1731 LUE’s, 3462 SFE

TRA Line Segment D – 1.373 MGD, 1731 LUE’s, 3462 SFE

The Development Line Segment S-1 was constructed by private development. The developer is being reimbursed project costs by the Denton County allocation to the TIRZ. Therefore, line segment S-1 project costs are no longer an eligible CIP project cost.

The Town’s participation cost in the TRA transmission line improvements was $803,950.32 for TRA Line Segment B and $1,518,303 for capacity building of Line Segment C and D. The capacity building for Line C and D were paid upfront by development and the $1,518,303 cost is to be reimbursed to the developer through impact fees. Figure 3.4 shows the TRA Impact Fee Reimbursement area associated with the Line Segment C and D capacity building. The Line Segment B, C, and D cost are eligible CIP cost for the impact fee assessment.

**Total Cost Associated with Capacity Building**

The total cost for capacity building includes the current CIP projects listed above and the capacity that has been obtained through the TRA Basin Improvements. The Basin improvement

costs are discounted to reflect the remaining capacity available. Table 3.4 shows the respective percentages of the capacity remaining. Currently the only sewer flow contribution from Argyle to the TRA basin is from the Liberty Christian School and the Cross Timbers Church. Table 3.4 shows the winter maximum average flows based upon water usage from these two sources. Approximately 98 percent of the TRA capacity is available. This will most likely be reduced considerably over the next four to five years due to current development within the TRA basin. Table 3.4 shows approximately 65 percent of the Denton Basin capacity is available. This will increase once lift station No. 3 is taken out of service and the area contributing to lift station No. 3 drains to the TRA basin.

**Maximum Wastewater Impact Fee**

According to Chapter 395 of the Texas Local Government Code the Maximum Assessable Wastewater Impact Fee cost per service unit is calculated by dividing the total CIP cost associated with the capacity needs of new development by the anticipated increase in service units based upon the service area and land use assumptions. A credit also is required to account for Ad Valorem Taxes and Utility Billing revenues. The credit is 50% of the calculated Maximum Assessable Wastewater Impact Fee.

As shown in Table 3.2, the total CIP project cost is $9,837,277. Of this CIP project cost, only the project cost attributable to the ten-year growth period can be used, ie improvements needed for the amount of growth. As shown in Table 3.2, the attributable project cost is estimated using percent utilization. The attributable cost based on the estimated utilization for the ten-year period is $2,572,903. This cost is the eligible capital cost without considering the fifty percent credit. The following show the calculations:

| **Wastewater Impact Fee Calculation** | | **Reference** |
|---|---|---|
| Eligible Capital Improvement Cost | $2,572,903 | Eligible Cost, Table 3.2 |
| Finance Cost | $1,234,993 | 4 percent per year for 10 years |
| Total CIP Eligible Cost | $3,807,896 | Eligible cost including financing |
| Impact Fee Cost w/ Credit (50%) | $1,903,948 | 50% Credit |
| Impact Fee Preparation | $ 70,000 | Two Impact Fee Study Preparations |
| Impact Fee Cost | $1,973,948 | Impact Fee Cost including Study Prep. |
| 10-Year Growth in Service Units | 805 | Growth in Service Units, Table 3.1 |
| Maximum Wastewater Impact Fee w/ 50% Credit | $2452/SU | Impact fee cost divided by Service Units |

## IV. Roadway Impact Fee Analysis

### General

Roadway Impact Fees are assessed for the same reasons as wastewater impact fees, in order to generate supplemental funding for CIP projects to address capacity requirements associated with new development. Though the service units used for calculating the roadway impact fees are different than the service units for wastewater impact fees, the general methods are the same. Both the wastewater and the roadway service unit increases are based upon projected population increases.

### Roadway Service Units

Roadway service units are based upon the peak hour trip generation of the population base and other demographics within the service area such as commercial buildings, schools, churches, and government buildings. The previous roadway impact fee report developed in May 2010 by Freese & Nichols utilized a Vehicle-Mile Service Unit method that accounts for the peak hour volume over the average travel length of the trip, commonly called the trip length. The 2010 report provided a table establishing service unit factors used to compute peak hour vehicle mile trip generation for various land uses. The Town has been using this table to compute impact fees for associate land uses. Table 4.1 shows the land use designations and the service unit factors that the Town uses. This 2020 report will continue to use this table and methodology.

Table 4.2 shows the estimated peak hour trip generation for both existing conditions and future additions using the quantities for each land use and the associated service unit factor taken from Table 4.1.

Single family quantities were estimated using the population data previously described. Commercial, Post Office, Town Hall, and Church quantities were based upon a square foot estimate of floor space for each land use. School quantities are based upon staff and student attendance. The total existing peak hour vehicle-mile trip generation calculated was 6838. The estimated future additional vehicle-mile trip generation is 3016. This represents a 44 % increase for the ten-year period. This also represents a 3.72 percent increase per year for the ten-year period.

### Existing Roadway Capacity

Roadway capacity is related to the Level of Service (LOS) desired. The more congested a given roadway the less desirable is its function or Level of Service. A free-flowing roadway is a LOS A while a highly congested roadway is LOS F. The existing capacity analysis shown in the 2010 study used LOS D to evaluate capacity. Table 4.3 shows the LOS D peak hour lane capacity for several types of roadway section that was included within the 2010 study. These values will be used to evaluate the current capacity of the roadways.

Each year the Town conducts 24-hour traffic counts for the major roadways within the Town limits. The traffic counts have been conducted since 2000 and provide useful information related to traffic flow and roadway capacity. Table 4.4 shows the traffic count data from 2008 through 2018 and the results of the capacity evaluation. Refer to Figure 4.1 for roadway locations.

A factor is used to convert 24-hour traffic counts to estimated peak hour traffic volumes. The factor can range from about 8 to 12 percent of the 24-hour traffic count. For the purpose of this report an 11 percent factor was used. The table shows a general increase in traffic volumes within the Town. Crawford Road, C Taylor Road, Harpole Road at the high school, North Gibbons, Stonecrest Road and Old Justin Road have seen substantial increases in traffic. Table 4.4 shows that Crawford Road does not meet LOS D capacity.

**Roadway Capital Improvement Plan**

Figure 4.1 shows the existing major roadway system within the Town of Argyle. Figure 4.2 is the Thoroughfare Plan that shows the existing major roadways, proposed roadways, and proposed future typical road sections. A two-phase approach is proposed for roadway CIP projects. Phase One improvements would increase roadway capacity to LOS D or better. Phase Two improvements would be consistent with the thoroughfare plan typical roadway sections and would provide LOS C capacity or better. Most likely the Phase Two projects will be well into the future due to the cost and capacity needs. Figure 4.3 shows the proposed Phase One CIP projects and Table 4.5 provides a summary of the CIP project costs including the impact fee eligible cost. Table 4.18 shows the estimated increase in lane capacity due to the Phase One roadway CIP projects. The estimated roadway capacity with the improvements is 15299. The increases in roadway capacity for Phase One improvements are attributed to constructing turn lanes and improving lane widths. A roundabout is also included in the Crawford Road CIP project to manage traffic flow from and to John Paine.

The following describes each one of the CIP projects:

- **Crawford Road Ph 1**– Table 4.6 – Project Cost: $ 3,463,600
  Crawford Road is currently a heavily travelled roadway that has seen over a 300 percent increase in use since 2012 based upon the annual trip counts taken by the Town each year. It is currently a narrow 2 lane road with no turn lanes. The road is designated as a Type B Minor Arterial. This a capacity building project that will provide turn lanes at intersections, a roundabout, and roadway widening.

- **Old Justin Road Ph 1**(IH 35 to Taylor) – Table 4.7 – Project Cost: $ 1,167,633
  Old Justin Road is currently a narrow 2 lane road that is designated as a Type B Minor Arterial. This a capacity building project that will provide turn lanes at intersections, and roadway widening.

- **Old Justin Road Ph 1** (C. Taylor Road to US HWY 377) – Table 4.8 – Project Cost: $ 4,212,189

Old Justin Road is currently a narrow 2 lane road that is designated as a Type E Rural Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **Hickory Hill Road Ph 1** (US HWY 377 to E. Hickory Ridge Cr.) – Table 4.9 – Project Cost: $ 2,025,020
  Hickory Hill Road is currently a narrow 2 lane road that is designated as a Type C Major Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **Hickory Hill Road Ph 1** (E. Hickory Ridge Cr. To Gibbon Road – Table 4.10 – Project Cost: $ 1,959,759
  Hickory Hill Road is currently a narrow 2 lane road that is designated as a Type E Rural Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **Sam Davis Road Ph 1** (IH 35 to Gateway Blvd) – Table 4.11 – Project Cost: $ 1,655,311
  Sam Davis Road is currently a narrow 2 lane road that is designated as a Type C Major Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **Harpole Road Ph 1** (US HWY 377 to Shadow Wood Dr.) – Table 4.12 – Project Cost: $ 1,550,690
  Harpole Road is currently a narrow 2 lane road that is designated as a Type D Minor Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **C. Taylor Road Ph 1** (Crawford to Old Justin Road) – Table 4.13 – Project Cost: $ 3,569,725
  Road is currently a narrow 2 lane road that is designated as a Type B Minor Arterial. This a capacity building project that will provide turn lanes at intersections and roadway widening.

- **Gateway Blvd Ph 1** (Old Justin Road to Sam Davis) – Table 4.14 – Project Cost: $ 3,724,518
  New two lane roadway with sufficient lane width, widened shoulders, and turn lanes at intersections.

- **Gateway Blvd Ph 1** (Sam Davis to FM 407) – Table 4.15 – Project Cost: $ 3,180,371
  New two lane roadway with sufficient lane width, widened shoulders, and turn lanes at intersections.

- **Gateway Blvd Ph 1** (FM 407 to Avalon Blvd) – Table 4.16 – Project Cost: $ 3,199,080
  New two lane roadway with sufficient lane width, widened shoulders, and turn lanes at intersections.

- **Gibbons Road Ph 1** (Hickory Hill to FM 407) – Table 4.17 – Project Cost: $ 3,557,106 Road is currently a narrow 2 lane road that is designated as a Type E Rural Collector. This a capacity building project that will provide turn lanes at intersections and roadway widening.

**Maximum Roadway Impact Fee**

According to Chapter 395 of the Texas Local Government Code the Maximum Assessable Roadway Impact Fee cost per service unit is calculated by dividing the total CIP cost associated with the capacity needs of new development by the anticipated increase in service units based upon the service area, land use assumptions, and Thoroughfare plan. A credit also is required to account for Ad Valorem Taxes. The credit is 50% of the calculated Maximum Assessable Roadway Impact Fee.

As shown in Table 4.5, the total CIP project cost is $33,265,002. Considering a fifty percent credit, the eligible CIP project cost is $16,632,501. Of this eligible CIP project cost, only the project cost attributable to the ten-year growth period can be used, ie improvements needed for the amount of growth. The amount of growth over the ten-year period is 3016 units. The total estimated capacity resulting with the CIP improvements is 15,299 units. The ten-year growth equals to 19.7 percent of the overall developed capacity. Of the eligible CIP project cost, 19.7 percent of the cost can be used to compute the impact fee.

The following show the calculations:

| **Roadway Impact Fee Calculation** | | **Reference** |
|---|---|---|
| Eligible Capital Improvement Cost w 50% Credit | $16,632,501 | Eligible cost w/ credit, Table 4.5 |
| Finance Cost | $ 7,986,600 | 4 percent per year for 10 years |
| Total CIP Eligible Cost | $24,616,101 | Eligible cost including financing |
| Program Cost Attributed to Growth | $ 4,852,746 | = Percent of Capacity x Eligible cost |
| Impact Fee Preparation | $ 70,000 | Two Impact Fee Study Preparations |
| Impact Fee Cost | $ 4,922,746 | Impact Fee Cost including Study Prep. |
| 10-Year Growth in Service Units | 3016 | Growth in Service Units, Table 4.2 |
| Estimated Capacity with CIP and System | 15,299 | Table 4.17 |
| Percent of Capacity Attributed to Growth | 19.7 | Service unit growth divided by capacity |
| Maximum Roadway Impact Fee w/ 50% Credit | $1632/SU | Impact fee cost divided by Service Units |

# TABLES

**TABLE 2.1**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Current Impact Fees**

## WASTEWATER

| Service Unit | Impact Fee Per Unit | Percent Of Maximum | |
|---|---|---|---|
| SFE | $2,914 | 50 | |
| SFE = Single Family Equivalent (3/4 Inch Water Meter) | | | |
| **Meter Size** | **Service Unit Equivalents** | **Impact Fee** | |
| 3/4" | 1 | $2,914.00 | |
| 1" | 2.7 | $7,867.80 | |
| 11/2" | 3.3 | $9,616.20 | |
| 2" | 10.7 | $31,179.80 | |
| 3" | 23.3 | $67,896.20 | |
| 4" | 40 | $116,560.00 | |

**ROADWAY:**

| Service Unit | USE | Impact Fee | Percent Of Maximum |
|---|---|---|---|
| VMT | Residential | $801.28 | 33.6 |
| VMT | Non-Resident | $595.50 | 25 |
| VMT = Vehicle-Mile-Trip | | | |
| **Category** | **Land Use** | **Unit** | **Service Unit Factor (VM/Unit)** |
| **Residential** | Single Family | DU | 3.12 |
| | Apt/Townhouse | DU | 1.76 |
| | Retirement Community | 0 | 0.71 |
| | Independent Sr Living | DU | 0.66 |
| | | | |
| | Others not specified | DU | 3.12 |
| | | | |

| | | | |
|---|---|---|---|
| **Office** | | | |
| | General Office | 1000 GFA | 4.60 |
| | Corporate Headquarters | 1000 GFA | 4.33 |
| | Medical-Dental | 1000 GFA | 13.32 |
| | U.S. Post Office | 1000 GFA | 12.37 |
| | Business Park | 1000 GFA | 4.12 |
| | Research & Development | 1000 GFA | 3.45 |
| | Others not specified | 1000 GFA | 4.60 |
| | | | |
| **Commercial** | | | |
| | Retail/shopping center | 1000 GFA | 4.50 |
| | Quality restaurant | 1000 GFA | 6.23 |
| | Fast Food with drive thru | 1000 GFA | 17.38 |
| | High turnover restaurant | 1000 GFA | 8.08 |
| | Gas Station w/ convenience | 1000 GFA | 9.96 |
| | Convenience market w/gas | 1000 GFA | 6.11 |
| | Convenience market | 1000 GFA | 5.28 |
| | Grocery/supermarket | 1000 GFA | 5.55 |
| | Discount club | 1000 GFA | 3.81 |
| | Auto sales | 1000 GFA | 3.36 |
| | Video rental store | 1000 GFA | 4.59 |
| | Bank | 1000 GFA | 15.44 |
| | Pharmacy-Drug /w Drive | 1000 GFA | 1.64 |
| | Apparel store | 1000 GFA | 2.22 |
| | Movie theater | Screens | 18.20 |
| | Furniture store | 1000 GFA | 0.37 |
| | Home Improvement Super Store | 1000 GFA | 2.16 |
| | Hardware/paint store | 1000 GFA | 2.68 |
| | Building materals/lumber store | 1000 GFA | 2.49 |
| | Nusery(garden center) | 1000 GFA | 2.09 |
| | Nursery (wholesale) | 1000 GFA | 1.75 |
| | Hotel | Rooms | 1.16 |
| | Motel | Rooms | 0.93 |
| | All suites hote | Rooms | 1.08 |
| | Auto care center | 1000 GFA | 3.13 |

| | | | |
|---|---|---|---|
| | Quick Lube shop | 1000 GFA | 3.11 |
| | Auto parts sales | 1000 GFA | 3.58 |
| | Tire Superstore | 1000 GFA | 3.86 |
| | Wholesale tire store | 1000 GFA | 2.93 |
| | Mini-warehouse/self storage | 1000 GFA | 0.81 |
| | Others not specified | 1000 GFA | 4.50 |
| | | | |
| **Industrial** | | | |
| | General light industrial | 1000 GFA | 3.03 |
| | Manufacturing | 1000 GFA | 3.17 |
| | Industrial park | 1000 GFA | 3.39 |
| | Warehousing | 1000 GFA | 1.97 |
| | Others not specified | 1000 GFA | 3.03 |
| | | | |
| **Institutional** | | | |
| | Private school (K-12) | Students | 0.33 |
| | Junior/community college | Students | 0.24 |
| | University/college | Students | 1.64 |
| | Day care center | 1000 GFA | 2.33 |
| | Hospital | 1000 GFA | 2.80 |
| | Nursing home | Beds | 0.54 |
| | Assisted living center | Beds | 0.54 |
| | Place of worshi | 1000 GFA | 0.75 |

VM = Vehicle Mile
DU = Dwelling Unit
GFA = Gross Floor Area
GLA = Gross Leasable Area

**TABLE 2.2**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Impact Fee Comparison**

**Wastewater Impact Fees:**

| | 5/8" | 3/4" | 1" | 1-1/2" |
|---|---|---|---|---|
| **Town of Argyle (Existing)** | **$2,914.00** | **$2,914.00** | **$7,868.00** | **$9,616.18** |
| Town of Argyle 2010 Prop. Max | $2,914.00 | $2,914.00 | $7,868.00 | $9,616.18 |
| Flower Mound-Long Prairie District Residential | $2,436.00 | $3,645.00 | $6,090.00 | $12,180.00 |
| Flower Mound-Long Prairie District Non-Residential | $1,218.00 | $1,827.00 | $3,045.00 | $6,090.00 |
| Southlake | $2,609.00 | $3,914.00 | $6,523.00 | $13,045.00 |
| Northlake | $964.00 | $1,446.00 | $2,410.00 | $4,821.00 |
| Colleyville | $643.00 | $965.00 | $1,068.00 | $3,215.00 |
| Keller | $918.00 | $1,560.60 | $2,478.60 | $3,029.40 |
| Melissa | $398.67 | $598.00 | $996.67 | $1,993.33 |
| Prosper | $1,129.00 | $1,129.00 | $2,822.00 | $5,644.00 |

**Roadway Impact Fees:**

| | | Residential | General Office (Based on a 10,000 SQ FT building) | General Retail (Based on a 10,000 SQ FT building) |
|---|---|---|---|---|
| **Town of Argyle (Existing)** | | **$2,500.00** | **$27,393.00** | **$26,797.50** |
| Town of Argyle 2010 Prop. Max | | $3,715.92 | $54,786.00 | $53,595.00 |
| Town of Flower Mound-Service Area A | | $1,424.10 | $9,599.75 | $13,218.75 |
| Town of Flower Mound-Service Area B | | $3,714.78 | $24,949.10 | $34,419.95 |
| City of Southlake-North Service Area | | $2,292.00 | $25,610.00 | $48,300.00 |
| City of Southlake-South Service Area | | $1,640.00 | $18,330.00 | $34,560.00 |
| Northlake Zone 1 (NW) | | $6,094.10 | NA | $226,033.00 |
| Northlake Zone 2 (NE) | | $3,844.98 | NA | $142,623.00 |
| Northlake Zone 3 (SW) | | $691.60 | NA | $25,657.60 |
| Northlake Zone 4 (SE) | | $710.62 | NA | $26,632.50 |
| City of Colleyville Service Area 1 | | $4,941.00 | $7,790.00 | $7,790.00 |
| City of Colleyville Service Area 2 | | $4,941.00 | $21,580.00 | $2,158.00 |
| Keller Service Area 1 | | $2,999.19 | $24,922.00 | $24,922.00 |
| Keller Service Area 2 | | $2,451.00 | $18,416.30 | $18,416.30 |
| Melissa Service Area 1 | | $3,915.12 | $39,151.16 | $18,900.56 |
| Melissa Service Area 2 | | $3,775.48 | $37,754.80 | $28,571.20 |
| Prosper Area 1 | | $6,053.00 | $51,320.00 | $141,350.00 |
| Prosper Area 2 | | $4,589.00 | $38,910.00 | $107,160.00 |

**TABLE 2.3**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Future Landuse Designations**

| Designation | Density Residential | Density Commercial | % Residential | % Commercial | % Public |
|---|---|---|---|---|---|
| PD- Commercial Planned Development | 0 | > 0.7 F.A.R. | 0 | 95 | 5 |
| T5 - Regional Center | 5 - 6 DU/AC | >0.4 F.A.R. | 35 | 55 | 10 |
| T4 - Village Center | 5 - 6 DU/AC | >0.4 F.A.R. | 50 | 40 | 10 |
| T3A - Low Density Railroad Transition | 1 AC min | >0.35 F.A.R. | 75 | 10 | 15 |
| T3 - Low Density Transition | 1 AC min | >0.35 F.A.R. | 75 | 10 | 15 |
| T2 - Rural Residential | 5 AC/DU | | 95 | | 5 |
| T1 - Rural or Conservation Residential | 10 AC/DU | | 90 | | 10 |
| C1 - Rural Corridor | 10 AC/DU | | 90 | | 10 |
| C2 - Approach Corridor | < 1 DU/AC | | 90 | | 10 |
| C3 - Centers Corridor | 5 - 6 DU/AC | > 0.5 F.A.R. | 30 | 60 | 10 |

**TABLE 2.4**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Population Growth Projections**

| Year | Town Population | Growth Rate % |
|---|---|---|
| 2010 | 3282 | |
| 2011 | 3300 | 0.55 |
| 2012 | 3350 | 1.52 |
| 2013 | 3420 | 2.09 |
| 2014 | 3510 | 2.63 |
| 2015 | 3690 | 5.13 |
| 2016 | 3820 | 3.52 |
| 2017 | 3920 | 2.62 |
| 2018 | 4040 | 3.06 |
| 2019 | 4170 | 3.22 |
| Average | | 2.43 |
| Average Last 5 years | | 3.51 |
| | | |

**Proposed Growth Projection Determination**

| | |
|---|---|
| Approximate Lots Developed - 2019 | 478 |
| Population From Lots Over 5 Years (3 persons/lot) | 1434 |
| Growth Per Year First 5 Years (%/year) | 6.1 |
| Growth for Next 5 years (%/year) | 3.5 |
| Estimated 2030 Population | 6656 |
| Population Addition for 10-year Period | 2486 |
| Estimated Additional Lots for 10-year Period (3 persons/lot) | 829 |
| 85% Small Lot Requiring Sewer Service | 705 |
| 15% Large Lot w/ Onsite Sewer System | 124 |

**TABLE 3.1**
**TOWN OF ARGYLE**
**Wastewater Impact Fee Study**
**Wastewater Service Units For 2020-2030**

| Meter Size | 2020 Service Connections | 2020 Service Units | 2030 Projected Service Connections | 2030 Projected Service Units | Projected Growth In Service Units | % Increase |
|---|---|---|---|---|---|---|
| 5/8" x 3/4" | 725 | 725 | 1430 | 1430 | 705 | 97 |
| 1" | 42 | 113 | 62 | 167 | 54 | 48 |
| Schools | | 78 | | 122 | 44 | 56 |
| Churches | | 5 | | 7 | 2 | 41 |
| Total | | 921 | | 1727 | 805 | 87 |

Notes:
1. 2020 School estimated service units based on Winter Maximum Average Water Demand. See Below
2. 2020 Churches estimated service units based on Winter Maximum Average Water Demand. See Below
3. Commercial (1") 2030 Service Connections estimate based on 2 Commercial/Retail businesses per year.
4. School 2030 Service Connection estimate based on 1 student per Singe Family Service Unit Increasee
5. Church 2030 Service Connection estimate based on 3.4 percent per year growth

**Service Unit Estimate for Schools and Churches**

| Schools | Existing Winter Avg. Max. Water Per Month | Existing Service Units Base on SFE |
|---|---|---|
| Argyle ISD | 374600 | 39 |
| Liberty Christian | 370900 | 39 |
| Churches | 44200 | 5 |

SFE = 320 Gallons per Day (GPD)

**TABLE 3.2**
**TOWN OF ARGYLE**
**Wastewater Impact Fee Study**
**Wastewater CIP Project Cost Summary**

| Project Name | Est. Project Cost | Current Utilization (%) | 2030 Utilization (%) | Cost | | |
|---|---|---|---|---|---|---|
| | | | | Current Development | 10 Year (2020-2030) | Eligible After 2030 |
| Crawford Road Wastewater Imp | $4,830,304 | 0 | 12 | $0 | $579,636 | $4,250,668 |
| Old Justin Road Wastewater Imp | $1,635,907 | 0 | 50 | $0 | $817,954 | $817,954 |
| Sam Davis Road Wastewater Imp | $333,144 | 0 | 20 | $0 | $66,629 | $266,515 |
| FM 407 Wastewater Imp | $715,669 | 0 | 100 | $0 | $715,669 | $0 |
| TRA Line Segment B Cost Participation | $803,950 | 2 | 30 | $16,079 | $241,185 | $546,686 |
| TRA Line C/D Oversize Capacity | $1,518,303 | 0 | 10 | $0 | $151,830 | $1,366,473 |
| Total | $9,837,277 | | | $16,079 | $2,572,903 | $7,248,295 |

## Table 3.3

# CONCEPTUAL OPINION OF PROBABLE COST

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number: ARG 19224**
**Client: Town of Argyle**
**Date: 2/21/2020**

**Project Name: Wastewater Impact Fee Study**

| ITEM NO. | DESCRIPTION OF ITEMS | QTY | UNIT | UNIT COST | TOTAL |
|---|---|---|---|---|---|
| | | | | | |
| | **Crawford Road Wastewater Improvements** | | | | |
| 1 | Surety Bonds | 1 | LS | $50,400.00 | $50,400 |
| 2 | Mobilization/Demobilization | 1 | LS | $126,000.00 | $126,000 |
| 3 | Erosion, Sedimendation, and Environmental Controls | 1 | LS | $10,000.00 | $10,000 |
| 4 | Barricades, Signs, and Traffic Control | 1 | LS | $10,000.00 | $10,000 |
| 5 | Project Signs | 2 | EA | $500.00 | $1,000 |
| 6 | 12" PVC Sewer Main | 8,550 | LF | $80.00 | $684,000 |
| 7 | 8" PVC Sewer Main | 1,100 | LF | $70.00 | $77,000 |
| 8 | 4" PVC Force Main | 2,150 | LF | $50.00 | $107,500 |
| 9 | 24" Bore and Casing under I-35W | 435 | LF | $400.00 | $174,000 |
| 10 | 12" RJDI Carrier Pipe | 435 | LF | $110.00 | $47,850 |
| 11 | 4' Diameter Standard Manhole | 28 | EA | $6,000.00 | $168,000 |
| 12 | Trench Safety | 11,800 | LF | $3.00 | $35,400 |
| 13 | Lift Station | 1 | LS | $650,000.00 | $650,000 |
| 14 | Asphalt Surface Restoration | 500 | SY | $60.00 | $30,000 |
| 15 | Gravel Surface Restoration | 6,500 | SY | $8.00 | $52,000 |
| 16 | Hydroseed Surface restoration | 26,000 | SY | $2.00 | $52,000 |
| | **Subtotal Crawford Road Wastewater Improvements** | | | | **$2,275,150** |
| | **20% Contingency** | | | | **$455,030** |
| | **Total Construction** | | | | **$2,730,180** |
| | **Design Engineering (~10%)** | | | | **$273,000** |
| | **Design Survey (~2%)** | | | | **$55,000** |
| | **Lift Station Property Acquisition** | | | | **$125,000** |
| | **Easements** | **40,000** | **SF** | **$2.00** | **$80,000** |
| | **Grand Total** | | | | **$3,263,180** |
| | **10 Year Projected Cost @ 4%** | | | | **$4,830,304** |
| | | | | | |
| | | | | | |
| | **Old Justin Road Wastewater Improvements** | | | | |
| 1 | Surety Bonds | 1 | LS | $16,100.00 | $16,100 |
| 2 | Mobilization/Demobilization | 1 | LS | $40,000.00 | $40,000 |
| 3 | Erosion, Sedimendation, and Environmental Controls | 1 | LS | $5,000.00 | $5,000 |
| 4 | Barricades, Signs, and Traffic Control | 1 | LS | $5,000.00 | $5,000 |
| 5 | Project Signs | 2 | EA | $500.00 | $1,000 |
| 6 | 8" PVC Sewer Main | 6,400 | LF | $70.00 | $448,000 |
| 7 | 4' Diameter Standard Manhole | 15 | EA | $6,000.00 | $90,000 |
| 8 | Trench Safety | 6,400 | LF | $3.00 | $19,200 |
| 9 | Asphalt Surface Restoration | 300 | SY | $60.00 | $18,000 |
| 10 | Gravel Surface Restoration | 7,000 | SY | $8.00 | $56,000 |
| 11 | Hydroseed Surface restoration | 14,000 | SY | $2.00 | $28,000 |
| | **Subtotal Old Justin Road Wastewater Improvements** | | | | **$726,300** |
| | **20% Contingency** | | | | **$145,260** |
| | **Total Construction** | | | | **$871,560** |
| | **Design Engineering (~10%)** | | | | **$87,000** |
| | **Design Survey (~2%)** | | | | **$17,000** |
| | **Easements** | **64,800** | **SF** | **$2.00** | **$129,600** |
| | **Grand Total** | | | | **$1,105,160** |
| | **10 Year Projected Cost @ 4%** | | | | **$1,635,907** |

## Table 3.3

# CONCEPTUAL OPINION OF PROBABLE COST

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number: ARG 19224**
**Client: Town of Argyle**
**Date: 2/21/2020**

**Project Name: Wastewater Impact Fee Study**

| ITEM NO. | DESCRIPTION OF ITEMS | QTY | UNIT | UNIT COST | TOTAL |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | **Sam Davis Road Wastewater Improvements** | | | | |
| 1 | Surety Bonds | 1 | LS | $3,700.00 | $3,700 |
| 2 | Mobilization/Demobilization | 1 | LS | $9,300.00 | $9,300 |
| 3 | Erosion, Sedimendation, and Environmental Controls | 1 | LS | $2,500.00 | $2,500 |
| 4 | Barricades, Signs, and Traffic Control | 1 | LS | $2,500.00 | $2,500 |
| 5 | Project Signs | 1 | EA | $500.00 | $500 |
| 6 | 8" PVC Sewer Main | 1,450 | LF | $70.00 | $101,500 |
| 7 | 4' Diameter Standard Manhole | 3 | EA | $6,000.00 | $18,000 |
| 8 | Trench Safety | 1,450 | LF | $3.00 | $4,350 |
| 9 | Asphalt Surface Restoration | 100 | SY | $60.00 | $6,000 |
| 10 | Gravel Surface Restoration | 1,600 | SY | $8.00 | $12,800 |
| 11 | Hydroseed Surface restoration | 3,200 | SY | $2.00 | $6,400 |
| | **Subtotal Sam Davis Road Wastewater Improvements** | | | | **$167,550** |
| | **20% Contingency** | | | | **$33,510** |
| | **Total Construction** | | | | **$201,060** |
| | **Design Engineering (~10%)** | | | | **$20,000** |
| | **Design Survey (~2%)** | | | | **$4,000** |
| | **Easements** | **0** | **SF** | **$2.00** | **$0** |
| | **Grand Total** | | | | **$225,060** |
| | **10 Year Projected Cost @ 4%** | | | | **$333,144** |
| | | | | | |
| | | | | | |
| | **F.M. 407 Wastewater Improvements** | | | | |
| 1 | Surety Bonds | 1 | LS | $6,700.00 | $6,700 |
| 2 | Mobilization/Demobilization | 1 | LS | $16,600.00 | $16,600 |
| 3 | Erosion, Sedimendation, and Environmental Controls | 1 | LS | $8,000.00 | $8,000 |
| 4 | Barricades, Signs, and Traffic Control | 1 | LS | $8,000.00 | $8,000 |
| 5 | Project Signs | 2 | EA | $500.00 | $1,000 |
| 6 | 8" PVC Sewer Main | 2,500 | LF | $70.00 | $175,000 |
| 7 | 4' Diameter Standard Manhole | 5 | EA | $6,000.00 | $30,000 |
| 8 | Trench Safety | 2,500 | LF | $3.00 | $7,500 |
| 9 | Asphalt Surface Restoration | 300 | SY | $60.00 | $18,000 |
| 10 | Gravel Surface Restoration | 2,300 | SY | $8.00 | $18,400 |
| 11 | Hydroseed Surface restoration | 5,600 | SY | $2.00 | $11,200 |
| | **Subtotal F.M. 407 Wastewater Improvements** | | | | **$300,400** |
| | **20% Contingency** | | | | **$60,080** |
| | **Total Construction** | | | | **$360,480** |
| | **Design Engineering (~10%)** | | | | **$36,000** |
| | **Design Survey (~2%)** | | | | **$7,000** |
| | **Easements** | **40,000** | **SF** | **$2.00** | **$80,000** |
| | **Grand Total** | | | | **$483,480** |
| | **10 Year Projected Cost @ 4%** | | | | **$715,669** |
| | | | | | |

**TABLE 3.4**
**TOWN OF ARGYLE**
**Wastewater Impact Fee Study**
**Wastewater System Capacity**

**DENTON GRAVEYARD LINE:**
**Agreement Capacity - 1600 SFE**
**Additional Capacity Available - 560 SFE**
**SFE = 320 GPD**

| | No. Days | Metered Flow (MG) | Graveyard Line No. Customers | Average GPD | SFE | 1600 SFE Available Capacity | % Capacity Remaining |
|---|---|---|---|---|---|---|---|
| **FY19** | | | | | | | |
| 08/31/2019-09/30/2019 | 30 | 4.244 | 775 | 141467 | 442 | 1158 | 72 |
| 07/31/2019-08/31/2019 | 30 | 4.79 | 760 | 159667 | 499 | 1101 | 69 |
| 06/29/2019-7/31/2019 | 33 | 3.781 | 748 | 114576 | 358 | 1242 | 78 |
| 05/31/2019-06/28/2019 | 28 | 3.982 | 739 | 142214 | 444 | 1156 | 72 |
| 04/30/2019-05/31/2019 | 31 | 8.5240 | 748 | 274968 | 859 | 741 | 46 |
| 03/29/2019-04/30/2019 | 32 | 4.4420 | 748 | 138813 | 434 | 1166 | 73 |
| 02/28/2019-03/29/2019 | 29 | 5.5110 | 747 | 190034 | 594 | 1006 | 63 |
| 01/30/2019 to 02/28/2019 | 28 | 6.2556 | 746 | 223414 | 698 | 902 | 56 |
| 12/31/2018 to 01/31/2019 | 31 | 5.7470 | 747 | 185387 | 579 | 1021 | 64 |
| 11/30/2018 to 12/31/2018 | 31 | 5.1770 | 737 | 167000 | 522 | 1078 | 67 |
| 10/30/2018 to 11/30/2018 | 30 | 5.7000 | | 190000 | 594 | 1006 | 63 |
| 09/28/2018 to 10/31/2018 | 33 | 7.1850 | 727 | 217727 | 680 | 920 | 57 |
| Total | | 65.3386 | | 179010 | 559 | 1041 | 65 |
| | | | | | | | |
| **FY18** | | | | | | | |
| 08/31/2018 to 09/30/2018 | 28 | 5.2950 | 722 | 189107 | 591 | 1009 | 63 |
| 07/31/2018 to 08/31/2018 | 31 | 4.4510 | 726 | 143581 | 449 | 1151 | 72 |
| 06/29/2018 to 07/31/2018 | 32 | 3.6060 | 714 | 112688 | 352 | 1248 | 78 |
| 05/31/2018 to 06/29/2018 | 29 | 3.5510 | 711 | 122448 | 383 | 1217 | 76 |
| 04/30/2018 to 05/31/2018 | 31 | 4.9490 | 713 | 159645 | 499 | 1101 | 69 |
| 03/30/2018 to 04/30/2018 | 31 | 4.0920 | 704 | 132000 | 413 | 1188 | 74 |
| 02/28/2018 to 03/30/2018 | 30 | 4.8230 | 707 | 160767 | 502 | 1098 | 69 |
| 01/31/2018 to 02/28/2018 | 28 | 5.0840 | 703 | 181571 | 567 | 1033 | 65 |
| 12/29/2017 to 01/31/2018 | 33 | 4.4810 | 700 | 135788 | 424 | 1176 | 73 |
| 11/30/2017 to 12/29/2017 | 29 | 3.9600 | 692 | 136552 | 427 | 1173 | 73 |
| 10/30/2017 to 11/30/2017 | 30 | 3.9190 | 690 | 130633 | 408 | 1192 | 74 |
| 09/29/2017 to 10/31/2017 | 32 | 4.3050 | 681 | 134531 | 420 | 1180 | 74 |
| Total | | 52.5160 | | 143879 | 450 | 1150 | 72 |

| FY17 | | | | | | | |
|---|---|---|---|---|---|---|---|
| 08/31/2017 to 09/29/2017 | 29 | 3.7860 | 680 | 130552 | 408 | 1192 | 75 |
| 07/31/2017 to 08/31/2017 | 31 | 4.9880 | 677 | 160903 | 503 | 1097 | 69 |
| 06/30/2017 to 07/31/2017 | 31 | 3.7290 | 676 | 120290 | 376 | 1224 | 77 |
| 05/31/2017 to 06/30/2017 | 30 | 4.8780 | 667 | 162600 | 508 | 1092 | 68 |
| 04/28/2017 to 05/31/2017 | 33 | 4.5090 | 655 | 136636 | 427 | 1173 | 73 |
| 03/31/2017 to 04/28/2017 | 28 | 4.7940 | 650 | 171214 | 535 | 1065 | 67 |
| 02/28/2017 to 03/31/2017 | 31 | 4.1970 | 651 | 135387 | 423 | 1177 | 74 |
| 01/31/2017 to 02/28/2017 | 28 | 4.3580 | 637 | 155643 | 486 | 1114 | 70 |
| 12/30/2016 to 01/31/2017 | 32 | 4.3580 | 637 | 136188 | 426 | 1174 | 73 |
| 11/30/2016 to 12/30/2016 | 30 | 4.5100 | 635 | 150333 | 470 | 1130 | 71 |
| 10/31/2016 to 11/30/2016 | 30 | 5.0160 | 634 | 167200 | 523 | 1078 | 67 |
| 09/30/2016 to 10/31/2016 | 31 | 4.2480 | 634 | 137032 | 428 | 1172 | 73 |
| Total | | 53.3710 | | 146222 | 457 | 1143 | 71 |

**TRA LINE:**

**Agreement Capacity**

**Development Line Segment S-1 - 0.623 MGD, 973 LUE, 1946 SFE**

**TRA Line Segment B - 0.623 MGD, 973 LUE, 1946 SFE**

**TRA Line Segment C - 1.373 MGD, 1731 LUE, 3462 SFE**

**TRA Line Segment D - 1.373 MGD, 1731 LUE, 3462 SFE**

| FY19 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| February 2109 | 28 | 0.4000 | 2 | 14286 | 45 | 1901 | 98 |
| January 2019 | 31 | 0.2387 | 2 | 7700 | 24 | 1922 | 99 |
| December 2018 | 31 | 0.3657 | 2 | 11797 | 37 | 1909 | 98 |

**TABLE 4.1**
**TOWN OF ARGYLE**
**Wastewater and Roadway Impact Fee Study**
**Land Use Vehicle-Mile Equivalency**

| Category | Land Use | Unit | Service Unit Factor (VM/Unit) |
|---|---|---|---|
| **Residential** | | | |
| | Single Family | DU | 3.12 |
| | Apt/Townhouse | DU | 1.76 |
| | Retirement Community | DU | 0.71 |
| | Independent Sr Living | DU | 0.66 |
| | Others not specified | DU | 3.12 |
| | | | |
| **Office** | | | |
| | General Office | 1000 GFA | 4.60 |
| | Corporate Headquarters | 1000 GFA | 4.33 |
| | Medical-Dental | 1000 GFA | 13.32 |
| | U.S. Post Office | 1000 GFA | 12.37 |
| | Business Park | 1000 GFA | 4.12 |
| | Research & Development | 1000 GFA | 3.45 |
| | Others not specified | 1000 GFA | 4.60 |
| | | | |
| **Commercial** | | | |
| | Retail/shopping center | 1000 GFA | 4.50 |
| | Quality restaurant | 1000 GFA | 6.23 |
| | Fast Food with drive thru | 1000 GFA | 17.38 |
| | High turnover restaurant | 1000 GFA | 8.08 |
| | Gas Station w/ convenience | 1000 GFA | 9.96 |
| | Convenience market w/gas | 1000 GFA | 6.11 |
| | Convenience market | 1000 GFA | 5.28 |
| | Grocery/supermarket | 1000 GFA | 5.55 |
| | Discount club | 1000 GFA | 3.81 |
| | Auto sales | 1000 GFA | 3.36 |
| | Video rental store | 1000 GFA | 4.59 |
| | Bank | 1000 GFA | 15.44 |
| | Pharmacy-Drug /w Drive | 1000 GFA | 1.64 |
| | Apparel store | 1000 GFA | 2.22 |
| | Movie theater | Screens | 18.20 |
| | Furniture store | 1000 GFA | 0.37 |
| | Home Improvement Super Store | 1000 GFA | 2.16 |
| | Hardware/paint store | 1000 GFA | 2.68 |
| | Building materals/lumber store | 1000 GFA | 2.49 |
| | Nusery(garden center) | 1000 GFA | 2.09 |
| | Nursery (wholesale) | 1000 GFA | 1.75 |
| | Hotel | Rooms | 1.16 |

| | | | |
|---|---|---|---|
| | Motel | Rooms | 0.93 |
| | All suites hotel | Rooms | 1.08 |
| | Auto care center | 1000 GFA | 3.13 |
| | Quick Lube shop | 1000 GFA | 3.11 |
| | Auto parts sales | 1000 GFA | 3.58 |
| | Tire Superstore | 1000 GFA | 3.86 |
| | Wholesale tire store | 1000 GFA | 2.93 |
| | Mini-warehouse/self storage | 1000 GFA | 0.81 |
| | Others not specified | 1000 GFA | 4.50 |
| | | | |
| **Industrial** | | | |
| | General light industrial | 1000 GFA | 3.03 |
| | Manufacturing | 1000 GFA | 3.17 |
| | Industrial park | 1000 GFA | 3.39 |
| | Warehousing | 1000 GFA | 1.97 |
| | Others not specified | 1000 GFA | 3.03 |
| | | | |
| Institutional | | | |
| | Private school (K-12) | Students | 0.33 |
| | Junior/community college | Students | 0.24 |
| | University/college | Students | 1.64 |
| | Day care center | 1000 GFA | 2.33 |
| | Hospital | 1000 GFA | 2.80 |
| | Nursing home | Beds | 0.54 |
| | Assisted living center | Beds | 0.54 |
| | Place of worshi | 1000 GFA | 0.75 |

VM = Vehicle Mile
DU = Dwelling Unit
GFA = Gross Floor Area
GLA = Gross Leasable Area

**TABLE 4.2**
**TOWN OF ARGYLE**
**Roadway Impact Fee Study**
**Peak Hour Trip Generation**

| | Existing Condition | | | | Future Addition | | | |
|---|---|---|---|---|---|---|---|---|
| **Land Use** | **Units** | **Quantity** | **Table 4.1 Factor** | **Vehicle-Mile Trip Generation** | **Quantity** | **% Increase** | **Factor** | **Vehicle-Mile Trip Generation** |
| Single Family | | | | | | | | |
| Large Lot | DU | 734 | 3.12 | 2290 | 124 | 17 | 3.12 | 387 |
| Small Lot | DU | 725 | 3.12 | 2262 | 705 | 97 | 3.12 | 2200 |
| Commercial/Retail | Per/1000 SQ FT | 191.8 | 4.5 | 863 | 42 | 22 | 4.5 | 190 |
| Post Office | Per/1000 SQ FT | 6.1 | 12.37 | 75 | | | | 0 |
| City Hall | Per/1000 SQ FT | 12.1 | 4.6 | 56 | | | | 0 |
| Churches | Per/1000 SQ FT | 69.9 | 0.75 | 52 | 10 | 15 | 0.75 | 8 |
| Schools Argyle ISD | Persons | 3034 | 0.24 | 728 | 524 | 17 | 0.25 | 131 |
| Schools Liberty Christian | Persons | 1550 | 0.33 | 512 | 305 | 20 | 0.33 | 101 |
| **TOTAL** | | | | 6838 | | | | 3016 |
| Total 2030 Vehicle-Mile Trips | | | | | | | | 9854 |
| Total Trip Increase (%) | | | | | | | | 44 |
| Percent CIP Utilization | | | | | | | | 44 |
| Average Increase Per Year (%) | | | | | | | | 3.72 |

Notes:

1. Vehicle-Mile Trip Generation = Quantity * Table 4.1 Factor
2. Future Addition Single Family quantity from population increase distribution
3. Future Addition Commercial/Retail quantity = 22 percent growth in square footage
4. Future Addition Church quantity = 15 percent growth in Church square footage
5. Future Addition School quantity = 1 person for each new single family dwelling

**TABLE 4.3**
**TOWN OF ARGYLE**
**Roadway Impact Fee Study**
**LOS D Roadway Capacity**

| Roadway Facility | Roadway Designation | Vehicle per Hour per Lane -Mile |
|---|---|---|
| | | |
| Divided Arterial | DA | 625 |
| Undivided Arterial | UA | 600 |
| One-Way Roadway | OW | 625 |
| Divided Arterial (No Continuous Turn Lane) | SA | 625 |
| Divided Collector | DC | 500 |
| Undivided Collector | UC | 450 |

Hourly Capacities taken from 2010 Roadway Impact Fee Study by Freese & Nicho

**TABLE 4.4**
**TOWN OF ARGYLE**
**Roadway Impact Fee Study**
**Existing Roadway Capacity**

**Peak Hour Factor** **0.11**

| Street | Location | Length Miles | 2008 Count | 2009 Count | 2010 Count | 2011 Count | 2012 Count | 2013 Count | 2014 Count | 2015 Count | 2016 Count | 2017 Count | 2018 Count | 5 Year Average | Maximum Last 5 Year | 5 Year Average Peak Hour | Maximum Last 5 Year Peak Hour | LOS D PKHR /LANE | VMT Supply | VMT Demand | VMT Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crawford Rd | E. of L.S. #1 | 0.12 | 4235 | 5044 | 4269 | 4450 | 4558 | 4810 | 5410 | 5937 | 6864 | 7026 | 7705 | 6588 | 7705 | 725 | 848 | 450 | 108 | 102 | 6 |
| Crawford Rd | E. of C. Taylor Rd. | 1.31 | 1947 | 2488 | 2207 | 2676 | 3124 | 3375 | 1883 | 3411 | 4181 | 9058 | 9690 | 5645 | 9690 | 621 | 1066 | 450 | 1179 | 1396 | -217 |
| C Taylor | S. of Crawford | 0.95 | 570 | 532 | 505 | 571 | 578 | 790 | 737 | 583 | 619 | 646 | 1451 | 807 | 1451 | 89 | 160 | 450 | 855 | 152 | 703 |
| Country Club Rd | E. of 377 | 0.86 | 5057 | 5101 | 4789 | 3819 | 6193 | 4730 | 3949 | 4700 | 2942 | 4953 | 5712 | 4451 | 5712 | 490 | 628 | 450 | 774 | 540 | 234 |
| Denton(Hickory Hill) | W. of Mesquite | 1.5 | 1317 | 1360 | 1290 | 1912 | 1410 | 1239 | 1647 | 1415 | 1144 | 1246 | 1334 | 1357 | 1647 | 149 | 181 | 450 | 1350 | 272 | 1078 |
| Frenchtown | E. of Stonecrest/W. of Charyl | 0.11 | 1192 | 820 | 1182 | 1296 | 1523 | 1673 | 969 | 1556 | 1038 | 1555 | 2700 | 1564 | 2700 | 172 | 297 | 450 | 99 | 33 | 66 |
| Frenchtown | E. of 377 | 1.96 | 981 | 2580 | 2894 | 1738 | 1755 | 1675 | 1150 | 1895 | 2059 | 2011 | 1740 | 1771 | 2059 | 195 | 226 | 450 | 1764 | 444 | 1320 |
| Harpole | W. of Hwy 377 | 0.25 | 366 | 388 | 431 | 597 | 578 | 598 | 363 | 429 | 385 | 408 | 419 | 401 | 429 | 44 | 47 | 450 | 225 | 12 | 213 |
| Harpole | E. of 377 | 0.44 | 655 | 663 | 1060 | 1112 | 1199 | 921 | 920 | 1212 | 1096 | 968 | 923 | 1024 | 1212 | 113 | 133 | 450 | 396 | 59 | 337 |
| Harpole | E. of Shadowwood | 0.4 | 620 | 618 | 606 | 492 | 595 | 463 | 258 | 402 | 540 | 511 | 443 | 431 | 540 | 47 | 59 | 450 | 360 | 24 | 336 |
| Harpole | W. of S. Gibbons | 1.14 | 565 | 255 | 521 | 504 | 372 | 516 | 516 | 545 | 689 | 1510 | 424 | 737 | 1510 | 81 | 166 | 450 | 1026 | 189 | 837 |
| Harpole | E. of S. Gibbons | 0.8 | 430 | 354 | 631 | 539 | 394 | 385 | 426 | 508 | 571 | 790 | 464 | 552 | 790 | 61 | 87 | 450 | 720 | 70 | 650 |
| N Gibbons | N. of Harpole | 0.87 | 377 | 539 | 1182 | 776 | 603 | 732 | 350 | 497 | 954 | 584 | 1022 | 681 | 1022 | 75 | 112 | 450 | 783 | 98 | 685 |
| S Gibbons Road | N. of 407 | 0.45 | 368 | 422 | 1022 | 657 | 682 | 652 | 595 | 568 | 775 | 1225 | 1245 | 882 | 1245 | 97 | 137 | 450 | 405 | 62 | 343 |
| S Gibbons Road | N of Frenchtown | 0.47 | | | | | | | | | | | | | 1245 | | 137 | 450 | 423 | 64 | 359 |
| Old Justin | E. of C. Taylor | 1.52 | 457 | 306 | 424 | 414 | 408 | 416 | 550 | 525 | 519 | 594 | 748 | 587 | 748 | 65 | 82 | 450 | 1368 | 125 | 1243 |
| Old Justin Rd. | E. of W. Front | 0.29 | - | - | - | - | - | 1966 | 2155 | 2360 | 2500 | 2478 | 3173 | 2533 | 3173 | 279 | 349 | 450 | 261 | 101 | 160 |
| Sam Davis | E of I-35 | 0.41 | 73 | 68 | 50 | 56 | 78 | 74 | 72 | 78 | 72 | 113 | 148 | 97 | 148 | 11 | 16 | 450 | 369 | 7 | 362 |
| Sam Davis | W. of Stonecrest | 1.1 | 180 | 228 | 238 | 261 | 243 | 200 | 171 | 364 | 386 | 206 | 451 | 316 | 451 | 35 | 50 | 450 | 990 | 55 | 935 |
| Stonecrest | S. Harb/ N. Sam Davis | 0.19 | 295 | 245 | 272 | 350 | 406 | 395 | 229 | 391 | 436 | 677 | 530 | 453 | 677 | 50 | 74 | 450 | 171 | 14 | 157 |
| Stonecrest | N. of 407 | 0.54 | 346 | 301 | 289 | 327 | 400 | 340 | 266 | 386 | 363 | 401 | 977 | 479 | 977 | 53 | 107 | 450 | 486 | 58 | 428 |
| Stonecrest | S. of 407 | 0.38 | 814 | 801 | 1250 | 1024 | 1049 | 1103 | 568 | 1754 | 1774 | 2413 | 2511 | 1804 | 2511 | 198 | 276 | 450 | 342 | 105 | 237 |
| Stonecrest | S. of Frenchtown | 0.09 | 1378 | 833 | 1414 | 1540 | 1445 | 2043 | 1447 | 2591 | 1420 | 2288 | 2697 | 2089 | 2697 | 230 | 297 | 450 | 81 | 27 | 54 |
| Stonecrest | S. of Forest Trail | 0.81 | 934 | 493 | 1025 | 1274 | 1034 | 988 | 994 | 1653 | 1051 | 1450 | 1313 | 1292 | 1653 | 142 | 182 | 450 | 729 | 147 | 582 |
| Total | | 16.96 | | | | | | | | | | | | | | | | | 15264 | 4154 | 11110 |

**TABLE 4.5**
**TOWN OF ARGYLE**
**Roadway Impact Fee Study**
**Roadway CIP Project Cost Summary**

| Project Name | Phase 1 Estimated Project Cost | Phase 1 Maximum Eligible Cost |
|---|---|---|
| Crawford Road Ph 1 Imp | $3,463,600 | $1,731,800 |
| | | |
| Old Justin Road Ph 1 (IH 35 to Gateway) Imp | $1,167,633 | $583,817 |
| | | |
| Old Justin Road Ph 1 (Gateway to 377) Imp | $4,212,189 | $2,106,095 |
| | | |
| Hickory Hill Road Ph 1 (377 to E Hickory Ridge Cr) | $2,025,020 | $1,012,510 |
| | | |
| Hickory Hill Road Ph 1 (Hickory Ridge Cr to Gibbons) | $1,959,759 | $979,880 |
| | | |
| Sam Davis Road Ph 1 (IH 35 to Gateway) Imp | $1,655,311 | $827,656 |
| | | |
| Harpole Road Ph 1 Imp | $1,550,690 | $775,345 |
| | | |
| C. Taylor Road Ph 1 Imp | $3,569,725 | $1,784,863 |
| | | |
| Gateway Blvd Ph 1 (Old Justin Rd to Sam Davis) | $3,724,518 | $1,862,259 |
| | | |
| Gateway Blvd Ph 1 (Sam Davis to FM 407) | $3,180,371 | $1,590,186 |
| | | |
| Gateway Blvd Ph 1 (FM 407 to Avalon Blvd) | $3,199,080 | $1,599,540 |
| | | |
| Gibbons Road Ph 1 (Hickory Hill Rd to FM 407) Imp | $3,557,106 | $1,778,553 |
| | | |
| | | |
| Total | $33,265,002 | $16,632,501 |

# Roadway Impact Fees Summary Table

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number:** ARG 19224
**Client:** Town of Argyle
**Date:** 2020.02.21
**Project Name:** Impact Fee Study

| | |
|---|---|
| | |
| **Crawford Road** | |
| **Classification: Type B Minor Arterial** | |
| Project Length | **7,400 ft** |
| | |
| **Estimated Total Construction Cost** | **$2,818,600** |
| ROW Acquisition | $361,000 |
| Engineering (~7% of Construction Cost) | $210,000 |
| Design Survey (~2% of Construction Cost) | $54,000 |
| Geotechnical Engineering (~0.7% of Construction Cost) | $20,000 |
| **Total Capital Cost** | **$3,463,600** |
| Capital Cost per Linear Foot | $468.05 |
| Future Capital Cost (10 years @ 4%) | $5,126,974 |
| | |
| **Gateway Boulevard from Old Justin to Sam Davis - Phase I** | |
| **Classification: Type B Minor Arterial** | |
| Project Length | **3,950 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,288,440** |
| ROW Acquisition | $1,066,500 |
| Engineering (10% of Construction Cost) | $129,000 |
| Design Survey (2% of Construction Cost) | $25,769 |
| Geotechnical Engineering (0.5% of Construction Cost) | $6,442 |
| **Total Capital Cost** | **$2,516,151** |
| Capital Cost per Linear Foot | $637.00 |
| Future Capital Cost (10 years @ 4%) | $3,724,518 |
| | |
| **Gateway Boulevard from Sam Davis to F.M. 407 - Phase I** | |
| **Classification: Type B Minor Arterial** | |
| Project Length | **3,000 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,189,800** |
| ROW Acquisition | $810,000 |
| Engineering (10% of Construction Cost) | $119,000 |
| Design Survey (2% of Construction Cost) | $23,796 |
| Geotechnical Engineering (0.5% of Construction Cost) | $5,949 |
| **Total Capital Cost** | **$2,148,545** |
| Capital Cost per Linear Foot | $716.18 |
| Future Capital Cost (10 years @ 4%) | $3,180,371 |

# Roadway Impact Fees Summary Table

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number:** ARG 19224
**Client:** Town of Argyle
**Date:** 2020.02.21
**Project Name:** Impact Fee Study

| | |
|---|---|
| | |
| **Gateway Boulevard from F.M. 407 to Avalon Blvd - Phase I** | |
| **Barricades, Signs, and Traffic Control** | |
| Project Length | **2,800 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,248,960** |
| ROW Acquisition | $756,000 |
| Engineering (10% of Construction Cost) | $125,000 |
| Design Survey (2% of Construction Cost) | $24,979 |
| Geotechnical Engineering (0.5% of Construction Cost) | $6,245 |
| **Total Capital Cost** | **$2,161,184** |
| Capital Cost per Linear Foot | $771.85 |
| Future Capital Cost (10 years @ 4%) | $3,199,080 |
| | |
| **C. Taylor Road - Phase I** | |
| **Classification: Type B Minor Arterial** | |
| Project Length | **5,000 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,810,320** |
| ROW Acquisition | $375,000 |
| Engineering (10% of Construction Cost) | $181,000 |
| Design Survey (2% of Construction Cost) | $36,206 |
| Geotechnical Engineering (0.5% of Construction Cost) | $9,052 |
| **Total Capital Cost** | **$2,411,578** |
| Capital Cost per Linear Foot | $482.32 |
| Future Capital Cost (10 years @ 4%) | $3,569,725 |
| | |
| **Old Justin Rd west of Gateway Blvd - Phase I** | |
| **Classification: Type B Minor Arterial** | |
| Project Length | **1,550 ft** |
| | |
| **Estimated Total Construction Cost** | **$639,084** |
| ROW Acquisition | $69,750 |
| Engineering (10% of Construction Cost) | $64,000 |
| Design Survey (2% of Construction Cost) | $12,782 |
| Geotechnical Engineering (0.5% of Construction Cost) | $3,195 |
| **Total Capital Cost** | **$788,811** |
| Capital Cost per Linear Foot | $508.91 |
| Future Capital Cost (10 years @ 4%) | $1,167,633 |

# Roadway Impact Fees Summary Table

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number:** ARG 19224
**Client:** Town of Argyle
**Date:** 2020.02.21
**Project Name:** Impact Fee Study

| | |
|---|---|
| | |
| **Hickory Hill Road from US 377 to Hickory Ridge - Phase I** | |
| **Classification: Type C Major Collector** | |
| Project Length | **3,550 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,175,640** |
| ROW Acquisition | $45,000 |
| Engineering (10% of Construction Cost) | $118,000 |
| Design Survey (2% of Construction Cost) | $23,513 |
| Geotechnical Engineering (0.5% of Construction Cost) | $5,878 |
| **Total Capital Cost** | **$1,368,031** |
| Capital Cost per Linear Foot | $385.36 |
| Future Capital Cost (10 years @ 4%) | $2,025,020 |
| | |
| **Sam Davis West from I-35W to Gateway Blvd - Phase I** | |
| **Classification: Type C Major Collector** | |
| Project Length | **2,200 ft** |
| | |
| **Estimated Total Construction Cost** | **$905,628** |
| ROW Acquisition | $99,000 |
| Engineering (10% of Construction Cost) | $91,000 |
| Design Survey (2% of Construction Cost) | $18,113 |
| Geotechnical Engineering (0.5% of Construction Cost) | $4,528 |
| **Total Capital Cost** | **$1,118,269** |
| Capital Cost per Linear Foot | $508.30 |
| Future Capital Cost (10 years @ 4%) | $1,655,311 |
| | |
| **New Road near Corral City** | |
| **Classification: Type D Minor Collector** | |
| Project Length | **1,900 ft** |
| | |
| **Estimated Total Construction Cost** | **$523,512** |
| ROW Acquisition | $399,000 |
| Engineering (10% of Construction Cost) | $52,000 |
| Design Survey (2% of Construction Cost) | $10,470 |
| Geotechnical Engineering (0.5% of Construction Cost) | $2,618 |
| **Total Capital Cost** | **$987,600** |
| Capital Cost per Linear Foot | $519.79 |
| Future Capital Cost (10 years @ 4%) | $1,461,889 |

# Roadway Impact Fees Summary Table

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number:** ARG 19224
**Client:** Town of Argyle
**Date:** 2020.02.21
**Project Name:** Impact Fee Study

| | |
|---|---|
| | |
| **Harpole Road from U.S.377 to Shadow Wood Drive - Phase I** | |
| **Classification: Type D Minor Collector** | |
| Project Length | **2,300 ft** |
| | |
| **Estimated Total Construction Cost** | **$931,308** |
| ROW Acquisition | $0 |
| Engineering (10% of Construction Cost) | $93,000 |
| Design Survey (2% of Construction Cost) | $18,626 |
| Geotechnical Engineering (0.5% of Construction Cost) | $4,657 |
| **Total Capital Cost** | **$1,047,591** |
| Capital Cost per Linear Foot | $455.47 |
| Future Capital Cost (10 years @ 4%) | $1,550,690 |
| | |
| **Old Justin Rd east of Gateway Blvd to US 377 - Phase I** | |
| **Classification: Type E Rural Collector** | |
| Project Length | **7,950 ft** |
| | |
| **Estimated Total Construction Cost** | **$2,423,760** |
| ROW Acquisition | $119,250 |
| Engineering (10% of Construction Cost) | $242,000 |
| Design Survey (2% of Construction Cost) | $48,475 |
| Geotechnical Engineering (0.5% of Construction Cost) | $12,119 |
| **Total Capital Cost** | **$2,845,604** |
| Capital Cost per Linear Foot | $357.94 |
| Future Capital Cost (10 years @ 4%) | $4,212,189 |
| | |
| **Hickory Hill Road east of Hickory Ridge to Gibbons Road - Phase I** | |
| **Classification: Type E Rural Collector** | |
| Project Length | **4,350 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,060,920** |
| ROW Acquisition | $130,500 |
| Engineering (10% of Construction Cost) | $106,000 |
| Design Survey (2% of Construction Cost) | $21,218 |
| Geotechnical Engineering (0.5% of Construction Cost) | $5,305 |
| **Total Capital Cost** | **$1,323,943** |
| Capital Cost per Linear Foot | $304.35 |
| Future Capital Cost (10 years @ 4%) | $1,959,759 |

# Roadway Impact Fees Summary Table

**Teague Nall and Perkins, Inc.**
**Consulting Engineers**

**TNP Project Number:** ARG 19224
**Client:** Town of Argyle
**Date:** 2020.02.21
**Project Name:** Impact Fee Study

| | |
|---|---|
| | |
| **Gibbons Road from Hickory Hill Road to F.M. 407 - Phase I** | |
| **Classification: Type E Rural Collector** | |
| Project Length | **7,000 ft** |
| | |
| **Estimated Total Construction Cost** | **$1,855,662** |
| ROW Acquisition | $315,000 |
| Engineering (10% of Construction Cost) | $186,000 |
| Design Survey (2% of Construction Cost) | $37,113 |
| Geotechnical Engineering (0.5% of Construction Cost) | $9,278 |
| **Total Capital Cost** | **$2,403,054** |
| Capital Cost per Linear Foot | $343.29 |
| Future Capital Cost (10 years @ 4%) | $3,557,106 |

**TABLE 4.18**
**TOWN OF ARGYLE**
**Roadway Impact Fee Study**
**Proposed Phase 1 Roadway Capacity**

**Peak Hour Factor** **0.11**

| Street | Location | Length Miles | Estimated PKHR /LANE | VMT Supply | Existing VMT Demand | VMT Capacity |
|---|---|---|---|---|---|---|
| | | | | | | |
| Crawford Rd | IH 35 to 377 | 1.4 | 550 | 1540 | 1396 | 144 |
| C Taylor | S. of Crawford | 0.95 | 525 | 997.5 | 152 | 846 |
| Country Club Rd | E. of 377 | 0.86 | 450 | 774 | 540 | 234 |
| Denton(Hickory Hill) | W. of Mesquite | 1.5 | 525 | 1575 | 272 | 1303 |
| Frenchtown | E. of Stonecrest/W. of Charyl | 0.11 | 450 | 99 | 33 | 66 |
| Frenchtown | E. of 377 | 1.96 | 450 | 1764 | 444 | 1320 |
| Harpole | W. of Hwy 377 | 0.25 | 450 | 225 | 12 | 213 |
| Harpole | E. of 377 | 0.44 | 450 | 396 | 59 | 337 |
| Harpole | E. of Shadowwood | 0.4 | 525 | 420 | 24 | 396 |
| Harpole | W. of S. Gibbons | 1.14 | 450 | 1026 | 189 | 837 |
| Harpole | E. of S. Gibbons | 0.8 | 450 | 720 | 70 | 650 |
| N Gibbons | N. of Harpole | 0.87 | 525 | 913.5 | 98 | 816 |
| S Gibbons Road | N. of 407 | 0.45 | 525 | 472.5 | 62 | 411 |
| S Gibbons Road | N of Frenchtown | 0.47 | 450 | 423 | 64 | 359 |
| Old Justin | E. of C. Taylor | 1.52 | 525 | 1596 | 125 | 1471 |
| Old Justin Rd. | E. of W. Front | 0.29 | 525 | 304.5 | 101 | 204 |
| Sam Davis | W of Gateway | 0.41 | 450 | 369 | 7 | 362 |
| Sam Davis | W. of Stonecrest | 1.1 | 450 | 990 | 55 | 935 |
| Stonecrest | S. Harb/ N. Sam Davis | 0.19 | 450 | 171 | 14 | 157 |
| Stonecrest | N. of 407 | 0.54 | 450 | 486 | 58 | 428 |
| Stonecrest | S. of 407 | 0.38 | 450 | 342 | 105 | 237 |
| Stonecrest | S. of Frenchtown | 0.09 | 450 | 81 | 27 | 54 |
| Stonecrest | S. of Forest Trail | 0.81 | 450 | 729 | 147 | 582 |
| New Road | Near Corral City | 0.36 | 450 | 324 | 0 | 324 |
| Gateway | S of Old Justin Road | 2.49 | 525 | 2614.5 | 0 | 2615 |
| Total | | 19.78 | | 19352.5 | 4054 | 15299 |

# FIGURES

CRAWFORD RD.

COUNTRY CLUB RD.

INTERSTATE HWY 35W

C. TAYLOR RD.

OLD JUSTIN RD.

US HWY 377

HICKORY HILL RD.

HARPOLE RD.

SAM DAVIS RD.

STONECREST RD.

GIBBONS RD.

HARPOLE RD

F.M. 1830

F.M. 407

F.M. 407

GIBBONS RD.

F.M. 407

FRENCHTOWN RD.

CITY LIMIT LINE

US HWY 377

tnp

GRAPHIC SCALE
1250 0 625 1250 2500


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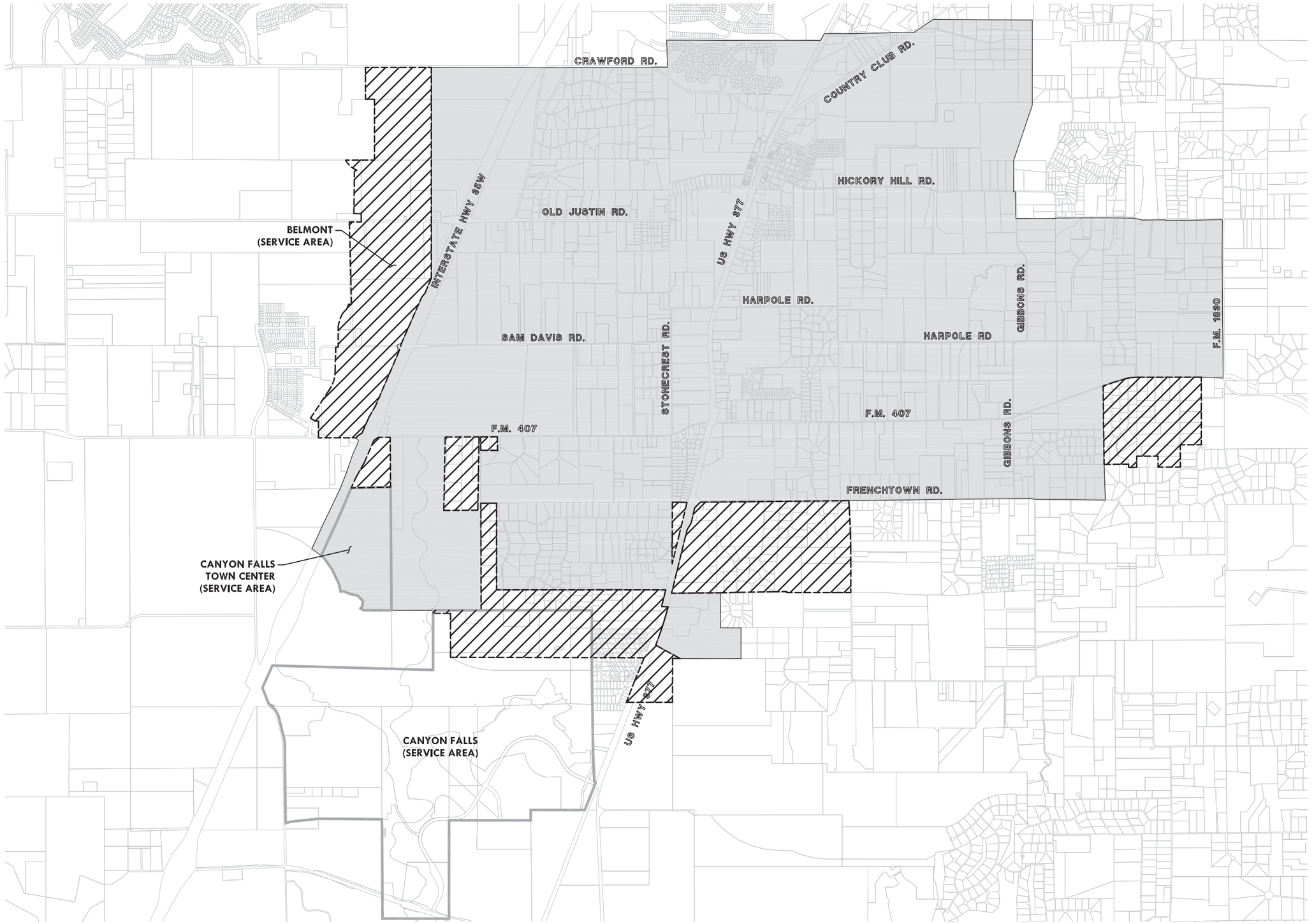
**FIGURE 2.1**
**Town of Argyle**
**Roadway System Impact Fees**
**Roadway Service Area Plan**


Drawing: Q:\PROJECTS\ARG1922A\cost\exhibits\Figure 2.1 Roadway Map.dwg at Nov 19, 2019-6:17pm by rharris
Layout: Layout1 Xrefs: 22x34 Exhibit Border.dwg




tnp

GRAPHIC SCALE
1500 0 750 1500 3000

CITY LIMITS

ETJ


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**FIGURE 2.2**
**Town of Argyle**
**Wastewater System Impact Fees**
**Wastewater Service Area Plan**

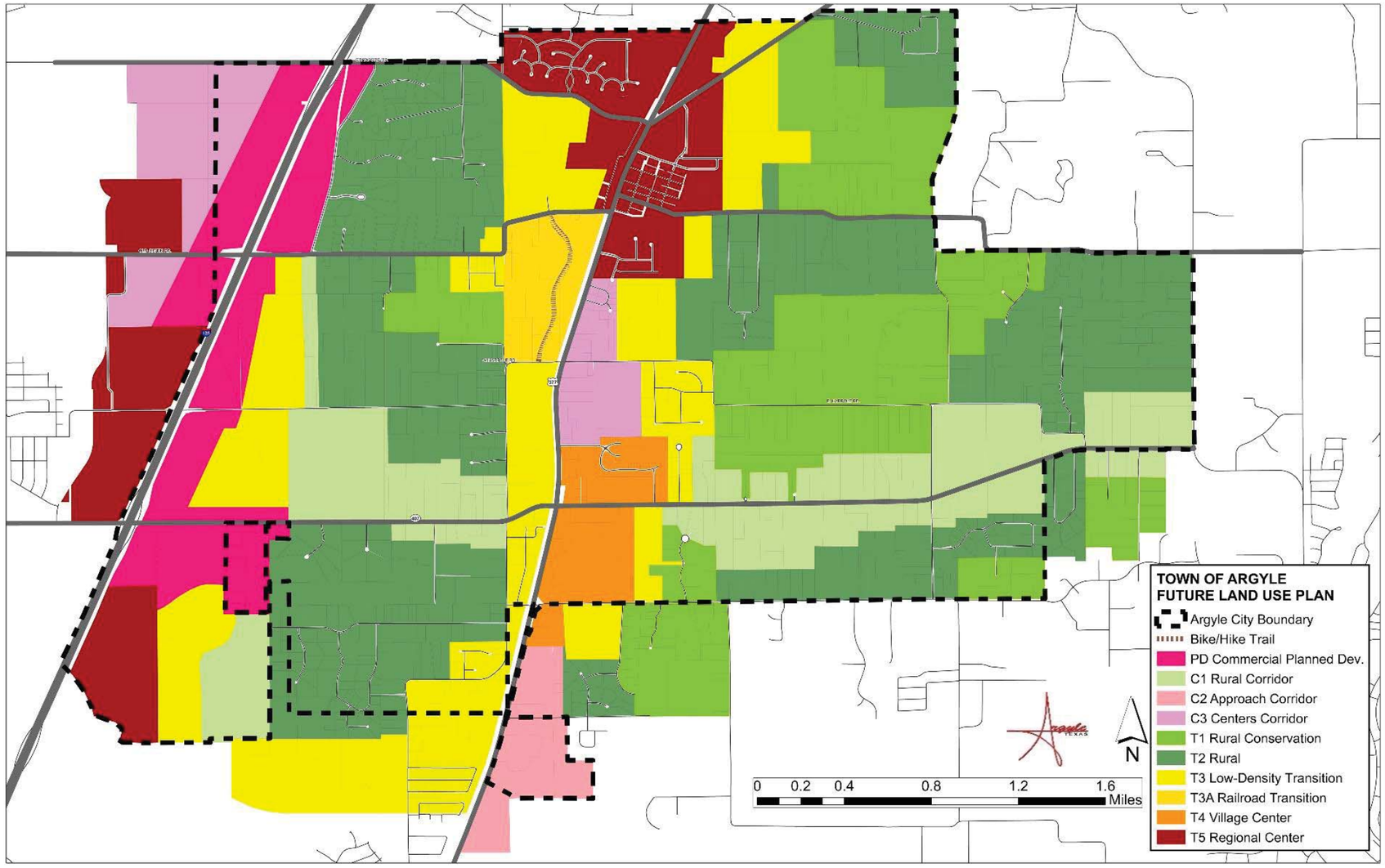


*Figure 1 Town of Argyle Future Land Use Plan*



**FIGURE 2.3**
**Town of Argyle**
**Wastewater and Roadway**
**Impact Fees**
**Future Land Use Plan**

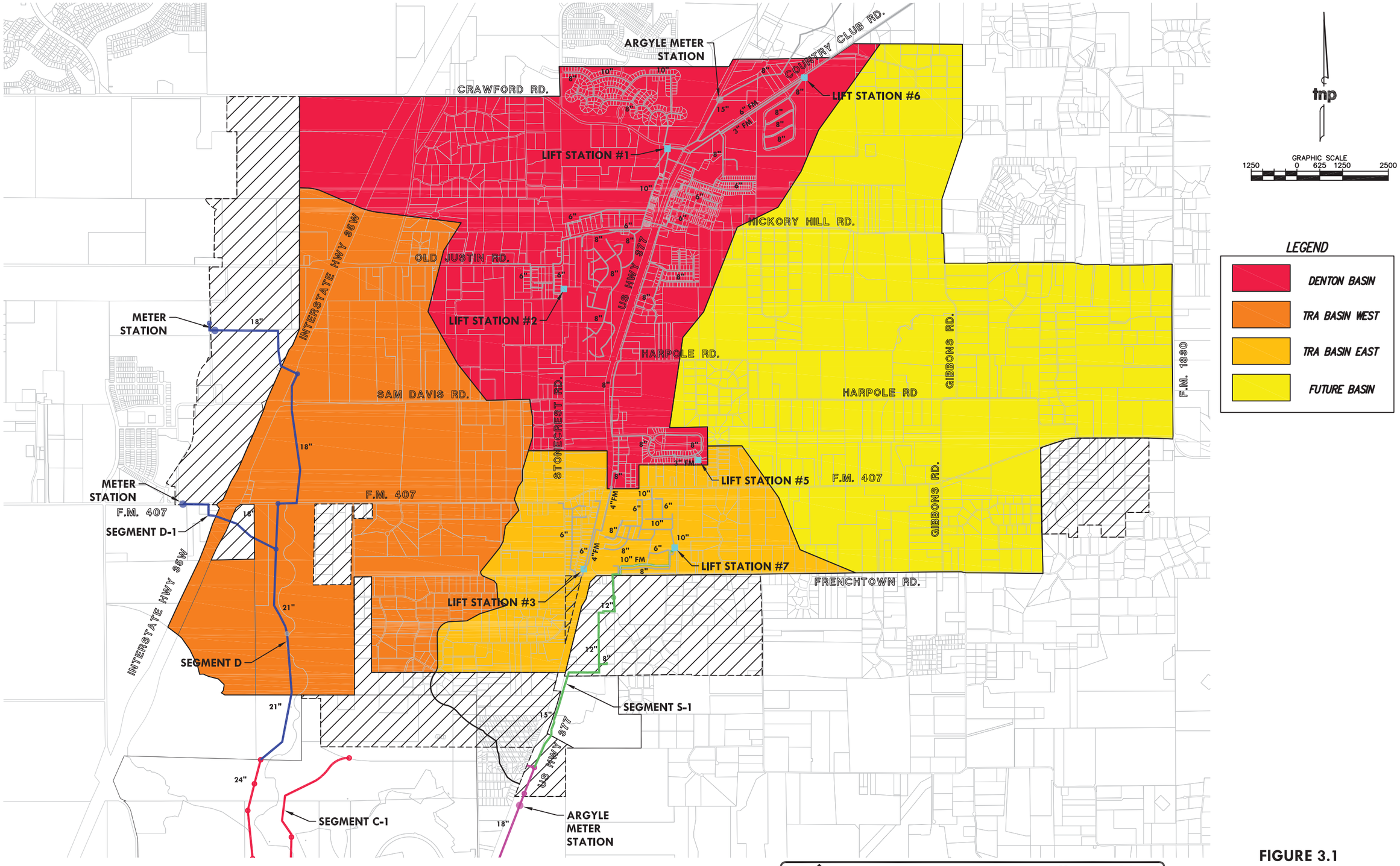


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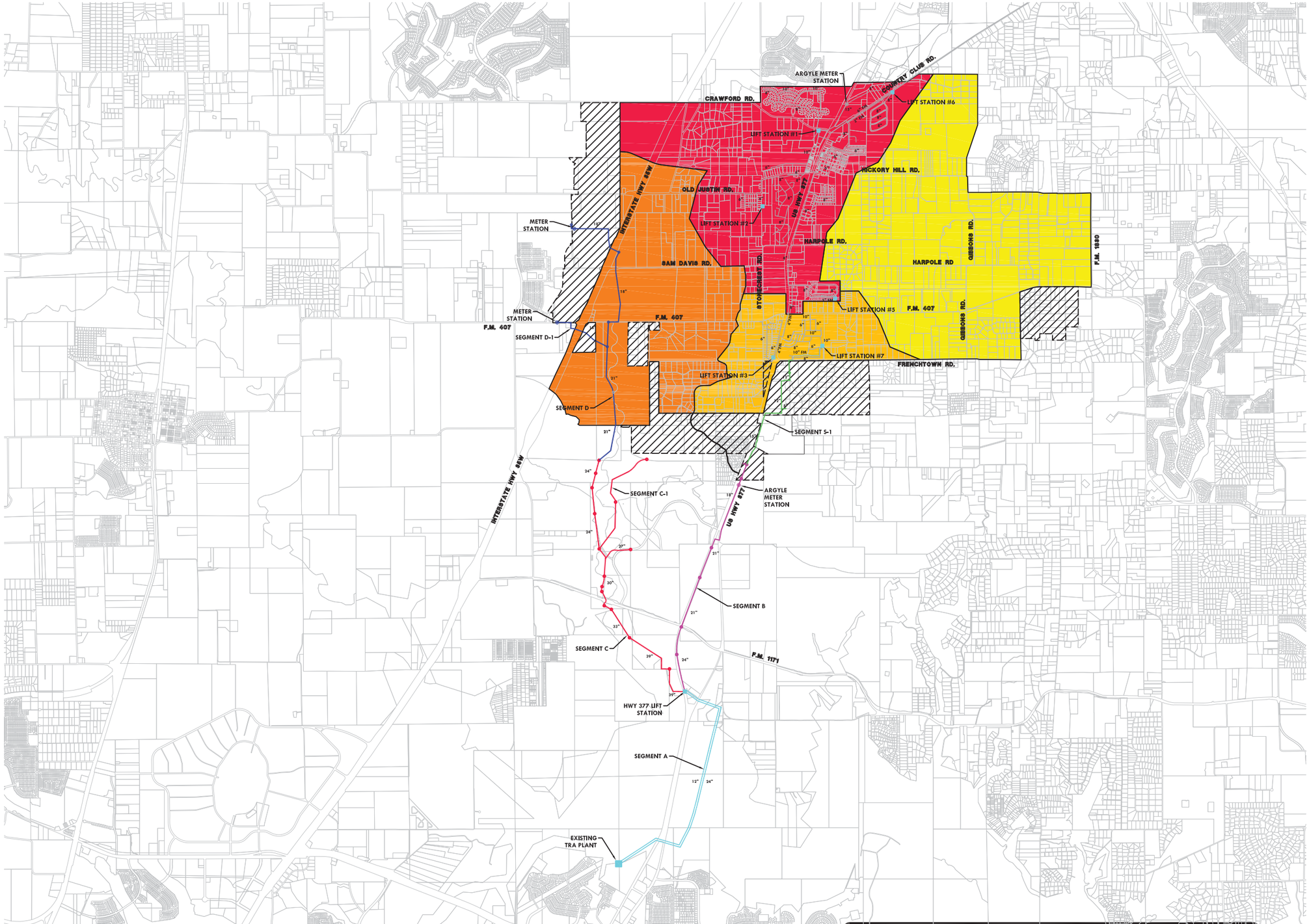
**FIGURE 3.1**
**Town of Argyle**
**Wastewater System Impact Fees**
**Existing Wastewater System Map**




tnp

GRAPHIC SCALE
2500 0 1250 2500 5000

## LEGEND

- DENTON BASIN
- TRA BASIN WEST
- TRA BASIN EAST
- FUTURE BASIN


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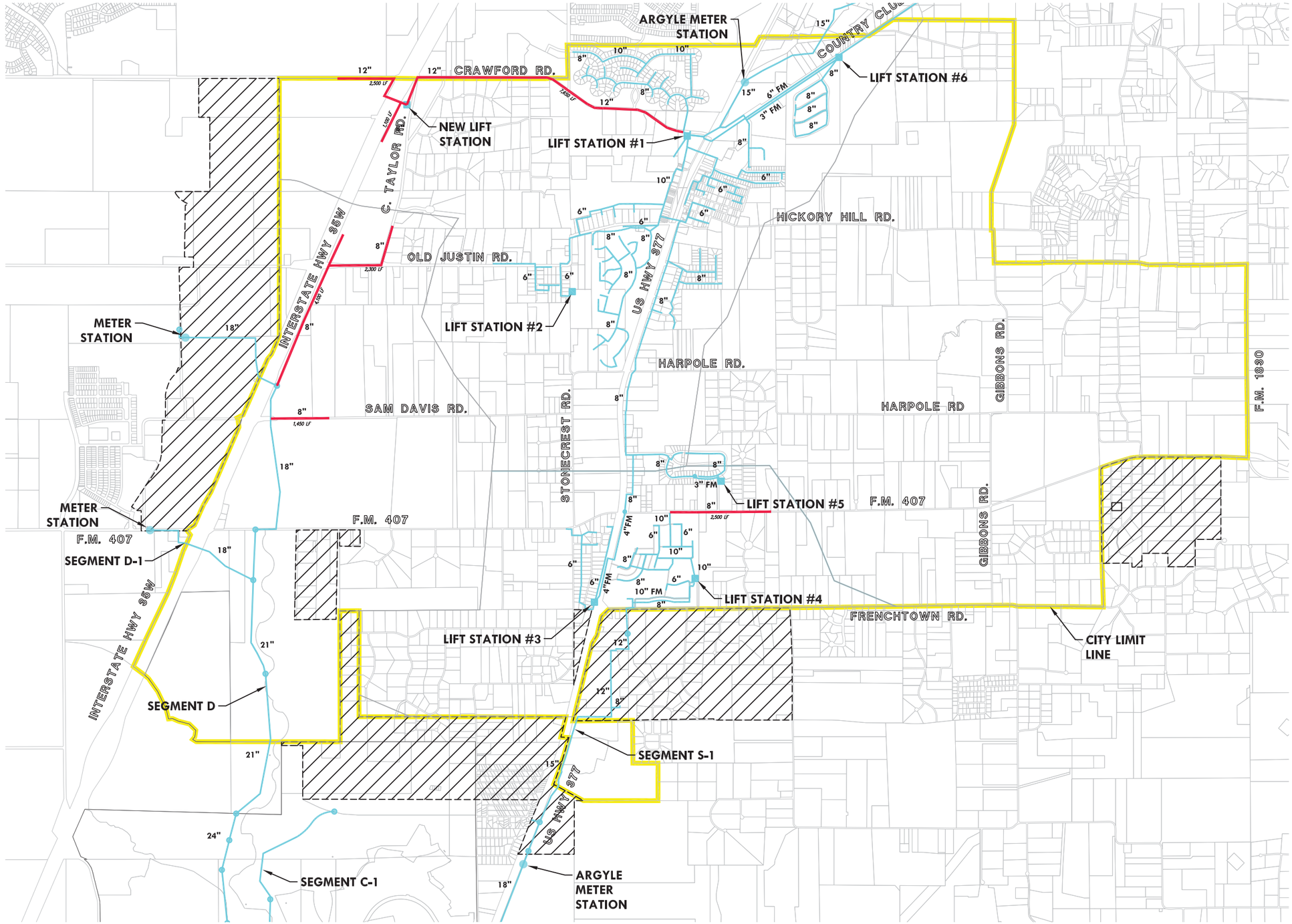
**FIGURE 3.2**
**Town of Argyle**
**Wastewater System Impact Fees**
**Overall Existing Wastewater System Map**




GRAPHIC SCALE
1250 0 625 1250 2500

**LEGEND**

- ETJ
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER


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**FIGURE 3.3**
**Town of Argyle**
**Wastewater System Impact Fees**
**Capitol Improvements Plan**

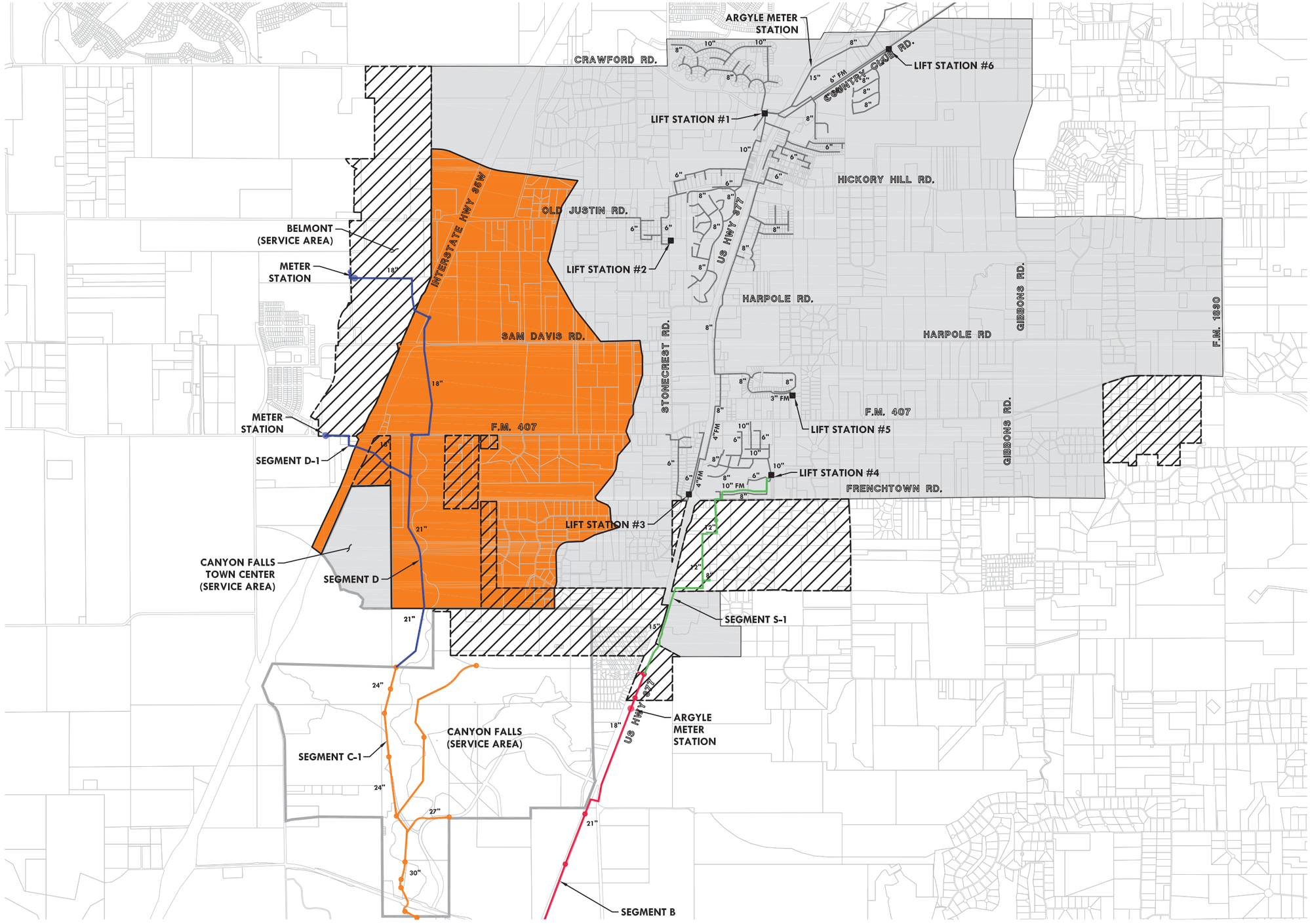


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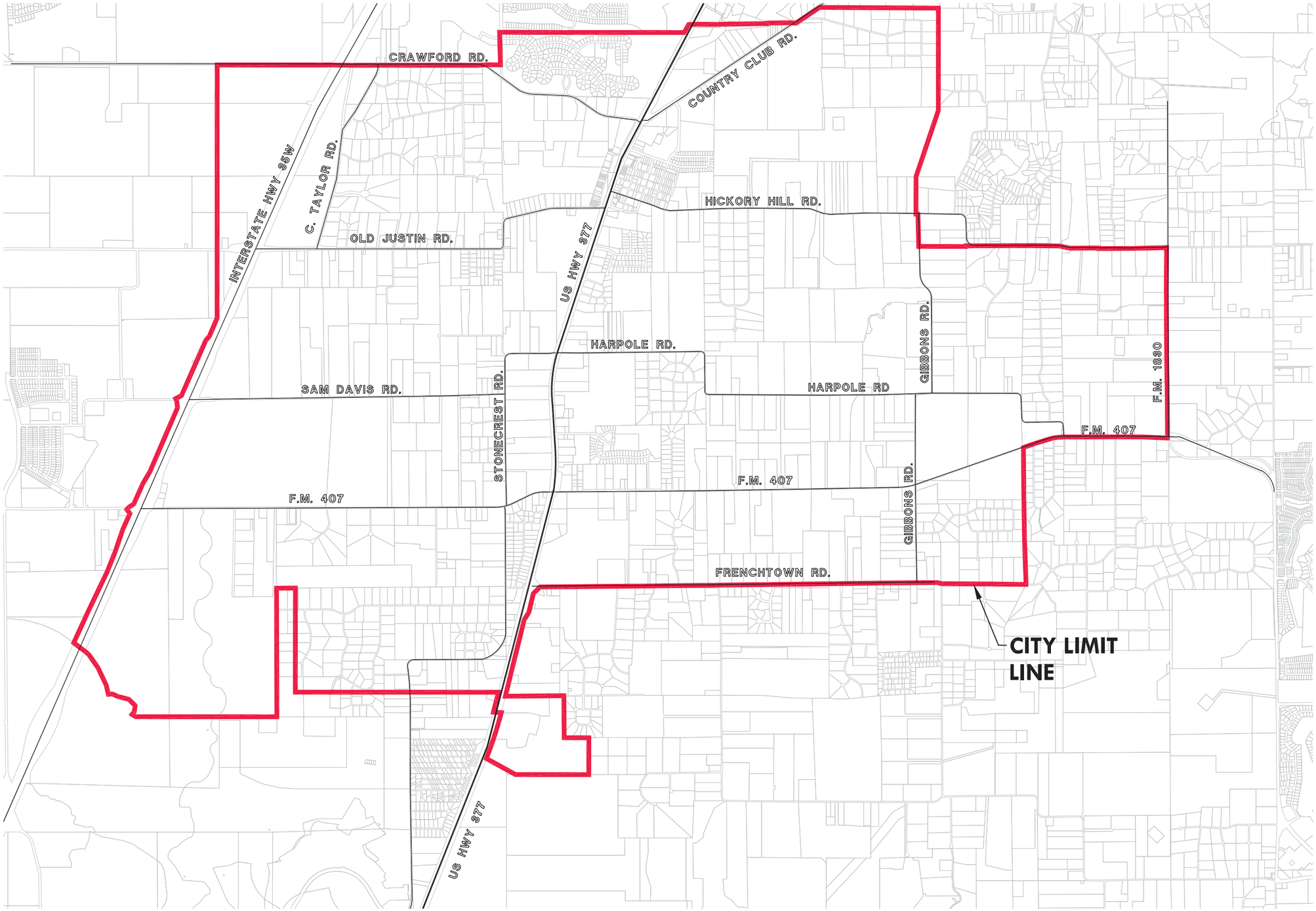
**FIGURE 3.4**
**Town of Argyle**
**Wastewater System Impact Fees**
**TRA Impact Fee**
**Reimbursement Area**




tnp

GRAPHIC SCALE
1250 0 625 1250 2500

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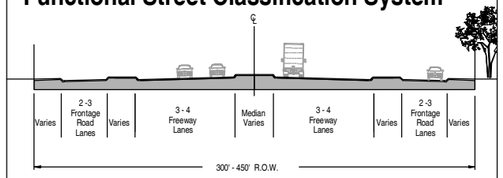
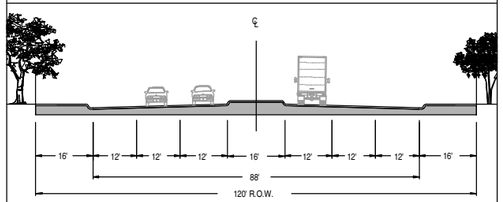
**FIGURE 4.1**
**Town of Argyle**
**Roadway System Impact Fees**
**Existing Roadway System**

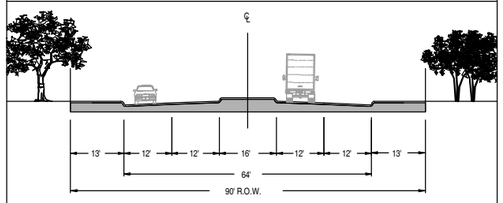
## Functional Street Classification System



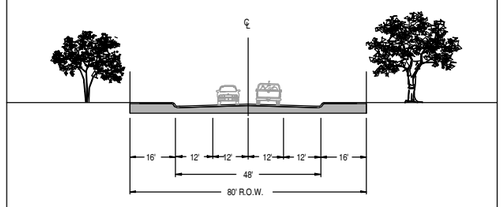

Controlled Access Freeway



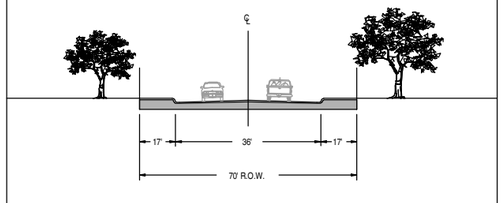

Type A Major Arterial



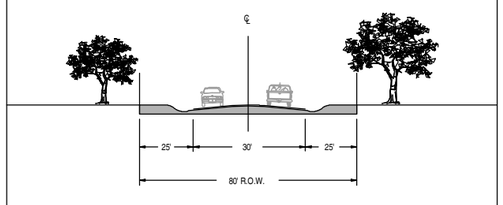

Type B Minor Arterial




Type C Major Collector




Type D Minor Collector




Type E Rural Collector

Denton
Northlake
Argyle
Corral City
Flower Mound
Northlake
Bartonville
Interstate Hwy. 35 W
IH 35 FRONTAGE RD.
C. Taylor Rd.
U.S. Hwy. 377
UP RR
Country Club Rd.
Crawford Rd.
Old Justin Rd.
Hickory Hill Rd.
Harpole Rd.
Sam Davis Rd.
F.M. 407
Gateway Blvd.
Stonecrest Rd.
Gibbons Rd.
F.M. 1830
Frenchtown Rd.
ROBSON RANCH RD.
OLD JUSTIN RD.
SAM DAVIS RD.
PRAIRIE MOUND CT.
KNOB HILL
VALLEY VIEW
SKYLINE
JOHNS WELL
SUNSET
SURREY
HERRIOTT
REDBUD
OAK
KAY
FRONT
EAGLE
HARRISON
HEARTH TERRACE
VILLAGE WAY
COLLINS
DALLAS
DENTON
RUSK
CHISHOLM
OREGON
OLD TOWN BLVD.
HICKORY RIDGE
SQUIRREL RUN
WESTOVER
TIMBERVIEW
COOK
PARTRIDGE
PRIMROSE
BEN BOYD
BAINS
WOODS
BIRCH
ROBIN
JOYCE
CHARYL LYNN
MANOR
FOREST
PRAIRIE
PIONEER
SHENANDOAH
RANCH
WINCHESTER
REMINGTON
KEITH
DANTE
GENOA
INDIAN
FATE
STONECREST RD.
MEADOWVIEW
THOUSAND OAKS
CACTUS
OAKRIDGE
SUNRISE
ROLLING ACRES
COCHRAN
DOVE CREEK
BADMINTON
DYER
ROADRUNNER
NOBLE CHAMPIONS
APPALOOSA
PALOMINO
FOX
TRIPLE CROWN
STONEBRIDGE
GOLD HILL
STEEPLECHASE
TUDOR
PECAN ACRES
PECAN
WHISPERING TRAILS
KNIGHT
FAIRWAY ACRES
QUAIL CREEK
BRIAR HILL
SPRING MCCAWAY
WILDFLOWER
THORNRIDGE CIR
THORNRIDGE
CREEKSIDE
COUNTRY LAKES
WOODLAND
SANDY
WOODED
CROOKED
HIDDEN
OAK RIDGE
FINCHER
CEDAR CREEK
GRANITE
SHADY OAK
SHADY OAKS
WHITEBRIDGE
HICKORY CR
HUNTER HILL
COSMOS
NATURE
BRITT
JEFF
TAWAKONI
EAGLE MOUNTAIN
BROOKSIDE
PALMORE
HAVENWAY
LAKEWAY
ORANGEWOOD
TRAILWOOD
PERIMETER
INDENWOOD
35W
377

**Legend**

- Argyle Town Limits
- Argyle ETJ
- Depicts existing thoroughfare
- Depicts proposed thoroughfare
- Thoroughfares in Adjoining Municipalities
- Areas of Further Study

# FIGURE 4.2

## Town of Argyle, Texas

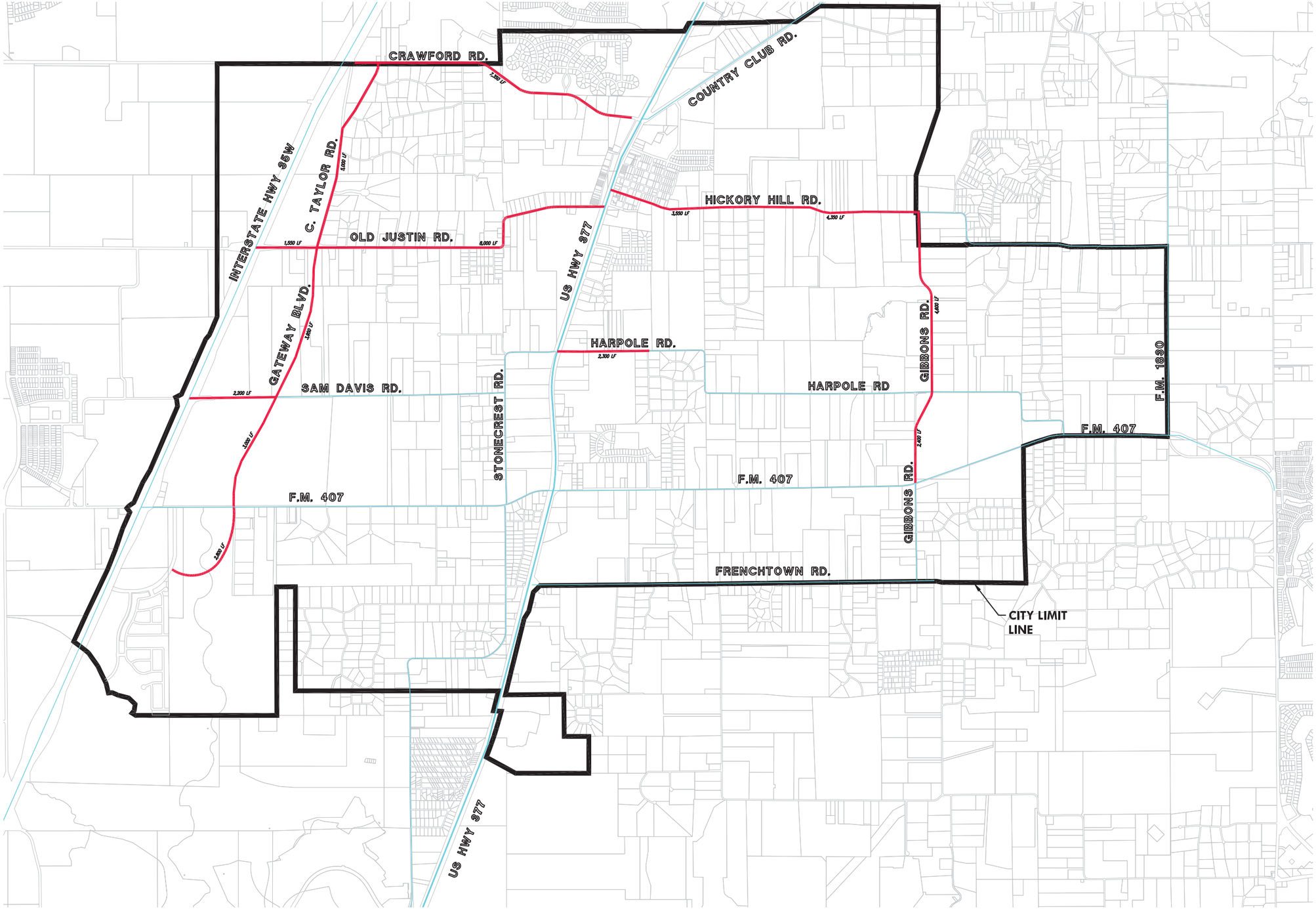
# Thoroughfare Plan

### An Element of the Comprehensive Plan

**December 2009**
**Amended April 2010**

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

N




tmp

GRAPHIC SCALE
1250 0 625 1250 2500

LEGEND

EXISTING ROAD

PROPOSED ROAD WORK


teague nall & perkins
3200 S Interstate 35E, Suite 1129
Denton, Texas 76210
940.383.4177 ph 940.383.8026 fx
TBPE Registration No. F-230
www.tnpinc.com


**FIGURE 4.3**
**Town of Argyle**
**Roadway System Impact Fees**
**Capital Improvement Plan**