

ORDINANCE NO. 997-2022

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ANNA, TEXAS, ADOPTING UPDATED LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENT PLANS, AND ROADWAY IMPACT FEES; AMENDING THE ANNA CITY CODE OF ORDINANCES **PART IV, ARTICLE 7, SECTION 14** (ROADWAY IMPACT FEES); PROVIDING FOR A PENALTY FOR ANY VIOLATION OF THIS ORDINANCE NOT TO EXCEED \$2,000; PROVIDING FOR SAVINGS, SEVERABILITY, AND REPEALING CLAUSES; PROVIDING FOR AN EFFECTIVE DATE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.

**WHEREAS**, the City of Anna, Texas ("the City") has previously adopted ordinances, rules and regulations relating to the imposition of roadway impact fees on developments within the City as authorized under Chapter 395 of the Texas Local Government Code; and

**WHEREAS**, the City of Anna, Texas City Council ("the City Council") has held a public hearing and determined that it would be advantageous and beneficial to the City and its citizens to adopt updated land use assumptions and roadway capital improvement plans, and to impose amended impact fees; and

**WHEREAS**, the City Council has further determined that it would be advantageous and beneficial to the City and its citizens to amend **Part IV, Article 7, Section 14** (Roadway Impact Fees) of the Anna Code to specify new roadway impact fee rates;

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ANNA, TEXAS:**

**SECTION 1. RECITALS.** The recitals set forth above are incorporated herein as if set forth herein in full.

**SECTION 2. ADOPTION OF LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN.** As relates to water and wastewater facilities, the City Council hereby adopts updates to the land use assumptions and capital improvements plan as set forth in the Impact Fee Update 2022-2032, a copy of which is attached hereto as Exhibit A. The adoption of said land use assumptions and capital improvements plan is cumulative of any land use assumptions and capital improvements plan regarding water and wastewater facilities and this ordinance does not amend or otherwise modify the City's existing water or wastewater impact fees.

**SECTION 3. AMENDMENTS TO PART IV OF THE ANNA CODE.** In accordance with **Part II, Article 1, Section 9** of the Anna Code, **Part IV, Article 7, Section 14** is deleted and replaced with the following:

The City hereby adopts the following assessment rates per service unit for the service areas listed below, to be rounded to the nearest dollar after calculating the total number of service units subject to the assessment, which shall replace the previously adopted assessment rates:

Service Area 1 (maximum \$1,845.00) = \$1,845.00

Service Area 2 (maximum \$1,423.00) = \$1,423.00

Schedule A - Land Use Maximum Fee Per Service Unit	
Land Use Category	% of Maximum Fee per Service Unit
Residential	100
Multifamily	100
Convenience Store	100
Fueling Station	100
Automotive Dealership	100
Auto Repair/Maintenance	100
Warehouse	100
Storage	100
Restaurant with Drive Thru	100
General Commercial	85
Retail	85
Industrial Manufacturing	85
Medical Office	75
Hospital	75
Sit-Down Restaurant	75
Retailer >20,000 SF GFA	75
Employment Center	65
3+ Story Professional Office	65
Corporate Campus	65

These assessment rates shall be effective on new development in the City in accordance with Anna Code and state law.

**SECTION 4. PENALTY**

Any violation of any of the terms of this ordinance, whether denominated in this ordinance as unlawful or not, shall be deemed a misdemeanor. Any person convicted of any such violation shall be fined in an amount not to exceed \$2,000 for each incidence of violation. Each violation is considered a separate offense and will be punished separately.

**SECTION 5. SAVINGS, SEVERABILITY AND REPEALING CLAUSES.**

That should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

**SECTION 6. PUBLICATION OF THE CAPTION HEREOF AND EFFECTIVE DATE**

This ordinance shall be in full force and effective from and after its passage and upon the posting and/or publication, if required by law, of its caption and the City Secretary is hereby directed to implement such posting and/or publication.

That this ordinance shall become effective immediately from and after its passage.

**APPROVED AND ADOPTED** by the City Council of the City of Anna, Texas on this the 23rd day of Aug., 2022.

ATTESTED:

APPROVED:

Carrie S. Land  
City Secretary Carrie Land

Nate Pike

Mayor Nate Pike



PREPARED FOR

THE CITY OF  
**Anna**

City of Anna

# 2022 Roadway, Water and Wastewater Impact Fee Study

PREPARED BY

**Kimley»»Horn**

Expect More. Experience Better.

JULY 2022



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Executive Summary  
2022 Impact Fee Study

THE CITY OF  
**Anna**

July 2022 Prepared for the City of Anna

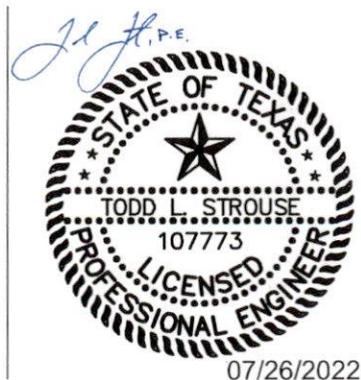
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TBPE Firm Registration Number: F-928

Kimley-Horn Project Number: 064512909  
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# Executive Summary

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## Introduction

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. Across the country, they are used to fund police and fire facilities, parks, schools, roads, and utilities. In Texas, the legislature has allowed their use for roadway and drainage, water, and wastewater facilities.

In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development towards new infrastructure needs. Impact Fees are a mathematical calculation that determine a maximum fee that would be equivalent to growth paying for growth. This study's purpose is to calculate the maximum impact fee per service unit of new growth.

The Maximum Impact Fee is considered an appropriate measure of the impacts generated by a new unit of development on a City's infrastructure system. An impact fee program is anticipated to be designed so that it is predictable for both the development community and City. An impact fee program is transparent. This report describes in detail how the fee is calculated and how the Capital Improvements Advisory Committee (CIAC) monitors the Impact Fee program. An impact fee program is flexible in that funds can be used on priority projects and not just on projects adjacent to a specific development. An impact fee program is both equitable and proportional in that every new development pays an equal fee that is directly related to its systemwide impact.

## Impact Fee Basics

### Service Area

A service area is a geographical area within which a unique maximum impact fee is determined. All fees collected within the Service Area must be spent on eligible improvements within the same Service Area. For Roadway Impact Fees, the service area may not exceed a 6-mile diameter trip length. In Anna, this results in the creation of two separate Roadway Service Areas. The Water and Wastewater Impact Fee Service Area for the City of Anna is the Extra-Territorial Justification, this service area was determined based on where the City of Anna will provide service.

### Land Use Assumptions

The Impact Fee determination is required to be based on the projected growth and corresponding capacity needs in a 10-year window. This study considers the years 2022-2032. The 10-year increase in residential units is projected to be 6,902 units within the city limits, the projected water and wastewater connections are 7,599 and 7,276 respectively. The 2032 projections show an increase of 19,141,000 square feet of non-residential land use over the 10-year window. These projections set the basis for determining loading and demands to serve new growth. The distribution of residential and non-residential growth utilized information from historical building permit data and input from city staff on known future development locations.

### Service Units

The "service area" is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used to quantify the supply and demand for roads and utilities in the City. Service units are attributable to an individual unit of development and utilized to calculate the maximum impact fee of a development.

For roadway purposes, the service unit is defined as a vehicle-mile. A "vehicle-mile" refers to the capacity consumed in a single lane by a vehicle making a trip one mile in length during the PM peak hour. The PM peak hour is the one-hour period during the afternoon/evening when the highest vehicular volumes are observed. In accordance with the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, the PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.

The service unit for water and wastewater impact fees is the "single family equivalent" (SFE), which is based on the

size of the individual water meters used to serve growth related development. The base water SFE is the water demand associated with the smallest water meter issued for a new single-family residence. The base wastewater SFE is the wastewater flow associated with the smallest water meter issued for a new single-family residence. The smallest water meter issued for a new single-family residence in the City of Anna is a 3/4-inch meter.

### **Capital Improvement Plan**

The City and project staff have identified the Roadway, Water, and Wastewater projects needed to accommodate the projected growth over the next ten (10) years within the City of Anna. These projects include existing, proposed, and recently completed projects that were determined based on their current or anticipated impact on each defined Service Area and the City as a whole.

### **Roadway Impact Fee Capital Improvement Plan**

The City of Anna Thoroughfare Plan is the ultimate plan for the roadway infrastructure within the City Limits. The projects on the Roadway Impact Fee Capital Improvement Plan were selected from the Thoroughfare Plan and cover existing, proposed, and completed roadway improvements, as well as intersection improvements with 10-year growth potential.

### **Water Impact Fee Capital Improvement Plan**

The Water Impact Fee Capital Improvements Plan was developed for the City of Anna based on the growth patterns and trends from the Land Use Assumptions. The recommended improvements will provide the required capacity and reliability to meet projected water demand through 2032. Elements of the water system, including storage facilities, pumping facilities, and the distribution network were evaluated against industry standards as outlined in the Design Criteria section of Water Impact Fee Chapter of this report.

### **Wastewater Impact Fee Capital Improvement Plan**

Similar to the Water Impact Fee Capital Improvements Plan, the Wastewater Impact Fee Capital Improvements Plan was developed to address system improvements driven by growth. Elements of the wastewater system, including gravity pipes, force mains, lift station and wastewater treatment facilities were evaluated against industry standards as outlined in the Design Criteria section of the Wastewater Impact Fee Chapter of this Report.

### **Recoverable Project Costs**

Impact Fees are a one-time fee meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs within a ten-year window. With this consideration, the maximum assessable impact fee does not specifically cover the entire cost of a roadway, water, or wastewater project. The calculations that determine the percentage of a project's cost that is impact fee eligible are defined as the project's recoverable cost.

### **Roadway Recoverable Project Costs**

The recoverable costs for roadway projects are calculated by first determining the net capacity of vehicle-miles supplied to support future growth within a 10-year window. This net capacity is then multiplied by the percentage of roadway capacity added attributable to this 10-year growth. This growth percentage is obtained through the derivation of a transportation demand factor (TDF), which computes the total vehicle-miles associated to a single land use development unit. The TDF is applied to both the net vehicle-miles supplied and the vehicle-mile growth projections to calculate the growth percentage needed to determine the total recoverable project costs, which total \$101,948,281

(pre-finance) over two (2) Roadway Service Areas. Per state law this recoverable cost is reduced by 50% to account for future ad valorem tax revenues from the new development.

**Water Recoverable Project Costs**

The recoverable costs for water projects are calculated by determining the increase in water demand due to growth over the 10-year window. The City’s current and future populations were utilized to calculate the percent utilization of each identified impact fee eligible project. The change in utilization of each project is multiplied by the total project cost to determine total recoverable project cost. The total recoverable cost is then divided by the growth in additional SFEs to determine the maximum fee per SFE. The total recoverable costs for the water distribution system are \$232,036,389 (pre-finance). Per state law this recoverable cost is reduced by 50% to account for future ad valorem tax and utility revenues from the new development.

**Wastewater Recoverable Project Costs**

The process for calculating the recoverable wastewater costs is similar to the water financial analysis. The recoverable costs for wastewater projects are calculated by determining the increase in wastewater flows due to growth over the 10-year window. The City’s current and future populations were utilized to calculate the percent utilization of each identified impact fee eligible project. The change in utilization of each project is multiplied by the total project cost to determine total recoverable project cost. The total recoverable cost is then divided by the growth in additional SFEs to determine the maximum fee per SFE. The total recoverable costs for the wastewater collection system are \$291,665,915 (pre-finance). Per state law this recoverable cost is reduced by 50% to account for future ad valorem tax and utility revenues from the new development.

**Maximum Assessable Impact Fee Calculation**

In simplest terms, the maximum impact fee allowable by law is calculated by dividing the recoverable cost of the Capital Improvement Plans by the number of new service units of development. In accordance with state law, both the cost of the Capital Improvement Plan and the number of new service units of development used in the equation are based on the growth and corresponding capacity needs projected to occur within a 10-year window. This calculation is performed for each service area individually; each service area has a stand-alone Capital Improvement Plan and 10-year growth projection.

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is shown below:

Roadway Service Area	Roadway Maximum Fee Per Service Unit (per Vehicle-Mile)	Water Maximum Fee Per Single Family Equivalent (3/4-inch Meter)	Wastewater Maximum Fee Per Single Family Equivalent (3/4-inch Meter)
1	\$1,845	\$9,285	\$11,671
2	\$1,423		

**Adoption Process**

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of impact fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and Capacity Plan used in calculating the maximum fee, and to provide the Committee’s findings for consideration by the City Council. This CIAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the CIAC is required to have adequate representation of the building and development communities. In Anna this is the Planning & Zoning Commission with an ETJ representative. The City Council then conducts a public

hearing on the Land Use Assumptions, Capacity Plan, and Impact Fee Ordinance.

Following policy adoption, the CIAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the Capacity Plan at any time within five years of adoption. Finally, the CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

Chapter 1  
Land Use Assumptions for the  
2022 Impact Fee Study



June 2022 Prepared for the City of Anna

Prepared by:

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Kimley-Horn Project Number: 064512909  
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06/28/2022

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## 1 Purpose

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Chapter 395 of the Texas Local Government Code describes the procedure Texas political subdivisions must follow in order to assess impact fees for new development. The first step required in updating impact fees is the development of Land Use Assumptions. These Land Use Assumptions, which include both residential and non-residential estimates, form the basis for the development of impact fees for roadway, water, and wastewater facilities.

Reasonable future growth estimates are necessary in order to aid the City of Anna in establishing the need for capital improvements required to serve future development. In accordance with Chapter 395, Kimley-Horn has compiled the information required to complete the Land Use Assumptions using the following sources:

- City of Anna Future Land Use Plan
- Parcel Data Information from Collin Central Appraisal District
- Aerial Overview of City Development Potential
- City of Anna Staff

## 2 Components of Land Use Assumptions Chapter

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Land Use Assumptions included the following components:

**Land Use Assumption Methodology:**

Overview of the general methodology used to generate land use assumptions

**Impact Fee Service Areas:**

Explanation of the divisions of Anna into service areas for roadway, water, and wastewater impact fees

**10-Year Growth Assumptions:**

Data on residential and non-residential growth within each service area from 2022-2032

**Land Use Assumptions Summary:**

Synopsis of the land use chapter

## 3 Land Use Assumptions Methodology

---

The residential and non-residential growth projections formulated in this chapter were done using reasonable and generally accepted planning principles. The following factors were considered in developing these projections:

- Existing development
- Known planned developments
- Location of vacant land
- Future Land Use Plan
- Buildout population projections

Existing residential and non-residential data was compiled using parcel data from Collin Central Appraisal District and aerial survey. For the remaining undeveloped area, assumptions were utilized based upon buildout population projections, future land use plan and known developments. Consultation with City staff helped with finalizing growth projections.

## 4 *Impact Fee Service Areas*

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### **Service Area Definitions**

According to Chapter 395 of the Local Government Code, a Service Area refers to the area within the corporate boundaries or extraterritorial jurisdiction of the political subdivision to be served by the capital improvements or facilities specified in the impact fee. Funds collected in the specific service areas must be spent in the service area collected.

### **Roadway Impact Fee Service Areas**

The geographic boundary of the proposed impact fee service areas for roadway facilities are shown in **Exhibit 1.1**. The roadway service areas cover the entire corporate boundary of the City of Anna. Chapter 395 of the Texas Local Government Code specifies “the service area is limited to an area within the corporate boundaries of a political subdivision and shall not exceed six (6) miles.” The City of Anna is proposed to be divided into two service areas for roadway impact fee purposes, using State Highway 5 to divide the service area boundaries. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded.

### **Water and Wastewater Impact Fee Service Areas**

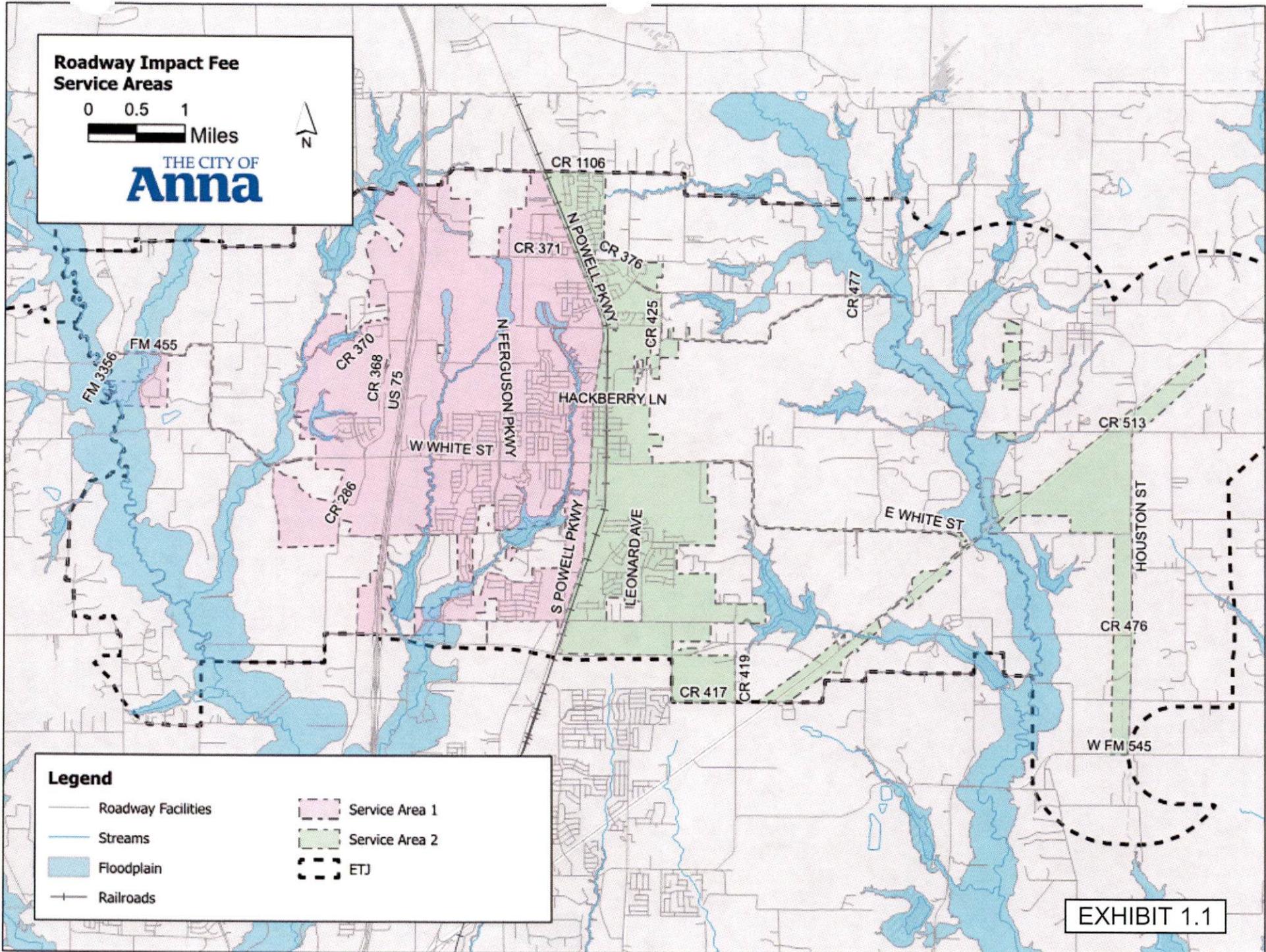
The geographic boundaries of the proposed impact fee service area for water and wastewater facilities are shown in **Exhibit 1.2**. The water and wastewater impact fee service areas include the area within the ETJ.

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**Roadway Impact Fee Service Areas**

0 0.5 1 Miles

THE CITY OF  
**Anna**



**Legend**

Roadway Facilities	Service Area 1
Streams	Service Area 2
Floodplain	ETJ
Railroads	

EXHIBIT 1.1

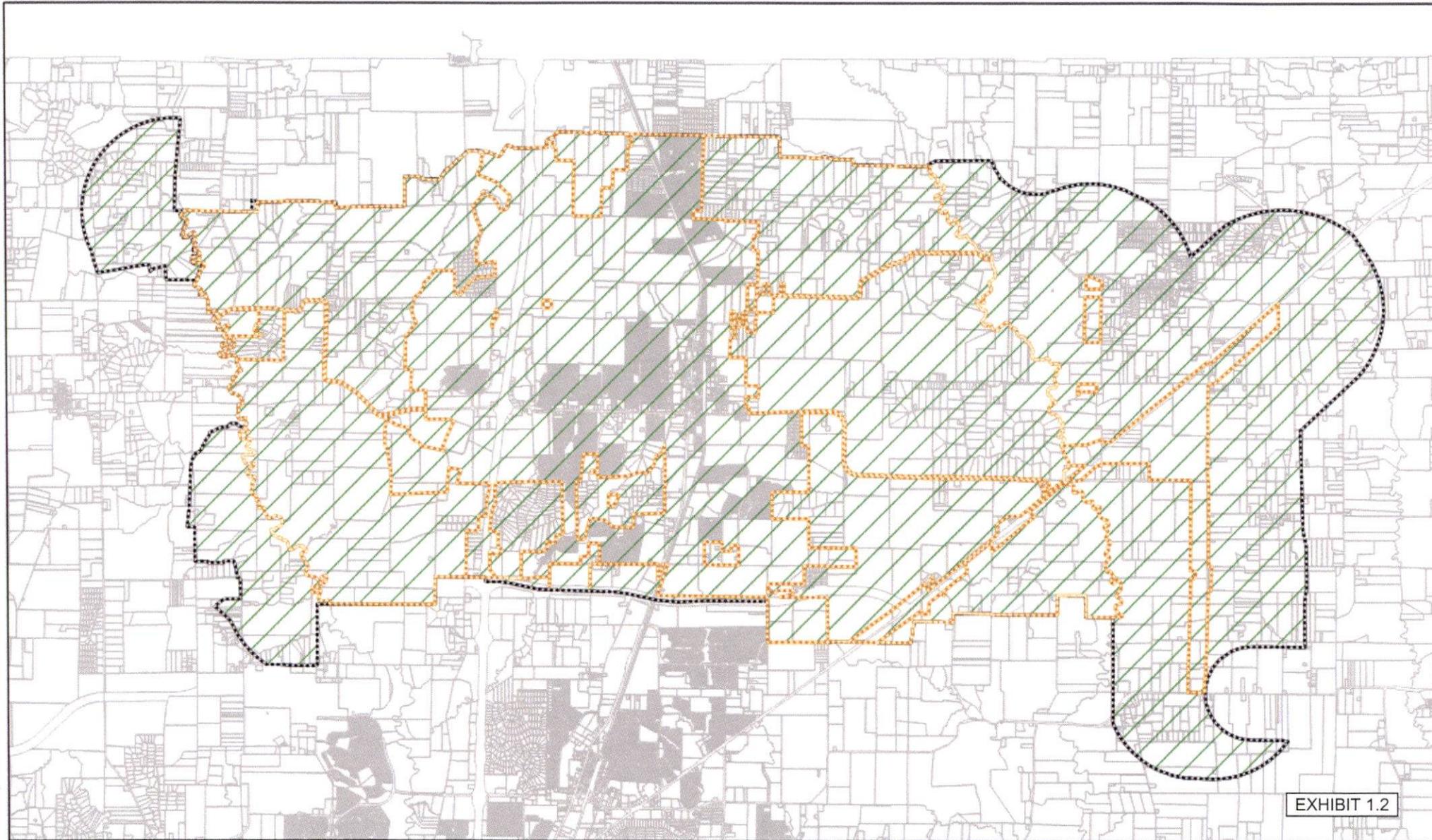


EXHIBIT 1.2



0 2,000 4,000  
Feet

**Legend**  
 Water & Wastewater Service Area  
 City Limits



**CITY OF ANNA**  
 WATER & WASTEWATER SERVICE AREA

FIGURE

SOURCE: © 2010, CONSULTING ENGINEERS GROUP, INC.

## 5 Data Format

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The residential and non-residential estimates were all compiled in accordance with the following categories and format:

**Impact Fee Service Areas:**

Large zones, which correspond to proposed roadway, water, and wastewater facilities service areas (as described in previous section)

**Residential Units:**

Number of dwelling units or connections, including both single-family and multifamily

**Non-residential:**

Square footage of building area or number of connections based on three different classifications:

*Retail:*

Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented towards the household sector (i.e., grocery stores and restaurants)

*Service:*

Land use activities which provide personal and professional services such as government and other professional and administrative offices

*Basic:*

Land use activities that produce goods and services, including those exporting outside the local economy (i.e., manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses)

## 6 10- Year Growth Summary

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**Table 1.1** summarizes residential and non-residential 10-year growth projections within the roadway service areas. Projections for single-family and multifamily growth were made using planned development information provided by the City of Anna. Growth projections made for non-residential building square footage assumed an 8% growth of non-residential businesses per year for the next 10 years. These assumptions are consistent with the water and wastewater connection growth projections presented in **Table 1.2** and **Table 1.3**. Residential water and wastewater connections for the next 10 years were based on development information provided by the City of Anna and the non-residential connections were based on a growth of 8% per year for the next 10 years. Based on historical connection count information, approximately 95.7% of all water customers are also wastewater customers.

*[Remainder of this page intentionally blank]*

**Table 1. Roadway Residential and Non-Residential Growth Projections (2022-2032)**

Service Area	Year	Residential Units		Non-Residential Square Feet		
		Single-Family	Multifamily	Basic	Service	Retail
1	2022	5,500	24	380,205	445,328	1,932,411
	2032	8,261	2,074	1,201,039	1,406,758	6,104,341
	<u>Growth</u>	<u>2,761</u>	<u>2,050</u>	<u>820,834</u>	<u>961,430</u>	<u>4,171,930</u>
2	2022	1,913	120	319,499	18,164	5,063,079
	2032	4,004	120	1,009,273	57,379	5,954,227
	<u>Growth</u>	<u>2,091</u>	<u>0</u>	<u>689,774</u>	<u>39,215</u>	<u>891,148</u>
<b>Overall City Growth</b>		<b>4,852</b>	<b>2,050</b>	<b>1,511,000</b>	<b>1,001,000</b>	<b>5,063,000</b>

**Table 2. Water Residential and Non-Residential Growth Projections (2022-2032)**

Year	Residential Connections	Non-Residential Connections
2022	8,385	269
2032	15,984	499
<b>Growth</b>	<b>7,599</b>	<b>230</b>

**Table 3. Wastewater Residential and Non-Residential Growth Projections (2022-2032)**

Year	Residential Connections	Non-Residential Connections
2022	8,029	257
2032	15,305	477
<b>Growth</b>	<b>7,276</b>	<b>220</b>

*[Remainder of this page intentionally blank]*

## 7 Summary

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The following is a summary of land use assumptions for the roadway, water, and wastewater impact fees. The roadway land use assumptions are confined to growth projected within the City Limits, while the water and wastewater land use assumptions are confined to growth projected within the ETJ. The roadway land use assumptions are quantified in terms of dwelling units and building square footage for residential and non-residential growth, respectively. The water and wastewater land use assumptions are quantified in terms of connections for both residential and non-residential growth.

- The 10 year (2022-2032) residential growth projection is approximately:
  - o Roadway Service Areas = 6,902 Dwelling Units
  - o Water Service Area = 7,599 Connections
  - o Wastewater Service Area = 7,276 Connections
  
- The 10-Year (2022-2032) non-residential growth projection is approximately:
  - o Roadway Service Areas = 7,574,000 ft<sup>2</sup>
  - o Water Service Area = 230 Connections
  - o Wastewater Service Area = 220 Connection

Chapter 2  
Roadway Impact Fee Study for the  
2022 Impact Fee Study



June 2022 Prepared for the City of Anna

Prepared by:

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6/28/22

*Brandon Forsythe*

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# 1 Introduction

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Chapter 395 of the Texas Local Government Code describes the procedure political subdivisions must follow in order to create and implement impact fees. Chapter 395 defines an Impact Fee as “a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.”

Accordingly, the City of Anna has developed its Land Use Assumptions and Capital Improvements Plan with which to implement Roadway Impact Fees. The City has retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2022 Roadway Impact Fee Study Update. This chapter includes details of the Roadway Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the Capital Improvements Plan, and refinement of the Land Use Equivalency Table.

This report introduces and references two of the basic inputs to the Roadway Impact Fee:

1. **Land Use Assumptions**
2. **Capital Improvements Plan**

Information from the Land Use Assumptions and Capital Improvements Plan are used extensively throughout the remainder of the report.

There is a detailed discussion of the methodology for the computation of impact fees. This discussion is broken into three components:

1. **Methodology for Roadway Impact Fees**
2. **Roadway Impact Fee Calculation**
3. **Plan for the Roadway Impact Fee Credit**

The components of the **Methodology for Roadway Impact Fees** include development of:

- Service Areas
- Service Units
- Cost Per Service Unit
- Roadway Impact Fee Capital Improvements Plan Costing Methodology
- Summary of Roadway Impact Fee Capital Improvements Plan Costs
- Service Unit Calculation

The **Roadway Impact Fee Calculation** includes the calculation of the:

- Maximum Assessable Impact Fee Per Service Unit
- Service Unit Demand Per Unit of Development

The **Plan for the Roadway Impact Fee Credit** outlines a 50% reduction of the Capital Improvements Plan as outlined in Chapter 395 of the Texas Local Government Code.

The final section of the report is the Conclusion, which presents the findings of the analysis and summarizes the report.

## 2 Land Use Assumptions

### 2.1 Summary

The methodology for land use assumptions is presented in Chapter 1: Land Use Assumptions for the 2022 Impact Fee Study. The development of land use assumptions included establishing roadway impact fee service areas (SA), collection/determination of residential and non-residential data by SA, and projection of the 10-year residential and non-residential growth by SA. **Table 1** presents the growth projected for the City of Anna from 2022-2032 based on planned development information provided by the City of Anna and the future land use plan utilized in the 2050 Comprehensive Plan.

**Table 1. Residential and Non-Residential Growth Projections (2022-2032)**

Service Area	Year	Residential Units		Non-Residential Square Feet		
		Single-Family	Multifamily	Basic	Service	Retail
1	2022	5,500	24	380,205	445,328	1,932,411
	2032	8,261	2,074	1,201,039	1,406,758	6,104,341
	<i>Growth</i>	<u>2,761</u>	<u>2,050</u>	<u>820,834</u>	<u>961,430</u>	<u>4,171,930</u>
2	2022	1,913	120	319,499	18,164	5,063,079
	2032	4,004	120	1,009,273	57,379	5,954,227
	<i>Growth</i>	<u>2,091</u>	<u>0</u>	<u>689,774</u>	<u>39,215</u>	<u>891,148</u>
<b>Overall City Growth</b>		<b>4,852</b>	<b>2,050</b>	<b>1,511,000</b>	<b>1,001,000</b>	<b>5,063,000</b>

### 2.2 Roadway Impact Fee Service Areas

The geographic boundary of the proposed impact fee service areas for roadway facilities is shown in **Exhibit 2.1**. The City of Anna is proposed to be divided by State Highway 5 into two (2) service areas. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded from the study.

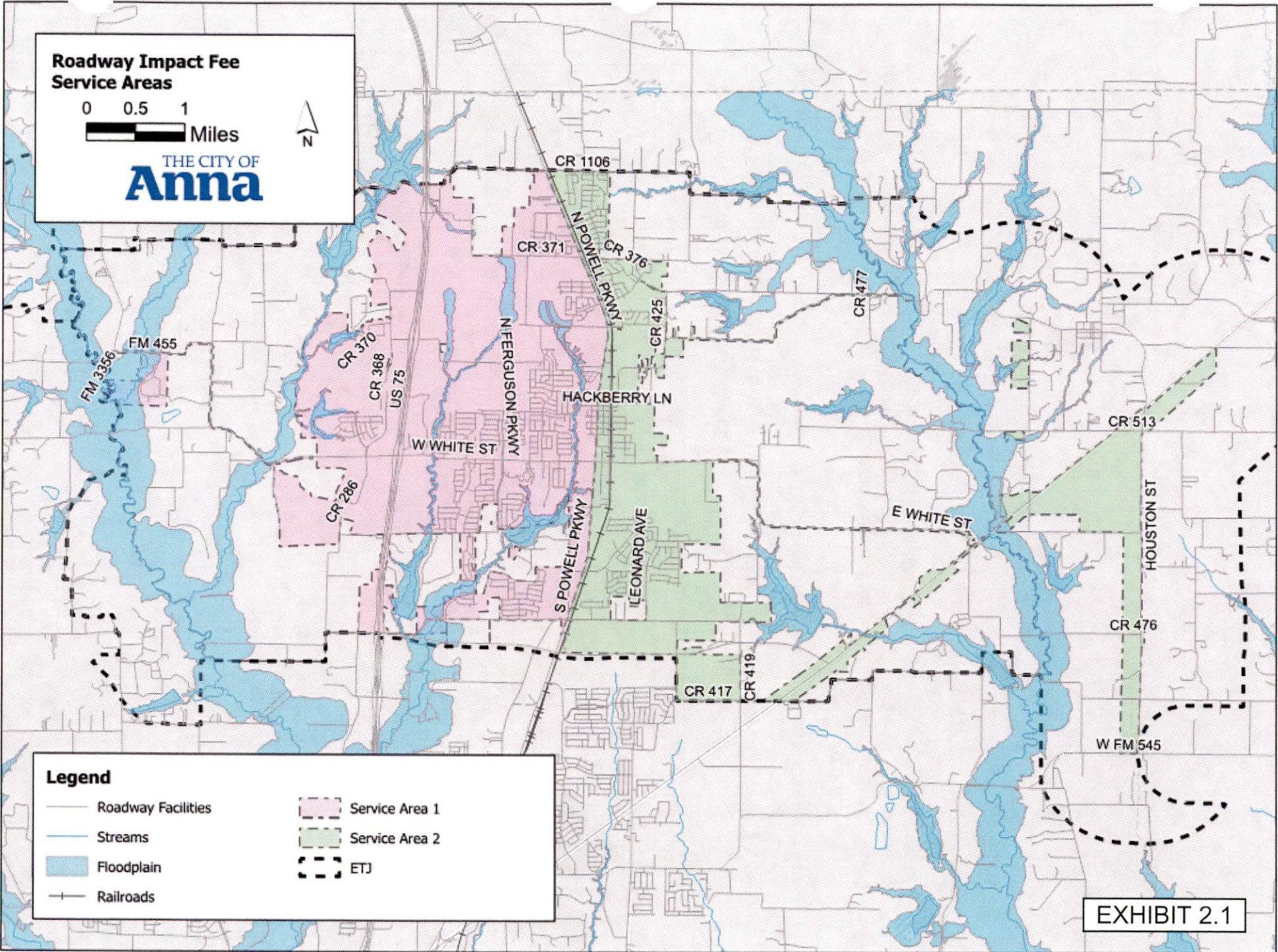
It should be noted that at locations where the service area boundary follows a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway, such as State Highway 5. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits are included in the service area.

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**Roadway Impact Fee Service Areas**

0 0.5 1 Miles

**THE CITY OF Anna**



**Legend**

Roadway Facilities	Service Area 1
Streams	Service Area 2
Floodplain	ETJ
Railroads	

**EXHIBIT 2.1**

### 3 Roadway Impact Fee Capital Improvements Plan

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The City has identified the roadway projects needed to accommodate the projected growth within the City. The City of Anna Master Thoroughfare Plan is the ultimate plan for roadway infrastructure within City Limits. Only capacity improvements still needed to build out the Master Thoroughfare Plan to accommodate the expected growth within the next 10-years are included in the Capital Improvements Plan. The Capital Improvements Plan includes arterials, collectors, and Downtown class roadway facilities increasing the network capacity and consists of 5 categories of projects. They are as follows:

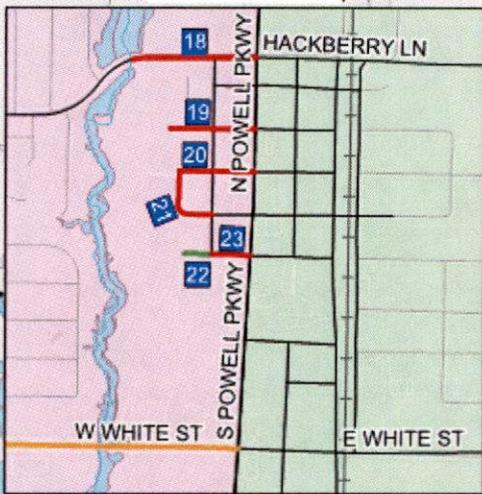
- New – Any future roadway identified by the City to be included in the Capital Improvements Plan
- Widening – Existing roadways not currently built to the ultimate classification in the Master Thoroughfare Plan and must be completely reconstructed
- 1/2 Widening – Existing roadways that only have half of the ultimate cross section to be built
- 1/3 Widening – Existing roadways that only have one-third of the ultimate cross section to be built
- 2/3 Widening – Existing roadways that only have two-thirds of the ultimate cross section to be built

All the roadway facilities identified are part of the currently adopted Master Thoroughfare Plan. The City uses six-lane and four-lane divided cross sections for their arterial facilities, four-lane and three-lane undivided cross sections for their collector facilities, and a two-lane undivided cross section for their Downtown facilities.

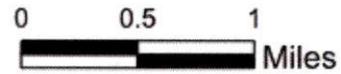
The Capital Improvements Plan is listed in **Table 2** and **Table 3** and mapped in **Exhibit 2.2** and **Exhibit 2.3**. The tables show the length of each project as well as the facility's Impact Fee classification. The Capital Improvements Plan was developed in conjunction with input from City of Anna staff and represents those projects that will be needed to accommodate the growth projected in Chapter 1: Land Use Assumptions for the 2022 Impact Fee Study.

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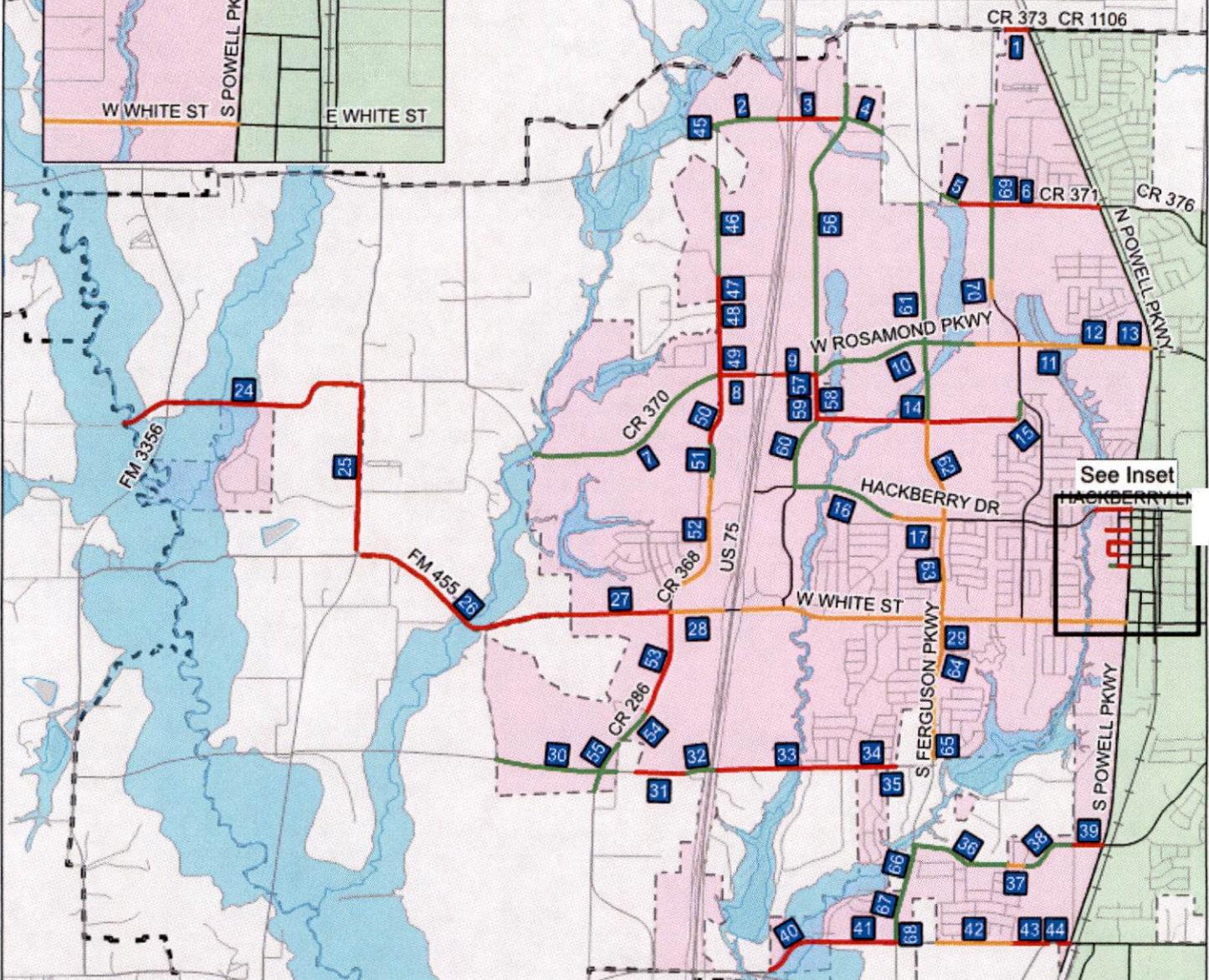
Downtown Inset



Capital Improvements Plan  
Service Area 1



THE CITY OF  
**Anna**



See Inset  
HACKBERRY LN

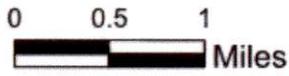
**Legend**

- Service Area 1
- Service Area 2
- Streams
- Floodplain
- Railroads
- ETJ

- Project Type**
- New
- Widening
- Partial Widening
- None
- Not a Thoroughfare in City Limits/Local Road

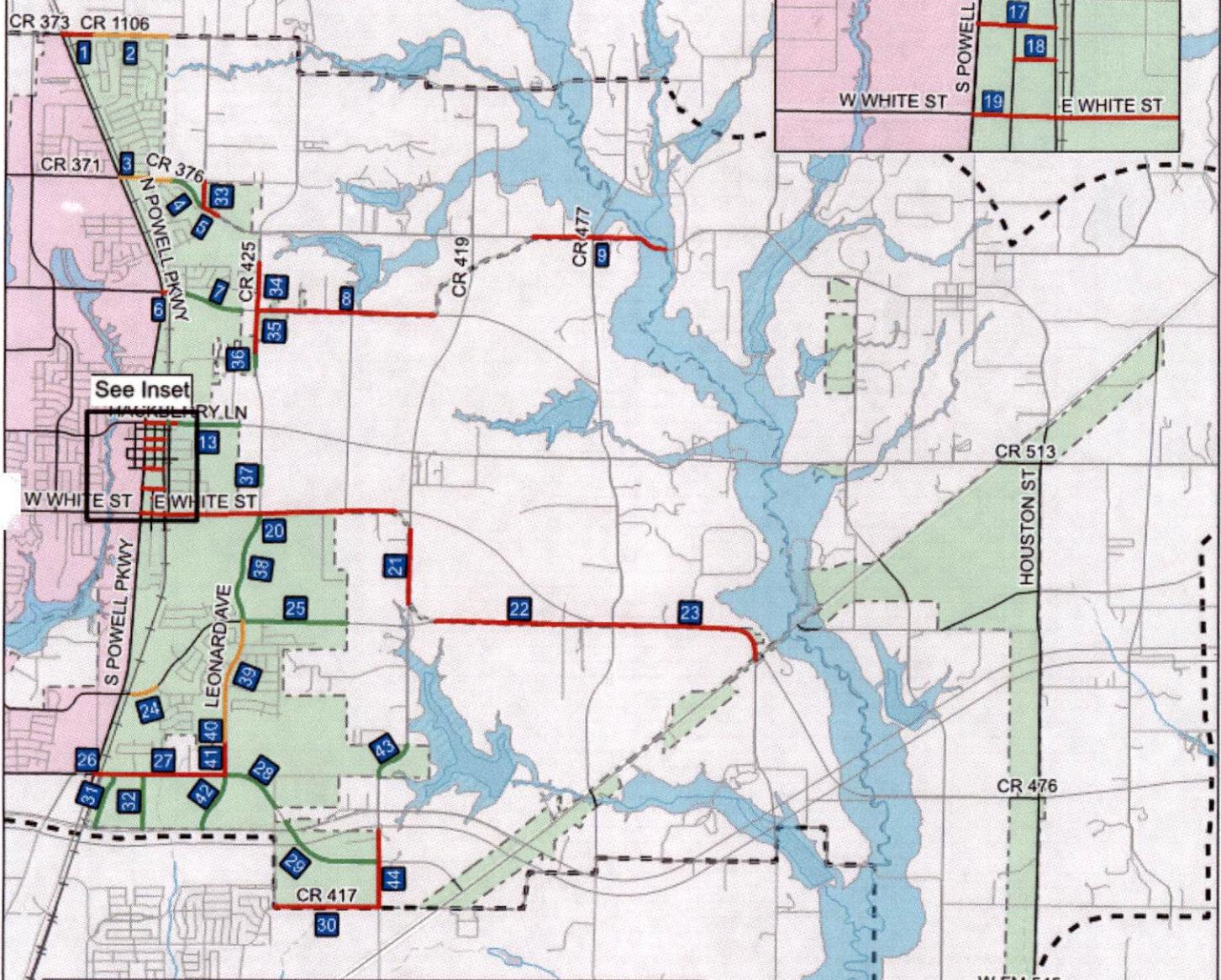
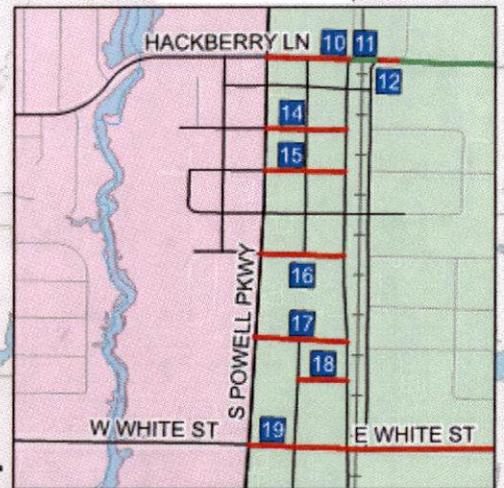
EXHIBIT 2.2

**Capital Improvements Plan  
Service Area 2**



THE CITY OF  
**Anna**

**Downtown Inset**



See Inset  
HACKBERRY LN  
W WHITE ST E WHITE ST

**Legend**

- |                |  |
|----------------|--|
| Service Area 1 | <b>Project Type</b>                          |
| Service Area 2 | New  |
| Streams        | Widening                                     |
| Floodplain     | Partial Widening                             |
| Railroads      | None   |
| ETJ            | Not a Thoroughfare in City Limits/Local Road |

**EXHIBIT 2.3**

**Table 2. 10-Year Roadway Impact Fee Capital Improvements – Service Area 1**

Service Area	Proj. #	Impact Fee Class	Roadway	Limits	Length (mi)	% In Service Area
SA 1	1	Minor Arterial	CR 373	595' W OF N POWELL PKWY to N POWELL PKWY	0.11	50%
	2	Major Arterial	CR 371 (1)	245' W OF CR 368 to CENTRAL EXPRESSWAY SB	0.36	100%
	3	Major Arterial	CR 371 (2)	CENTRAL EXPRESSWAY SB to 910' E OF CENTRAL EXPRESSWAY NB	0.30	100%
	4	Major Arterial	CR 371 (3)	910' E OF CENTRAL EXPRESSWAY NB to 1,075' E OF CR 374	0.24	100%
	5	Major Arterial	CR 371 (4)	595' W OF BRYANT FARM RD to BRYANT FARM RD	0.11	100%
	6	Major Arterial	CR 371 (5)	BRYANT FARM RD to N POWELL PKWY	0.71	100%
	7	Major Arterial	CR 370 (1)	5,795' W OF CR 368 to CR 368	1.10	100%
	8	Major Arterial	CR 370 (2)	CR 368 to CENTRAL EXPRESSWAY SB	0.18	100%
	9	Major Arterial	W ROSAMOND PKWY (1)	CENTRAL EXPRESSWAY NB to CR 374	0.22	100%
	10	Major Arterial	W ROSAMOND PKWY (2)	CR 374 to 1,170' W OF W CROSSING BLVD	0.86	100%
	11	Major Arterial (2/3)	W ROSAMOND PKWY (3)	1,170' W OF W CROSSING BLVD to LANGDON DR	0.53	100%
	12	Major Arterial (1/3)	W ROSAMOND PKWY (4)	LANGDON DR to 740' E OF LANGDON DR	0.14	100%
	13	Major Arterial (2/3)	W ROSAMOND PKWY (5)	740' E OF LANGDON DR to N POWELL PKWY	0.23	100%
	14	Minor Collector	ROLLINS RD (1)	CR 374 to 615' W OF W CROSSING BLVD	1.01	100%
	15	Minor Collector	ROLLINS RD (2)	615' W OF W CROSSING BLVD to W CROSSING BLVD	0.12	100%
	16	Minor Arterial	HACKBERRY DR (1)	CR 374 to 1,365' W OF N FERGUSON PKWY	0.54	100%
	17	Minor Arterial (1/2)	HACKBERRY DR (2)	1,365' W OF N FERGUSON PKWY to N FERGUSON PKWY	0.26	100%
	18	Minor Arterial	HACKBERRY LN (1)	640' W OF N JAMES ST to N POWELL PKWY	0.18	100%
	19	Downtown Type B	W 2ND ST (1)	340' W OF N JAMES DR to N POWELL PKWY	0.13	100%
	20	Downtown Type B	W 3RD ST (1)	HARPER DR to N POWELL PKWY	0.11	100%
	21	Downtown Type B	HARPER DR	W 3RD ST to N JAMES DR	0.11	100%
	22	Downtown Type B	W 5TH ST (1)	215' W OF S JAMES DR to S JAMES DR	0.04	100%
	23	Downtown Type B	W 5TH ST (2)	S JAMES DR to S POWELL PKWY	0.06	100%
	24	Major Arterial	FM 455 (1)	1,330' W OF FM 3356 to 140' W OF CR 289	1.28	100%
	25	Major Arterial	FM 455 (2)	80' S OF FM 290 to 180' N OF COWAN RD	0.83	100%
	26	Major Arterial	FM 455 (3)	180' E OF COWAN RD to W WHITE ST	1.21	100%
	27	Major Arterial	W WHITE ST (1)	FM 455 to CR 286	0.51	100%
	28	Major Arterial (1/3)	W WHITE ST (2)	CR 286 to CENTRAL EXPRESSWAY SB	0.27	100%
	29	Major Arterial (1/3)	W WHITE ST (3)	CENTRAL EXPRESSWAY NB to S POWELL PKWY	1.98	100%
	30	Major Collector	CR 284 (1)	2,860' W OF CR 286 to 415' E OF CR 286	0.62	100%
	31	Major Collector	CR 284 (2)	1,905' W OF CENTRAL EXPRESSWAY SB to 610' W OF CENTRAL EXPRESSWAY SB	0.25	50%
	32	Major Collector	CR 284 (3)	610' W OF CENTRAL EXPRESSWAY SB to CENTRAL EXPRESSWAY NB	0.18	100%
	33	Major Collector	TAYLOR BLVD (1)	CENTRAL EXPRESSWAY NB to 3,775' E OF CENTRAL EXPRESSWAY NB	0.71	50%
	34	Major Collector	TAYLOR BLVD (2)	3,775' E OF CENTRAL EXPRESSWAY NB to 4,600' E OF CENTRAL EXPRESSWAY NB	0.16	100%
	35	Major Collector	TAYLOR BLVD (3)	4,600' E OF CENTRAL EXPRESSWAY NB to 4,825' E OF CENTRAL EXPRESSWAY NB	0.04	50%
	36	Minor Collector (4D)	W FINLEY BLVD (1)	S FERGUSON PKWY to 2,700' E OF S FERGUSON PKWY	0.51	50%
	37	Minor Collector (4D) (1/2)	W FINLEY BLVD (2)	2,700' E OF S FERGUSON PKWY to SILVER LEAF LN	0.08	100%
	38	Minor Collector (4D)	W FINLEY BLVD (3)	SILVER LEAF LN to CR 423	0.30	100%
	39	Minor Collector	W FINLEY BLVD (4)	CR 423 to S POWELL PKWY	0.15	100%
	40	Major Collector	W FOSTER CROSSING RD (1)	3,740' W OF S FERGUSON PKWY to 1,780' W OF S FERGUSON PKWY	0.37	100%
	41	Major Collector	W FOSTER CROSSING RD (2)	1,780' W OF S FERGUSON PKWY to S FERGUSON PKWY	0.34	50%
	42	Major Collector (1/2)	W FOSTER CROSSING RD (3)	1,095' E OF S FERGUSON PKWY to ASPEN DR	0.38	50%
	43	Major Collector	W FOSTER CROSSING RD (4)	ASPEN DR to HIGHLAND RD	0.19	50%
	44	Major Collector	W FOSTER CROSSING RD (5)	295' W OF S POWELL PKWY to S POWELL PKWY	0.06	100%
	45	Minor Arterial	CR 368 (1)	CR 371 to 155' S OF CR 371	0.03	100%
	46	Minor Arterial	CR 368 (2)	2,865' N OF FAIRWAY LANE to FAIRWAY LANE	0.54	100%
	47	Minor Arterial	CR 368 (3)	FAIRWAY LANE to 625' S OF FAIRWAY LANE	0.12	100%
	48	Minor Arterial	CR 368 (4)	625' S OF FAIRWAY LANE to 1,150' N OF CR 370	0.16	50%
	49	Minor Arterial	CR 368 (5)	1,150' N OF CR 370 to 740' S OF CR 370	0.36	100%
	50	Minor Arterial	CR 368 (6)	740' S OF CR 370 to 1,855' S OF CR 370	0.21	50%
	51	Minor Arterial	CR 368 (7)	1,855' S OF CR 370 to 4,020' N OF W WHITE ST	0.20	100%
	52	Minor Arterial (1/2)	CR 368 (8)	4,020' N OF W WHITE ST to 880' N OF W WHITE ST	0.59	100%
	53	Minor Arterial	CR 286 (1)	W WHITE ST to 2,800' S OF W WHITE ST	0.53	100%
	54	Minor Arterial	CR 286 (2)	2,800' S OF W WHITE ST to 3,800' S OF W WHITE ST	0.19	100%
	55	Minor Arterial	CR 286 (3)	890' N OF CR 284 to 560' S OF CR 284	0.28	100%
	56	Major Collector	CR 374 (1)	900' N OF CR 371 to W ROSAMOND PKWY	1.52	100%
	57	Major Collector	CR 374 (2)	W ROSAMOND PKWY to 240' S OF W ROSAMOND PKWY	0.05	100%
	58	Major Collector	CR 374 (3)	240' S OF W ROSAMOND PKWY to 525' N OF ROLLINS RD	0.08	50%
	59	Major Collector	CR 374 (4)	525' N OF ROLLINS RD to ROLLINS RD	0.10	100%
	60	Major Collector	CR 374 (5)	ROLLINS RD to HACKBERRY DR	0.38	100%
	61	Major Arterial	N FERGUSON PKWY (1)	CR 371 to ROLLINS RD	1.11	100%
	62	Major Arterial (2/3)	N FERGUSON PKWY (2)	ROLLINS RD to HACKBERRY DR	0.52	100%
	63	Major Arterial (1/3)	N FERGUSON PKWY (3)	HACKBERRY DR to W WHITE ST	0.50	100%
	64	Major Arterial (1/3)	S FERGUSON PKWY (1)	W WHITE ST to 2,440' S OF W WHITE ST	0.46	100%
	65	Major Arterial (2/3)	S FERGUSON PKWY (2)	2,440' S OF W WHITE ST to 190' N OF TAYLOR BLVD	0.26	100%
	66	Major Arterial	S FERGUSON PKWY (3)	W FINLEY BLVD to 1,245' S OF W FINLEY BLVD	0.24	50%
	67	Major Arterial	S FERGUSON PKWY (4)	1,245' S OF FINLEY BLVD to 425' N OF W FOSTER CROSSING RD	0.19	100%
	68	Major Arterial	S FERGUSON PKWY (5)	425' N OF W FOSTER CROSSING RD to W FOSTER CROSSING RD	0.08	50%
	69	Major Collector	W CROSSING BLVD (1)	2,660' N OF CR 371 to 1,970' N OF W ROSAMOND PKWY	0.89	100%
	70	Major Collector (4D) (1/2)	W CROSSING BLVD (2)	1,970' N OF W ROSAMOND PKWY to 1,530' N OF W ROSAMOND PKWY	0.08	100%

**Table 3. 10-Year Roadway Impact Fee Capital Improvements – Service Area 2**

Service Area	Proj. #	Impact Fee Class	Roadway	Limits	Length (mi)	% In Service Area
SA 2	1	Minor Arterial	CR 1106 (1)	N POWELL PKWY to 1,080' E OF N POWELL PKWY	0.20	50%
	2	Minor Arterial (1/2)	CR 1106 (2)	1,080' E OF N POWELL PKWY to 3,505' E OF N POWELL PKWY	0.46	50%
	3	Major Arterial (2/3)	CR 376 (1)	N POWELL PKWY to 1,675' E OF N POWELL PKWY	0.32	100%
	4	Major Arterial	CR 376 (2)	1,675' E OF N POWELL PKWY to CR 427	0.29	100%
	5	Major Arterial	CR 376 (3)	CR 427 to 575' E OF CR 427	0.11	100%
	6	Major Arterial	E ROSAMOND PKWY (1)	N POWELL PKWY to 295' E OF N POWELL PKWY	0.06	100%
	7	Major Arterial	E ROSAMOND PKWY (2)	820' E OF N POWELL PKWY to 2,735' E OF N POWELL PKWY	0.36	100%
	8	Major Arterial	HOUSTON ST (1)	CR 425 to 5,850' E OF CR 425	1.11	100%
	9	Major Arterial	HOUSTON ST (2)	1,970' W OF CR 477 to 2,475' E OF CR 477	0.84	100%
	10	Minor Arterial	HACKBERRY LN (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%
	11	Minor Arterial	HACKBERRY LN (3)	N RIGGINS ST to N SHERLEY AVE	0.05	100%
	12	Minor Arterial	HACKBERRY LN (4)	N SHERLEY AVE to 140' E OF N SHERLEY AVE	0.03	100%
	13	Minor Arterial	HACKBERRY LN (5)	140' E OF N SHERLEY AVE to 2,215' E OF N SHERLEY AVE	0.39	100%
	14	Downtown Type B	W 2ND ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%
	15	Downtown Type B	W 3RD ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%
	16	Downtown Type B	W 5TH ST (3)	S POWELL PKWY to S RIGGINS ST	0.12	100%
	17	Downtown Type B	W 7TH ST	S POWELL PKWY to S RIGGINS ST	0.14	100%
	18	Downtown Type B	W 8TH ST	S INTERURBAN ST to S RIGGINS ST	0.07	100%
	19	Major Arterial	W WHITE ST (4)	S POWELL PKWY to S INTERURBAN ST	0.07	100%
	20	Major Arterial	E WHITE ST (1)	S INTERURBAN ST to 1,640' E OF HOUSTON TO E WHITE CONNECTOR	1.52	100%
	21	Minor Arterial	CR 419 (1)	595' S OF E WHITE ST to 745' N OF E FINLEY BLVD	0.46	100%
	22	Major Collector	E FINLEY BLVD (1)	930' E OF CR 419 to E WHITE ST	1.05	100%
	23	Major Arterial	E WHITE ST (2)	E FINLEY BLVD to SAM RAYBURN MEMORIAL HWY	1.09	100%
	24	Major Collector (4D) (1/2)	E FINLEY BLVD (2)	345' E OF S POWELL PKWY to SHARP ST	0.16	100%
	25	Major Collector	E FINLEY BLVD (3)	LEONARD AVE to 3,410' E OF LEONARD AVE	0.65	100%
	26	Major Collector	E FOSTER CROSSING RD (1)	S POWELL PKWY to 260' E OF S POWELL PKWY	0.05	50%
	27	Major Collector	E FOSTER CROSSING RD (2)	260' E OF S POWELL PKWY to LEONARD AVE	0.76	100%
	28	Major Collector	E FOSTER CROSSING RD (3)	LEONARD AVE to 2,135' E OF LEONARD AVE	0.40	100%
	29	Major Collector	E FOSTER CROSSING RD (4)	375' W OF OUTER LOOP to CR 419	0.69	100%
	30	Major Arterial	CR 417	CR 418 to CR 419	0.65	50%
	31	Minor Collector	E FOSTER CROSSING TO OUTER LOOP CONNECTION	E FOSTER CROSSING RD to OUTER LOOP	0.36	100%
	32	Minor Collector	S VAIL ST	E FOSTER CROSSING RD to OUTER LOOP	0.34	100%
	33	Minor Collector	CR 427	880' N OF CR 376 to CR 376	0.17	100%
	34	Major Arterial	CR 425	1,540' N OF E ROSAMOND PKWY to E ROSAMOND PKWY	0.29	100%
	35	Major Arterial	HOUSTON ST (3)	E ROSAMOND PKWY to LEONARD AVE	0.27	100%
	36	Major Arterial	LEONARD AVE (1)	HOUSTON ST to 485' S OF HOUSTON ST	0.09	100%
	37	Major Arterial	LEONARD AVE (2)	1,565' N OF E WHITE ST to 930' N OF E WHITE ST	0.12	50%
	38	Major Arterial	LEONARD AVE (3)	E WHITE ST to E FINLEY BLVD	0.71	100%
	39	Major Arterial (1/3)	LEONARD AVE (4)	E FINLEY BLVD to 3,415' S OF E FINLEY BLVD	0.65	100%
	40	Major Arterial (2/3)	LEONARD AVE (5)	3,415' S OF E FINLEY BLVD to 1,135' N OF E FOSTER CROSSING RD	0.13	100%
	41	Major Arterial	LEONARD AVE (6)	1,135' N OF E FOSTER CROSSING RD to E FOSTER CROSSING RD	0.21	50%
	42	Major Arterial	LEONARD AVE (7)	E FOSTER CROSSING RD to OUTER LOOP	0.38	100%
	43	Minor Arterial	CR 419 (2)	3,965' S OF E FINLEY BLVD to 5,485' S OF E FINLEY BLVD	0.29	100%
	44	Minor Arterial	CR 419 (3)	1,030' N OF E FOSTER CROSSING RD to CR 417	0.48	50%

## 4 Methodology for Roadway Impact Fees

### 4.1 Service Areas

The two (2) service areas used in the 2022 Roadway Impact Fee Study are shown in the previously referenced **Exhibit 2.1**. These service areas cover the entire corporate boundary of the City of Anna. Chapter 395 of the Texas Local Government Code specifies that “the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles.” The service areas in the 2022 Roadway Impact Fee Study are consistent with the specification of Chapter 395 of the Texas Local Government Code.

### 4.2 Service Units

The “service unit” is a measure of consumption or use of the roadway facilities by new development. In other words, it is the unit of measure used in the 2022 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile.

**Vehicle-Mile:** The capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.

Total Vehicle-Miles of Supply: Based on the total length (miles), number of lanes, and capacity (vehicles per hour) (see **Appendix B**).

Total Vehicle-Miles of Demand: Based on the 10-year growth projections. The demand is equal to PM Trip Rate (trips) \* Trip Length (miles).

The hourly service volumes used in the 2022 Roadway Impact Fee Study are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG) and generally accepted planning principles. **Table 4** and **Table 5** show the service volumes as a function of the Impact Fee classification and existing cross sections, respectively.

**Table 4. Service Volumes for Proposed Facilities**

Roadway Type (Impact Fee Classifications)	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
Major Arterial	Six-Lane Divided	775
Minor Arterial	Four-Lane Divided	725
Major Collector	Four-Lane Undivided	650
Minor Collector	Three-Lane Undivided	525
Downtown Type B	Two-Lane Undivided	425

**Table 5. Service Volumes for Existing Facilities**

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
6D	Six-Lane Divided	775
4D	Four-Lane Divided	725
4U	Four-Lane Undivided	650
3U	Three-Lane Undivided	525
2D	Two-Lane Divided	
2U	Two-Lane Undivided	425

### 4.3 Cost Per Service Units

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the Roadway Impact Fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel. The cost per service unit is calculated for each service area based on the Capital Improvements Plan projects within that service area.

The second component of the cost per service unit is the determination of the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the 10-year period. Chapter 395 requires that Impact Fees be assessed only to pay for growth projected to occur in the City Limits within the next 10-years. As noted earlier, the units of demand are vehicle-miles of travel.

### 4.4 Roadway Impact Fee Capital Improvements Plan Costing Methodology

All of the project costs for a facility which serves the overall transportation system are eligible to be included in the Capital Improvements Plan. Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "...including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;

3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the Capital Improvements Plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the Capital Improvements Plan is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The costs for location-specific items such as bridges, drainage structures, and any other special components are added to each project as appropriate. The following is a detailed description of the costing worksheet/methodology for the Roadway Impact Fee Capital Improvements Plan.

### Overview of Roadway Impact Fee Capital Improvements Plan Costing Worksheets

For each project a specific costing worksheet has been developed (see **Appendix A**). Each worksheet contains project information, construction pay items, construction component allowances, and a summary of costs and allowances. An example costing sheet can be seen below.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
updated: 6/28/2022

Project Information:		Description:	Project No.	
<b>Name:</b>	CR 373	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	<b>1</b>	
<b>Limits:</b>	595' W OF N POWELL PKWY to N POWELL PKWY			
<b>Impact Fee Class:</b>	Minor Arterial			
<b>Length (lf):</b>	595			
<b>Service Area(s):</b>	Service Area 1			
Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit Price	Item Cost
102	Unclassified Roadway Excavation	1,851	cy \$ 16.00	\$ 29,618
202	8" Lime-Treated Subgrade	3,570	sy \$ 20.00	\$ 71,400
302	8" Concrete Pavement	3,173	sy \$ 100.00	\$ 317,333
402	6" Concrete Sidewalk	7,140	sf \$ 10.00	\$ 71,400
502	Curb & Gutter	2,380	lf \$ 40.00	\$ 95,200
602	Topsoil	1,983	sy \$ 10.00	\$ 19,833
702	Turn Lanes	201	sy \$ 120.00	\$ 24,070
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 628,855</b>
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 31,443	
√ Pavement Markings/Markers		3%	\$ 18,866	
√ Roadway Drainage	Standard Internal System	30%	\$ 188,656	
√ Special Drainage Structures	None Anticipated	-	\$ -	
√ Water	Minor Adjustments	5%	\$ 31,443	
√ Sewer	Minor Adjustments	5%	\$ 31,443	
√ Landscaping and Irrigation		6%	\$ 37,731	
√ Illumination	Standard Illumination System	6%	\$ 37,731	
Other:		\$0	\$ -	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			<b>Allowance Subtotal: \$ 377,313</b>	
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,006,168</b>	
<b>Construction Contingency: 20%</b>			<b>\$ 201,234</b>	
<b>Mobilization 5%</b>			<b>\$ 50,308</b>	
<b>Prep ROW 5%</b>			<b>\$ 50,308</b>	
<b>Construction Cost TOTAL:</b>			<b>\$ 1,309,000</b>	
Impact Fee Project Cost Summary				
Item Description	Notes:	Allowance	Item Cost	
<b>Construction:</b>		-	\$ 1,309,000	
<b>Engineering/Survey/Testing:</b>		16%	\$ 209,440	
<b>ROW/Easement Acquisition:</b>	Existing Alignment	10%	\$ 130,900	
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,649,000</b>	

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.  
The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

## Project Information

In order to correctly estimate the cost of a roadway project, several attributes are first identified:

- Project Number – Identifies each project with a corresponding number. The corresponding number does not represent any prioritizations and is used only to identify projects.
- Name – A unique identifier for each project.
- Limits – Represents the beginning and ending location for each project.
- Impact Fee Class – The costing class to be used in the analysis. The impact fee class provides the width for the various elements in the roadway. The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway. Additional classifications are utilized in cases where a portion of the facility currently exists and the road is only to be partially widened or the ultimate cross section is assumed to be different than the Master Thoroughfare Plan classification due to field conditions. The following notations are used for these projects:
  - o “(1/2)” for facilities where one-half the facility still needs to be constructed.
  - o “(1/3)” for facilities where one-third of the facility still needs to be constructed.
  - o “(2/3)” for facilities where two-thirds of the facility still needs to be constructed.
  - o “4D” for collector class facilities assuming a four-lane divided ultimate section in continuity with the adjacent cross sections.
- Length (ft) – The distance measured in feet that is used to cost out the project.
- Service Area – Represents the service area where the project is located.
- Description – Used to describe the project type assumed in the costing such as a widening or a new project.

## Construction Pay Items

A typical roadway project consists of a number of costs, including planning, survey, design engineering, permitting, right-of-way acquisition, construction, and inspection. While the construction cost component of a project may actually consist of hundreds of various pay items, a simplified approach was used for developing the conceptual level project costs. The roadway construction components pay items are listed below:

- |                                   |                 |
|-----------------------------------|-----------------|
| - Unclassified Roadway Excavation | - Curb & Gutter |
| - Lime-Treated Subgrade           | - Topsoil       |
| - Concrete Pavement               | - Turn Lanes    |
| - Concrete Sidewalk               |                 |

## Construction Component Allowances

A percentage of the paving construction cost is allotted for various major construction component allowances, as appropriate. These allowances include traffic control, pavement markings, roadway drainage, special drainage structures, utility adjustments, landscaping, irrigation, and illumination.

Lump sum dollar allowances are provided for special drainage structures and railroad crossings where needs are anticipated.

The paving and allowance subtotal is given a twenty percent (20%) contingency, five percent (5%) mobilization, and either five (5%) or one percent (1%) preparation of right-of-way (ROW) based on whether the project is new or existing to determine the construction cost total.

## Summary of Costs and Allowances

To determine the total Impact Fee Project Cost, sixteen percent (16%) of the construction cost total is added for engineering, surveying, and testing.

Percentages are also allotted for ROW/easement acquisition. ROW/easement acquisition was based on whether the project was an existing alignment or future alignment. For an existing alignment, the ROW/easement acquisition cost was provided an allotment equal to ten percent (10%) of the construction cost total. For a new alignment, the ROW/easement acquisition cost was equal to twenty percent (20%) of the construction cost total. The value for ROW/easement acquisition is an estimated contribution allocation and does not represent actual ROW/easement acquisition needs. TxDOT facilities and partial widening projects assumed no ROW/easement acquisition.

The Impact Fee Project Cost Total is the Construction Cost Total plus engineering, surveying, testing, and inspection, plus ROW/easement acquisition. Based upon discussions with City of Anna staff, TxDOT facility projects were included with a projected contribution of twenty percent (20%) of the total project cost.

#### 4.5 *Summary of Roadway Impact Fee Capital Improvements Plan Costs*

**Table 6** and **Table 7** summarize the Roadway Impact Fee Capital Improvements Plan project list for the two (2) service areas with planning level project costs. Individual project cost worksheets can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted.

The Roadway Impact Fee Capital Improvements Plan establishes the list of projects for which Impact Fees may be utilized. Projects not included in the Capital Improvements Plan are not eligible to receive impact fee funding. The cost projections utilized in this study should not be utilized for the City's building program or construction CIP.

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**Table 6. 10-Year Roadway Impact Fee Capital Improvements Plan with  
 Conceptual Level Cost Projections – Service Area 1**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
	1	Minor Arterial	CR 373	595' W OF N POWELL PKWY to N POWELL PKWY	0.11	50%	\$ 1,649,000	\$ 824,500
	2	Major Arterial	CR 371 (1)	245' W OF CR 368 to CENTRAL EXPRESSWAY SB	0.36	100%	\$ 7,132,000	\$ 7,132,000
	3	Major Arterial	CR 371 (2)	CENTRAL EXPRESSWAY SB to 910' E OF CENTRAL EXPRESSWAY NB	0.30	100%	\$ 7,980,000	\$ 7,980,000
	4	Major Arterial	CR 371 (3)	910' E OF CENTRAL EXPRESSWAY NB to 1,075' E OF CR 374	0.24	100%	\$ 4,799,000	\$ 4,799,000
	5	Major Arterial	CR 371 (4)	595' W OF BRYANT FARM RD to BRYANT FARM RD	0.11	100%	\$ 2,222,000	\$ 2,222,000
	6	Major Arterial	CR 371 (5)	BRYANT FARM RD to N POWELL PKWY	0.71	100%	\$ 14,208,000	\$ 14,208,000
	7	Major Arterial	CR 370 (1)	5,795' W OF CR 368 to CR 368	1.10	100%	\$ 21,639,000	\$ 21,639,000
	8	Major Arterial	CR 370 (2)	CR 368 to CENTRAL EXPRESSWAY SB	0.18	100%	\$ 3,575,000	\$ 3,575,000
	9	Major Arterial	W ROSAMOND PKWY (1)	CENTRAL EXPRESSWAY NB to CR 374	0.22	100%	\$ 4,201,000	\$ 4,201,000
	10	Major Arterial	W ROSAMOND PKWY (2)	CR 374 to 1,170' W OF W CROSSING BLVD	0.86	100%	\$ 17,734,000	\$ 17,734,000
	11	Major Arterial (2/3)	W ROSAMOND PKWY (3)	1,170' W OF W CROSSING BLVD to LANGDON DR	0.53	100%	\$ 5,317,000	\$ 5,317,000
	12	Major Arterial (1/3)	W ROSAMOND PKWY (4)	LANGDON DR to 740' E OF LANGDON DR	0.14	100%	\$ 1,337,000	\$ 1,337,000
	13	Major Arterial (2/3)	W ROSAMOND PKWY (5)	740' E OF LANGDON DR to N POWELL PKWY	0.23	100%	\$ 1,933,000	\$ 1,933,000
	14	Minor Collector	ROLLINS RD (1)	CR 374 to 615' W OF W CROSSING BLVD	1.01	100%	\$ 11,510,000	\$ 11,510,000
	15	Minor Collector	ROLLINS RD (2)	615' W OF W CROSSING BLVD to W CROSSING BLVD	0.12	100%	\$ 1,244,000	\$ 1,244,000
	16	Minor Arterial	HACKBERRY DR (1)	CR 374 to 1,365' W OF N FERGUSON PKWY	0.54	100%	\$ 8,486,000	\$ 8,486,000
	17	Minor Arterial (1/2)	HACKBERRY DR (2)	1,365' W OF N FERGUSON PKWY to N FERGUSON PKWY	0.26	100%	\$ 1,298,000	\$ 1,298,000
	18	Minor Arterial	HACKBERRY LN (1)	640' W OF N JAMES ST to N POWELL PKWY	0.18	100%	\$ 2,688,000	\$ 2,688,000
	19	Downtown Type B	W 2ND ST (1)	340' W OF N JAMES DR to N POWELL PKWY	0.13	100%	\$ 1,126,000	\$ 1,126,000
	20	Downtown Type B	W 3RD ST (1)	HARPER DR to N POWELL PKWY	0.11	100%	\$ 990,000	\$ 990,000
	21	Downtown Type B	HARPER DR	W 3RD ST to N JAMES DR	0.11	100%	\$ 956,000	\$ 956,000
	22	Downtown Type B	W 5TH ST (1)	215' W OF S JAMES DR to S JAMES DR	0.04	100%	\$ 370,000	\$ 370,000
	23	Downtown Type B	W 5TH ST (2)	S JAMES DR to S POWELL PKWY	0.06	100%	\$ 517,000	\$ 517,000
	24	Major Arterial	FM 455 (1)	1,330' W OF FM 3356 to 140' W OF CR 289	1.28	100%	\$ 5,347,000	\$ 5,347,000
	25	Major Arterial	FM 455 (2)	80' S OF FM 290 to 180' N OF COWAN RD	0.83	100%	\$ 3,437,000	\$ 3,437,000
	26	Major Arterial	FM 455 (3)	180' E OF COWAN RD to W WHITE ST	1.21	100%	\$ 5,020,000	\$ 5,020,000
	27	Major Arterial	W WHITE ST (1)	FM 455 to CR 286	0.51	100%	\$ 1,983,000	\$ 1,983,000
	28	Major Arterial (1/3)	W WHITE ST (2)	CR 286 to CENTRAL EXPRESSWAY SB	0.27	100%	\$ 225,000	\$ 225,000
	29	Major Arterial (1/3)	W WHITE ST (3)	CENTRAL EXPRESSWAY NB to S POWELL PKWY	1.98	100%	\$ 1,643,000	\$ 1,643,000
	30	Major Collector	CR 284 (1)	2,860' W OF CR 286 to 415' E OF CR 286	0.62	100%	\$ 7,961,000	\$ 7,961,000
	31	Major Collector	CR 284 (2)	1,905' W OF CENTRAL EXPRESSWAY SB to 610' W OF CENTRAL EXPRESSWAY SB	0.25	50%	\$ 3,515,000	\$ 1,757,500
	32	Major Collector	CR 284 (3)	610' W OF CENTRAL EXPRESSWAY SB to CENTRAL EXPRESSWAY NB	0.18	100%	\$ 4,832,000	\$ 4,832,000
	33	Major Collector	TAYLOR BLVD (1)	CENTRAL EXPRESSWAY NB to 3,775' E OF CENTRAL EXPRESSWAY NB	0.71	50%	\$ 11,511,000	\$ 5,755,500
	34	Major Collector	TAYLOR BLVD (2)	3,775' E OF CENTRAL EXPRESSWAY NB to 4,600' E OF CENTRAL EXPRESSWAY NB	0.16	100%	\$ 1,979,000	\$ 1,979,000
	35	Major Collector	TAYLOR BLVD (3)	4,600' E OF CENTRAL EXPRESSWAY NB to 4,825' E OF CENTRAL EXPRESSWAY NB	0.04	50%	\$ 541,000	\$ 270,500
	36	Minor Collector (4D)	W FINLEY BLVD (1)	S FERGUSON PKWY to 2,700' E OF S FERGUSON PKWY	0.51	50%	\$ 7,581,000	\$ 3,790,500
SA 1	37	Minor Collector (4D) (1/2)	W FINLEY BLVD (2)	2,700' E OF S FERGUSON PKWY to SILVER LEAF LN	0.08	100%	\$ 405,000	\$ 405,000
	38	Minor Collector (4D)	W FINLEY BLVD (3)	SILVER LEAF LN to CR 423	0.30	100%	\$ 4,521,000	\$ 4,521,000
	39	Minor Collector	W FINLEY BLVD (4)	CR 423 to S POWELL PKWY	0.15	100%	\$ 1,547,000	\$ 1,547,000
	40	Major Collector	W FOSTER CROSSING RD (1)	3,740' W OF S FERGUSON PKWY to 1,780' W OF S FERGUSON PKWY	0.37	100%	\$ 6,339,000	\$ 6,339,000
	41	Major Collector	W FOSTER CROSSING RD (2)	1,780' W OF S FERGUSON PKWY to S FERGUSON PKWY	0.34	50%	\$ 4,270,000	\$ 2,135,000
	42	Major Collector (1/2)	W FOSTER CROSSING RD (3)	1,095' E OF S FERGUSON PKWY to ASPEN DR	0.38	50%	\$ 1,793,000	\$ 896,500
	43	Major Collector	W FOSTER CROSSING RD (4)	ASPEN DR to HIGHLAND RD	0.19	50%	\$ 2,423,000	\$ 1,211,500
	44	Major Collector	W FOSTER CROSSING RD (5)	295' W OF S POWELL PKWY to S POWELL PKWY	0.06	100%	\$ 708,000	\$ 708,000
	45	Minor Arterial	CR 368 (1)	CR 371 to 155' S OF CR 371	0.03	100%	\$ 435,000	\$ 435,000
	46	Minor Arterial	CR 368 (2)	2,865' N OF FAIRWAY LANE to FAIRWAY LANE	0.54	100%	\$ 8,043,000	\$ 8,043,000
	47	Minor Arterial	CR 368 (3)	FAIRWAY LANE to 625' S OF FAIRWAY LANE	0.12	100%	\$ 1,731,000	\$ 1,731,000
	48	Minor Arterial	CR 368 (4)	625' S OF FAIRWAY LANE to 1,150' N OF CR 370	0.16	50%	\$ 2,300,000	\$ 1,150,000
	49	Minor Arterial	CR 368 (5)	1,150' N OF CR 370 to 740' S OF CR 370	0.36	100%	\$ 5,645,000	\$ 5,645,000
	50	Minor Arterial	CR 368 (6)	740' S OF CR 370 to 1,855' S OF CR 370	0.21	50%	\$ 3,090,000	\$ 1,545,000
	51	Minor Arterial	CR 368 (7)	1,855' S OF CR 370 to 4,020' N OF W WHITE ST	0.20	100%	\$ 2,976,000	\$ 2,976,000
	52	Minor Arterial (1/2)	CR 368 (8)	4,020' N OF W WHITE ST to 880' N OF W WHITE ST	0.59	100%	\$ 2,984,000	\$ 2,984,000
	53	Minor Arterial	CR 286 (1)	W WHITE ST to 2,800' S OF W WHITE ST	0.53	100%	\$ 7,757,000	\$ 7,757,000
	54	Minor Arterial	CR 286 (2)	2,800' S OF W WHITE ST to 3,800' S OF W WHITE ST	0.19	100%	\$ 2,808,000	\$ 2,808,000
	55	Minor Arterial	CR 286 (3)	890' N OF CR 284 to 560' S OF CR 284	0.28	100%	\$ 4,085,000	\$ 4,085,000
	56	Major Collector	CR 374 (1)	900' N OF CR 371 to W ROSAMOND PKWY	1.52	100%	\$ 19,996,000	\$ 19,996,000
	57	Major Collector	CR 374 (2)	W ROSAMOND PKWY to 240' S OF W ROSAMOND PKWY	0.05	100%	\$ 576,000	\$ 576,000
	58	Major Collector	CR 374 (3)	240' S OF W ROSAMOND PKWY to 525' N OF ROLLINS RD	0.08	50%	\$ 1,032,000	\$ 516,000
	59	Major Collector	CR 374 (4)	525' N OF ROLLINS RD to ROLLINS RD	0.10	100%	\$ 1,260,000	\$ 1,260,000
	60	Major Collector	CR 374 (5)	ROLLINS RD to HACKBERRY DR	0.38	100%	\$ 4,899,000	\$ 4,899,000
	61	Major Arterial	N FERGUSON PKWY (1)	CR 371 to ROLLINS RD	1.11	100%	\$ 22,328,000	\$ 22,328,000
	62	Major Arterial (2/3)	N FERGUSON PKWY (2)	ROLLINS RD to HACKBERRY DR	0.52	100%	\$ 4,482,000	\$ 4,482,000
	63	Major Arterial (1/3)	N FERGUSON PKWY (3)	HACKBERRY DR to W WHITE ST	0.50	100%	\$ 2,087,000	\$ 2,087,000
	64	Major Arterial (1/3)	S FERGUSON PKWY (1)	W WHITE ST to 2,440' S OF W WHITE ST	0.46	100%	\$ 1,922,000	\$ 1,922,000
	65	Major Arterial (2/3)	S FERGUSON PKWY (2)	2,440' S OF W WHITE ST to 190' N OF TAYLOR BLVD	0.26	100%	\$ 2,309,000	\$ 2,309,000
	66	Major Arterial	S FERGUSON PKWY (3)	W FINLEY BLVD to 1,245' S OF W FINLEY BLVD	0.24	50%	\$ 4,650,000	\$ 2,325,000
	67	Major Arterial	S FERGUSON PKWY (4)	1,245' S OF FINLEY BLVD to 425' N OF W FOSTER CROSSING RD	0.19	100%	\$ 3,828,000	\$ 3,828,000
	68	Major Arterial	S FERGUSON PKWY (5)	425' N OF W FOSTER CROSSING RD to W FOSTER CROSSING RD	0.08	50%	\$ 1,587,000	\$ 793,500
	69	Major Collector	W CROSSING BLVD (1)	2,660' N OF CR 371 to 1,570' N OF W ROSAMOND PKWY	0.89	100%	\$ 11,485,000	\$ 11,485,000
	70	Major Collector (4D) (1/2)	W CROSSING BLVD (2)	1,970' N OF W ROSAMOND PKWY to 1,530' N OF W ROSAMOND PKWY	0.08	100%	\$ 419,000	\$ 419,000
							<b>Service Area Project Cost Subtotal</b>	<b>\$ 302,135,000</b>
							<b>Roadway Impact Fee Study Cost</b>	<b>\$ 28,167</b>
							<b>Total Cost in Service Area 1</b>	<b>\$ 302,163,167</b>

**Table 7. 10-Year Roadway Impact Fee Capital Improvements Plan with Conceptual Level Cost Projections – Service Area 2**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA 2	1	Minor Arterial	CR 1106 (1)	N POWELL PKWY to 1,080' E OF N POWELL PKWY	0.20	50%	\$ 3,812,000	\$ 1,906,000
	2	Minor Arterial (1/2)	CR 1106 (2)	1,080' E OF N POWELL PKWY to 3,505' E OF N POWELL PKWY	0.46	50%	\$ 3,059,000	\$ 1,529,500
	3	Major Arterial (2/3)	CR 376 (1)	N POWELL PKWY to 1,675' E OF N POWELL PKWY	0.32	100%	\$ 3,474,000	\$ 3,474,000
	4	Major Arterial	CR 376 (2)	1,675' E OF N POWELL PKWY to CR 427	0.29	100%	\$ 5,658,000	\$ 5,658,000
	5	Major Arterial	CR 376 (3)	CR 427 to 575' E OF CR 427	0.11	100%	\$ 2,119,000	\$ 2,119,000
	6	Major Arterial	E ROSAMOND PKWY (1)	N POWELL PKWY to 295' E OF N POWELL PKWY	0.06	100%	\$ 1,906,000	\$ 1,906,000
	7	Major Arterial	E ROSAMOND PKWY (2)	827' E OF N POWELL PKWY to 2,735' E OF N POWELL PKWY	0.36	100%	\$ 7,151,000	\$ 7,151,000
	8	Major Arterial	HOUSTON ST (1)	CR 425 to 585' E OF CR 425	1.11	100%	\$ 4,195,000	\$ 4,195,000
	9	Major Arterial	HOUSTON ST (2)	1,970' W OF CR 477 to 2,475' E OF CR 477	0.84	100%	\$ 3,317,000	\$ 3,317,000
	10	Minor Arterial	HACKBERRY LN (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%	\$ 1,773,000	\$ 1,773,000
	11	Minor Arterial	HACKBERRY LN (3)	N RIGGINS ST to N SHERLEY AVE	0.05	100%	\$ 1,545,000	\$ 1,545,000
	12	Minor Arterial	HACKBERRY LN (4)	N SHERLEY AVE to 140' E OF N SHERLEY AVE	0.03	100%	\$ 71,000	\$ 71,000
	13	Minor Arterial	HACKBERRY LN (5)	140' E OF N SHERLEY AVE to 2,215' E OF N SHERLEY AVE	0.39	100%	\$ 5,826,000	\$ 5,826,000
	14	Downtown Type B	W 2ND ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%	\$ 1,058,000	\$ 1,058,000
	15	Downtown Type B	W 3RD ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	100%	\$ 1,067,000	\$ 1,067,000
	16	Downtown Type B	W 5TH ST (3)	S POWELL PKWY to S RIGGINS ST	0.12	100%	\$ 1,092,000	\$ 1,092,000
	17	Downtown Type B	W 7TH ST	S POWELL PKWY to S RIGGINS ST	0.14	100%	\$ 1,227,000	\$ 1,227,000
	18	Downtown Type B	W 8TH ST	S INTERURBAN ST to S RIGGINS ST	0.07	100%	\$ 653,000	\$ 653,000
	19	Major Arterial	W WHITE ST (4)	S POWELL PKWY to S INTERURBAN ST	0.07	100%	\$ 241,000	\$ 241,000
	20	Major Arterial	E WHITE ST (1)	S INTERURBAN ST to 1,640' E OF HOUSTON TO E WHITE CONNECTOR	1.52	100%	\$ 5,907,000	\$ 5,907,000
	21	Minor Arterial	CR 419 (1)	595' S OF E WHITE ST to 745' N OF E FINLEY BLVD	0.46	100%	\$ 1,239,000	\$ 1,239,000
	22	Major Collector	E FINLEY BLVD (1)	930' E OF CR 419 to E WHITE ST	1.05	100%	\$ 2,739,000	\$ 2,739,000
	23	Major Arterial	E WHITE ST (2)	E FINLEY BLVD to SAM RAYBURN MEMORIAL HWY	1.09	100%	\$ 4,189,000	\$ 4,189,000
	24	Major Collector (4D) (1/2)	E FINLEY BLVD (2)	345' E OF S POWELL PKWY to SHARP ST	0.16	100%	\$ 813,000	\$ 813,000
	25	Major Collector	E FINLEY BLVD (3)	LEONARD AVE to 3,410' E OF LEONARD AVE	0.65	100%	\$ 8,289,000	\$ 8,289,000
	26	Major Collector	E FOSTER CROSSING RD (1)	S POWELL PKWY to 260' E OF S POWELL PKWY	0.05	50%	\$ 1,443,000	\$ 721,500
	27	Major Collector	E FOSTER CROSSING RD (2)	260' E OF S POWELL PKWY to LEONARD AVE	0.76	100%	\$ 10,484,000	\$ 10,484,000
	28	Major Collector	E FOSTER CROSSING RD (3)	LEONARD AVE to 2,115' E OF LEONARD AVE	0.40	100%	\$ 5,190,000	\$ 5,190,000
	29	Major Collector	E FOSTER CROSSING RD (4)	375' W OF OUTER LOOP to CR 419	0.69	100%	\$ 8,897,000	\$ 8,897,000
	30	Major Arterial	CR 417	CR 418 to CR 419	0.65	50%	\$ 13,139,000	\$ 6,569,500
	31	Minor Collector	E FOSTER CROSSING TO OUTER LOOP CONNECTION	E FOSTER CROSSING RD to OUTER LOOP	0.36	100%	\$ 3,815,000	\$ 3,815,000
	32	Minor Collector	S VAIL ST	E FOSTER CROSSING RD to OUTER LOOP	0.34	100%	\$ 3,603,000	\$ 3,603,000
	33	Minor Collector	CR 427	880' N OF CR 376 to CR 376	0.17	100%	\$ 1,758,000	\$ 1,758,000
	34	Major Arterial	CR 425	1,540' N OF E ROSAMOND PKWY to E ROSAMOND PKWY	0.29	100%	\$ 6,085,000	\$ 6,085,000
	35	Major Arterial	HOUSTON ST (3)	E ROSAMOND PKWY to LEONARD AVE	0.27	100%	\$ 957,000	\$ 957,000
	36	Major Arterial	LEONARD AVE (1)	HOUSTON ST to 485' S OF HOUSTON ST	0.09	100%	\$ 1,812,000	\$ 1,812,000
	37	Major Arterial	LEONARD AVE (2)	1,565' N OF E WHITE ST to 930' N OF E WHITE ST	0.12	50%	\$ 2,372,000	\$ 1,186,000
	38	Major Arterial	LEONARD AVE (3)	E WHITE ST to E FINLEY BLVD	0.71	100%	\$ 13,947,000	\$ 13,947,000
	39	Major Arterial (1/3)	LEONARD AVE (4)	E FINLEY BLVD to 3,415' S OF E FINLEY BLVD	0.65	100%	\$ 2,690,000	\$ 2,690,000
	40	Major Arterial (2/3)	LEONARD AVE (5)	3,415' S OF E FINLEY BLVD to 1,135' N OF E FOSTER CROSSING RD	0.13	100%	\$ 1,096,000	\$ 1,096,000
	41	Major Arterial	LEONARD AVE (6)	1,135' N OF E FOSTER CROSSING RD to E FOSTER CROSSING RD	0.21	50%	\$ 4,182,000	\$ 2,091,000
	42	Major Arterial	LEONARD AVE (7)	E FOSTER CROSSING RD to OUTER LOOP	0.38	100%	\$ 7,431,000	\$ 7,431,000
	43	Minor Arterial	CR 419 (2)	3,965' S OF E FINLEY BLVD to 5,485' S OF E FINLEY BLVD	0.29	100%	\$ 4,268,000	\$ 4,268,000
	44	Minor Arterial	CR 419 (3)	1,030' N OF E FOSTER CROSSING RD to CR 417	0.48	50%	\$ 7,841,000	\$ 3,920,500
<b>Service Area Project Cost Subtotal</b>							<b>\$ 155,506,000</b>	
<b>Roadway Impact Fee Study Cost</b>							<b>\$ 28,167</b>	
<b>Total Cost in Service Area 2</b>							<b>\$ 155,534,167</b>	

#### 4.6 Service Unit Calculation

The basic service unit for the computation of Anna's Roadway Impact Fee is the vehicle-mile of travel during the PM peak-hour. To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service areas for the 10-year period.

The growth in vehicle-miles from 2022 to 2032 is based upon projected changes in residential and non-residential growth for the period. These growth projections are discussed in Chapter 1: Land Use Assumptions for the 2022 Impact Fee Study.

The residential and non-residential statistics in the Land Use Assumptions provide the "independent variables" that are used to calculate the existing (2022) and projected (2032) transportation service units (vehicle-miles) used to establish the roadway impact fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for the service area are the sum of the vehicle-miles "generated" by each category of land use in the service area.

For the purpose of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the number of dwelling units in each service area is multiplied by a transportation demand factor to compute the vehicle-miles of travel that occur during the PM peak hour. This factor computes the average amount of demand caused by the residential land uses in the service area. The transportation demand factor is discussed in more detail later in this section.

For non-residential land uses, the process is similar. The Land Use Assumptions provide the projected number of building square footages for three (3) categories of non-residential land uses – basic, service, and retail. These

categories correspond to an aggregation of other specific land use categories based on the North American Industrial Classification System (NAICS).

Building square footage is the most common independent variable for the estimation of non-residential trips in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11<sup>th</sup> Edition. This characteristic is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development, or development modification, that would require the assessment of an impact fee.

The existing and projected Land Use Assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle-miles of travel. As noted earlier, a transportation demand factor is applied to these values and then summed to calculate the total peak hour vehicle-miles of demand for the service area.

The transportation demand factors are aggregate rates derived from two sources – the ITE Trip Generation Manual, 11<sup>th</sup> Edition and trip length information from the National Household Travel Survey (NHTS).

ITE's Trip Generation Manual, 11<sup>th</sup> Edition provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail rate to avoid double counting trips.

The next component of the transportation demand factor accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics survey conducted by NHTS, requirements in Chapter 395, and other generally accepted planning principles.

The computation of the *transportation demand factor* is based on the following equation:

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

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

Variables:

- TDF = Transportation Demand Factor
- T = Trip Rate (peak hour trips / unit)
- P<sub>b</sub> = Pass-By Discount (% of trips)
- L = Average Trip Length (miles)
- L<sub>Max</sub> = Maximum Trip Length (miles)
- OD = Origin-Destination Reduction (50%)
- SA<sub>L</sub> = Maximum Service Area Trip Length

The maximum trip length was limited to three (3) miles, or the assumed radius of the service area. Chapter 395 of the Texas Local Government Code allows for a service area of six (6) miles in diameter.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the Roadway Impact Fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Anna to both residential and non-residential land uses. To avoid counting these trips as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is

assessed to each land use, and the total trip is only counted once. This methodology is consistent with that used in the NHTS.

**Table 8** shows the derivation of the Transportation Demand Factor for the two (2) residential land uses and the three (3) non-residential land use categories. The values utilized for all variables shown in the transportation demand factor equation are also shown in the table.

**Table 8. Transportation Demand Factor Calculations**

Variable	Residential		Basic	Service	Retail
	Single-Family	Multifamily			
T	0.94	0.51	0.65	1.44	3.40
P <sub>b</sub>	0%	0%	0%	0%	29%
L <sub>Max</sub> *	3.0	3.0	3.0	3.0	2.8
TDF	2.82	1.53	1.95	4.32	6.76

The application of the demographic projections and the transportation demand factors are presented in the 10-Year Growth Projections in **Table 9**. This table shows the total growth in total vehicle-miles by service area between the years 2022 and 2032. These estimates and projections lead to the Vehicle-Miles of Travel for the 10-year period.

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Table 9. 10-Year Growth Projections

2022 - 2032 Growth Projections<sup>1</sup>

SERVICE AREA	RESIDENTIAL VEHICLE-MILES				VEHICLE MILES <sup>4</sup>	NON-RESIDENTIAL SQUARE FEET <sup>5</sup>			TRANS. DEMAND FACTOR <sup>6</sup>			NON-RESIDENTIAL VEHICLE-MILES <sup>10</sup>				TOTAL VEHICLE MILES <sup>11</sup>
	Single Family Units	Trip Rate	Multi-Family Units	Trip Rate		BASIC	SERVICE	RETAIL	BASIC <sup>7</sup>	SERVICE <sup>8</sup>	RETAIL <sup>9</sup>	BASIC	SERVICE	RETAIL	TOTAL	
		TDF <sup>2</sup>		TDF <sup>3</sup>												
1	2,761	0.94	2,050	0.51	10,923	820,834	961,430	4,171,930	0.65	1.44	3.40	1,601	4,153	28,199	33,953	44,876
2	2,091	2.82	0	1.53	5,896	689,774	39,215	891,148	1.95	4.32	6.76	1,345	169	6,023	7,537	13,433
Totals	4,852		2,050		16,819	1,511,000	1,001,000	5,063,000				2,946	4,322	34,222	41,490	58,309

VEHICLE-MILES OF INCREASE (2022 - 2032)

SERVICE AREA	VEH-MILES
1	44,876
2	13,433

Notes:

- <sup>1</sup> From Chapter 1: Land Use Assumptions for 2022 Impact Fee Study
- <sup>2</sup> Transportation Demand Factor for each Service Area (from LUMMET) using Single-Family Detached Housing land use and trip generation rate
- <sup>3</sup> Transportation Demand Factor for each Service Area (from LUMMET) using Multifamily Housing (Low-Rise) land use and trip generation rate
- <sup>4</sup> Calculated by multiplying TDF by the number of dwelling units
- <sup>5</sup> From Chapter 1: Land Use Assumptions for 2022 Impact Fee Study
- <sup>6</sup> Trip generation rate and Transportation Demand Factors from LUMMET for each land use
- <sup>7</sup> 'Basic' corresponds to General Light Industrial land use and trip generation rate
- <sup>8</sup> 'Service' corresponds to General Office Building land use and trip generation rate
- <sup>9</sup> 'Retail' corresponds to Shopping Center (>150k SF) land use and trip generation rate
- <sup>10</sup> Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- <sup>11</sup> Residential plus non-residential vehicle-mile totals for each Service Area

## 5 Roadway Impact Fee Calculation

### 5.1 Maximum Assessable Impact Fee Per Service Unit

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible Roadway Impact Fee Capital Improvements Plan costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this chapter. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed.

**Table 10** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

**Table 10. Maximum Assessable Roadway Impact Fee Computation**

Line	Title	Description
1	<i>Total Vehicle-Miles of Capacity Added by Capital Improvements Plan</i>	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from <b>Appendix B – Capital Improvements Plan Units of Supply</b> )

Each project identified in the Capital Improvements Plan will add a certain amount of capacity to the City's roadway network based on its length and classification. This line displays the total amount added within each service area.

2	<i>Total Vehicle-Miles of Existing Demand</i>	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added (from <b>Appendix B – Capital Improvements Plan Units of Supply</b> )
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A number of facilities identified in the Capital Improvements Plan have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently being used by existing traffic.

3	<i>Total Vehicle-Miles of Existing Deficiencies</i>	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from <b>Appendix C – Existing Roadway Facilities Inventory</b> )
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In order to ensure that existing deficiencies on the City's roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient, even those not identified on the Capital Improvements Plan, will have these additional vehicle-miles removed from the calculation.

4	<i>Net Amount of Vehicle-Miles of Capacity Added</i>	A measurement of the amount of vehicle-miles added by the Capital Improvements Plan that will not be utilized by existing demand. <b>(Line 1 – Line 2 – Line 3)</b>
---	--	---

This calculation identifies the portion of the Capital Improvements Plan (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	<i>Total Cost of Capital Improvements Plan Within Service Area</i>	The total cost of the Capital Improvements Plan projects within each service area (from <b>Table 6</b> and <b>Table 7: 10-Year Roadway Impact Fee Capital Improvement Plan with Conceptual Level Cost Projections</b> )
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This line simply identifies the total cost of all of the roadway projects identified in each service area.

<b>6</b>	<i>Cost of Net Capacity Supplied</i>	The Total Cost of Capital Improvements Plan Within Service Area ( <b>Line 5</b> ) prorated by the ratio of Net Amount of Vehicle-Miles of Capacity Added ( <b>Line 4</b> ) to Total Vehicle-Miles of Capacity Added by Capital Improvements Plan ( <b>Line 1</b> ). <b>[(Line 4 / Line 1) * (Line 5)]</b>
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Using the ratio of vehicle-miles added by the Capital Improvements Plan available to serve future growth to the total vehicle-miles added, the total cost of the Capital Improvements Plan is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

<b>7</b>	<i>Cost to Meet Existing Needs and Usage</i>	The difference between the Total Cost of Capital Improvements Plan Within Service Area ( <b>Line 5</b> ) and the Cost of Net Capacity Supplied ( <b>Line 6</b> ). <b>(Line 5 – Line 6)</b>
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This line is provided for information purposes only – it is to present the portion of the total cost of the Capital Improvements Plan that is required to meet existing demand.

<b>8</b>	<i>Total Vehicle-Miles of New Demand Over 10 Years</i>	Based upon the growth projection provided in Chapter 1: Land Use Assumptions for the 2022 Impact Fee Study, an estimate of the number of new vehicle-miles within the service area over the next ten years (from <b>Table 9: 10-Year Growth Projections</b> )
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This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next 10-years.

<b>9</b>	<i>Percent of Capacity Added Attributable to New Growth</i>	The result of dividing Total Vehicle-Miles of New Demand Over 10 Years ( <b>Line 8</b> ) by the Net Amount of Vehicle-Miles of Capacity Added ( <b>Line 4</b> ), limited to 100%. This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth. <b>(Line 8 / Line 4) &lt; (100%)</b>
<b>10</b>	<i>Chapter 395 Check</i>	

In order to ensure that the vehicle-miles added by the Capital Improvements Plan do not exceed the amount needed to accommodate growth beyond the 10-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Capital Improvements Plan exceeds the growth projected to occur in the next ten years, the Capital Improvements Plan cost is reduced accordingly.

<b>11</b>	<i>Cost of Capacity Added Attributable to New Growth</i>	The result of multiplying the Cost of Net Capacity Supplied ( <b>Line 6</b> ) by the Percent of Capacity Added Attributable to New Growth, limited to 100% ( <b>Line 10</b> ). <b>(Line 6 * Line 10)</b>
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This value is the total Capital Improvements Plan project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

<b>12</b>	<i>Pre-Credit Maximum Fee Per Service Unit (without financing)</i>	Found by dividing the Cost of Capacity Added Attributable to New Growth by the Total Vehicle-Miles of New Demand Over 10 Years. <b>(Line 11 / Line 8)</b>
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This value is the total pre-credit maximum fee per service unit (without financing costs) that may be recovered through impact fees. This line is determined considering limitations to impact fee required by Texas Legislature.

## 5.2 Plan for the Roadway Impact Fee Credit

Chapter 395 of the Texas Local Government Code requires the Roadway Impact Fee Capital Improvement Plan to contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code requires:

“(A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or

(B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan...”

The City of Anna has determined the maximum assessable impact fee per service unit shall be 50% of the total projected cost of implementing the Capital Improvements Plan. Therefore, the Credit Calculation (Line 13) is assumed to be half of the Cost of Capacity Added Attributable to Growth (Line 11). The sum of these values represents the Recoverable Cost of Capital Improvements Plan (Line 14). The Maximum Assessable Fee Per Service Unit (Line 15) is then found by dividing the Recoverable Cost of Capital Improvements Plan (Line 14) by the Total Vehicle-Miles of Demand Over 10 Years (Line 8).

**Table 11** summarizes the additional computations carried out to provide the maximum assessable impact fee.

**Table 11. Maximum Assessable Roadway Impact Fee Computation (Continued)**

Line	Title	Description
13	<i>Credit Calculation</i>	Assumed to be 50% of the Cost of Capacity Added Attributable to New Growth ( <b>Line 11</b> ) as allowed by Chapter 395. ( <b>Line 11 * 50%</b> )
14	<i>Recoverable Cost of Capital Improvements Plan</i>	The sum of the Cost of Capacity Added Attributable to New Growth ( <b>Line 11</b> ) and the Credit Calculation ( <b>Line 13</b> ). ( <b>Line 11 + Line 13</b> )
15	<i>Maximum Assessable Fee Per Service Unit</i>	Found by dividing the Recoverable Cost of Capital Improvements Plan ( <b>Line 14</b> ) by the Total Vehicle-Miles of New Demand Over 10 Years ( <b>Line 8</b> ). ( <b>Line 14 / Line 8</b> )

**Table 12** summarizes the calculations walked through in **Table 10** and **Table 11** and provides the maximum assessable impact fee for each service area.

*[Remainder of this page intentionally blank]*

**Table 12. Maximum Assessable Roadway Impact Fee**

SERVICE AREA:		SA 1	SA 2
1	TOTAL VEH-MI OF CAPACITY ADDED BY CIP (FROM CIP UNITS OF SUPPLY, APPENDIX B)	81,917	54,702
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM CIP UNITS OF SUPPLY, APPENDIX B)	1,636	1,934
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, APPENDIX C)	229	229
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	80,052	52,539
5	TOTAL COST OF CIP WITHIN SERVICE AREA (FROM TABLE 6 AND TABLE 7)	\$ 302,163,167	\$ 155,534,167
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 295,283,834	\$ 149,384,110
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	\$ 6,879,333	\$ 6,150,057
8	TOTAL VEH-MI OF NEW DEMAND OVER 10 YEARS (FROM TABLE 9 AND LAND USE ASSUMPTIONS)	44,876	13,433
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	56.1%	25.6%
10	CHAPTER 395 CHECK (IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE)	56.1%	25.6%
11	COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 6 * LINE 10)	\$ 165,654,231	\$ 38,242,332
12	PRE-CREDIT MAX FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 11 / LINE 8)	\$ 3,691	\$ 2,846
13	CREDIT CALCULATION (50% OF LINE 11)	\$ (82,827,115)	\$ (19,121,166)
14	RECOVERABLE COST OF CIP (LINE 11 + LINE 13)	\$ 82,827,115	\$ 19,121,166
15	MAX ASSESSABLE FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 14 / LINE 8)	\$ 1,845	\$ 1,423

\*Note: Financing Cost Not Included

### 5.3 *Service Unit Demand Per Unit of Development*

The Roadway Impact Fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City will utilize the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 13**. This table lists the predominant land uses that may occur within the City of Anna. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of local uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, and industrial.

The trip rates presented for each land use are a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the PM peak hour by each land use per development unit. The next column, if applicable to the land use, presents the number of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The source of the trip generation and pass-by statistics is the ITE Trip Generation Manual, 11<sup>th</sup> Edition, the latest edition. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning. However, for land uses not contained within the 11<sup>th</sup> Edition of the ITE Trip Generation Manual, an alternative service unit demand could be calculated by completing a trip generation study based on the procedure identified in the ITE Trip Generation Handbook.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on land use, as explained in Section 4.6 - Service Unit Calculation.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the Transportation Demand Factor, is used in the impact fee to compute the number of service units attributed to each land use category. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

**Table 13. Land Use/Vehicle-Mile Equivalency Table**

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Average Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
<b>INDUSTRIAL</b>											
General Light Industrial	110	1,000 SF GFA	0.65			0.65	14.65	50%	7.33	3.00	1.95
Industrial Park	130	1,000 SF GFA	0.34			0.34	14.65	50%	7.33	3.00	1.02
Warehousing	150	1,000 SF GFA	0.18			0.18	14.65	50%	7.33	3.00	0.54
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	14.65	50%	7.33	3.00	0.45
High-Cube Fulfillment Center Warehouse (Sort)	155	1,000 SF GFA	1.20			1.20	14.65	50%	7.33	3.00	3.60
<b>RESIDENTIAL</b>											
Single-Family Detached Housing	210	Dwelling Units	0.94			0.94	15.50	50%	7.75	3.00	2.82
Single-Family Attached Housing	215	Dwelling Units	0.57			0.57	15.50	50%	7.75	3.00	1.71
Multifamily Housing (Low-Rise)	220	Dwelling Units	0.51			0.51	15.50	50%	7.75	3.00	1.53
Multifamily Housing (Mid-Rise)	221	Dwelling Units	0.39			0.39	15.50	50%	7.75	3.00	1.17
Multifamily Housing (High-Rise)	222	Dwelling Units	0.32			0.32	15.50	50%	7.75	3.00	0.96
Mobile Home Park	240	Dwelling Units	0.58			0.58	15.50	50%	7.75	3.00	1.74
Senior Adult Housing - Single-Family	251	Dwelling Units	0.30			0.30	15.50	50%	7.75	3.00	0.90
Senior Adult Housing - Multifamily	252	Dwelling Units	0.25			0.25	15.50	50%	7.75	3.00	0.75
Assisted Living	254	Beds	0.24			0.24	15.50	50%	7.75	3.00	0.72
<b>LODGING</b>											
Hotel	310	Rooms	0.59			0.59	6.43	50%	3.22	3.00	1.77
Motel	320	Rooms	0.36			0.36	6.43	50%	3.22	3.00	1.08
<b>RECREATIONAL</b>											
Golf Course	430	Holes	2.91			2.91	7.86	50%	3.93	3.00	8.73
Miniature Golf Course	431	Holes	0.33			0.33	7.86	50%	3.93	3.00	0.99
Golf Driving Range	432	Tees/Driving Positions	1.25			1.25	7.86	50%	3.93	3.00	3.75
Batting Cages	433	Cages	2.22			2.22	7.86	50%	3.93	3.00	6.66
Multipurpose Recreational Facility	435	1,000 SF GFA	3.58			3.58	7.86	50%	3.93	3.00	10.74
Trampoline Park	436	1,000 SF GFA	1.50			1.50	7.86	50%	3.93	3.00	4.50
Movie Theater	445	Movie Screens	13.96			13.96	7.86	50%	3.93	3.00	41.88
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	7.86	50%	3.93	3.00	3.99
Racquet/Tennis Club	491	Tennis Courts	3.82			3.82	7.86	50%	3.93	3.00	11.46
Health/Fitness Club	492	1,000 SF GFA	3.45			3.45	7.86	50%	3.93	3.00	10.35
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.00	7.50
<b>INSTITUTIONAL</b>											
Private School (K-8)	530	Students	0.26			0.26	3.49	50%	1.75	1.75	0.46
Private High School	534	Students	0.19			0.19	3.49	50%	1.75	1.75	0.33
Charter Elementary School	536	Students	0.16			0.16	3.49	50%	1.75	1.75	0.28
Junior/Community College	540	Students	0.11			0.11	10.44	50%	5.22	3.00	0.33
University/College	550	Students	0.15			0.15	10.44	50%	5.22	3.00	0.45
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.16	3.00	1.47
Day Care Center	565	1,000 SF GFA	11.12	44%	C	6.23	3.49	50%	1.75	1.75	10.90
<b>MEDICAL</b>											
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.93	3.00	2.58
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.93	3.00	0.42
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.93	3.00	11.07
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	9.85	50%	4.93	3.00	7.41
<b>OFFICE</b>											
General Office Building	710	1,000 SF GFA	1.44			1.44	14.65	50%	7.33	3.00	4.32
Small Office Building	712	1,000 SF GFA	2.16			2.16	14.65	50%	7.33	3.00	6.48
Corporate Headquarters Building	714	1,000 SF GFA	1.30			1.30	14.65	50%	7.33	3.00	3.90
Single Tenant Office Building	715	1,000 SF GFA	1.76			1.76	14.65	50%	7.33	3.00	5.28
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.93	3.00	11.79
Office Park	750	1,000 SF GFA	1.30			1.30	14.65	50%	7.33	3.00	3.90

**Key to Sources of Pass-by Rates:**

- A: ITE Trip Generation Handbook 3rd Edition (September 2017)
- B: Estimated by Kimley-Horn based on ITE rates for similar categories
- C: 2021 Pass-By Tables for ITE Trip Gen Appendices

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Average Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev Unit
<b>COMMERCIAL</b>											
<b>Automobile Related</b>											
Automobile Sales (New)	840	1,000 SF GFA	2.42	20%	B	1.94	4.45	50%	2.23	2.23	4.32
Automobile Sales (Used)	841	1,000 SF GFA	3.75	20%	B	3.00	4.45	50%	2.23	2.23	6.69
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.23	2.23	6.23
Tire Store	848	1,000 SF GFA	3.75	25%	C	2.81	4.45	50%	2.23	2.23	6.27
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.23	2.23	6.49
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.23	2.23	4.16
Gasoline/Service Station	944	Vehicle Fueling Positions	13.91	57%	C	5.98	1.20	50%	0.60	0.60	3.59
Convenience Store/Gas Station	945	Vehicle Fueling Positions	13.51	56%	B	5.94	1.20	50%	0.60	0.60	3.57
Self-Service Car Wash	947	Wash Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Car Wash and Detail Center	949	Wash Stalls	13.60	40%	B	8.16	1.20	50%	0.60	0.60	4.90
<b>Dining</b>											
Food Cart Pod	926	Food Carts	6.16	50%	B	3.08	5.64	50%	2.82	2.82	8.69
Fast Casual Restaurant	930	1,000 SF GFA	12.55	43%	A	7.15	6.07	50%	3.04	3.04	21.75
Fine Dining Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	6.07	50%	3.04	3.04	13.28
High-Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.05	43%	A	5.16	6.07	50%	3.04	3.04	15.68
Fast-Food Restaurant without Drive-Through Window	933	1,000 SF GFA	33.21	50%	B	16.61	5.64	50%	2.82	2.82	46.83
Fast-Food Restaurant	934	1,000 SF GFA	33.03	50%	A	16.52	5.64	50%	2.82	2.82	46.57
Coffee/Donut Shop with Drive-Through Window	937	1,000 SF GFA	38.99	70%	A	11.70	4.53	50%	2.27	2.27	26.55
<b>Other Retail</b>											
Free-Standing Discount Store	815	1,000 SF GFA	4.86	20%	C	3.89	5.60	50%	2.80	2.80	10.89
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.60
Shopping Center (>150k SF)	820	1,000 SF GFA	3.40	29%	C	2.41	5.60	50%	2.80	2.80	6.76
Shopping Plaza (40-150k)	821	1,000 SF GFA	5.19	40%	C	3.11	5.60	50%	2.80	2.80	8.72
Strip Retail Plaza (<40k SF)	822	1,000 SF GFA	6.59	40%	B	3.95	5.60	50%	2.80	2.80	11.07
Supermarket	850	1,000 SF GFA	8.95	24%	C	6.80	5.60	50%	2.80	2.80	19.05
Home Improvement Superstore	862	1,000 SF GFA	2.29	42%	A	1.33	5.60	50%	2.80	2.80	3.72
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.82
Pharmacy/Drugstore without Drive-Through Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy/Drugstore with Drive-Through Window	881	1,000 SF GFA	10.25	49%	A	5.23	5.60	50%	2.80	2.80	14.64
Medical Equipment Store	897	1,000 SF GFA	1.24	20%	B	0.99	5.60	50%	2.80	2.80	2.78
Wine Tasting Room	970	1,000 SF GFA	7.31			7.31	5.60	50%	2.80	2.80	20.47
<b>SERVICES</b>											
Walk-in Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.23	2.23	16.23
Drive-in Bank	912	Drive-in Lanes	27.07	35%	A	17.60	4.45	50%	2.23	2.23	39.24
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	4.45	50%	2.23	2.23	2.26

**Key to Sources of Pass-by Rates:**

A: ITE Trip Generation Handbook 3rd Edition (September 2017)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: 2021 Pass-By Tables for ITETripGen Appendices

## 6 Sample Calculations

The following section details two (2) examples of maximum assessable Roadway Impact Fee calculations.

### Example 1:

#### Development Type - One (1) Unit of Single-Family Detached Housing in Service Area 1

Step 1	<b>Determine Development Unit and Vehicle-Miles Per Development Unit</b>
	<i>From Table 13 [Land Use – Vehicle-Mile Equivalency Table]</i> Development Type: 1 Dwelling Unit of Single-Family Detached Housing Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 2.82
Step 2	<b>Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)</b>
	<i>From Table 12, Line 15 [Maximum Assessable Fee Per Service Unit]</i> Service Area 1: \$1,845
Step 3	<b>Determine Maximum Assessable Impact Fee</b>
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 2.82 * \$1,845 Maximum Assessable Impact Fee = \$5,203

### Example 2:

#### Development Type - 150,000 Square Foot Home Improvement Store in Service Area 2

Step 1	<b>Determine Development Unit and Vehicle-Miles Per Development Unit</b>
	<i>From Table 13 [Land Use – Vehicle-Mile Equivalency Table]</i> Development Type: 150,000 square feet of Home Improvement Superstore Development Units: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.72
Step 2	<b>Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)</b>
	<i>From Table 12, Line 15 [Maximum Assessable Fee Per Service Unit]</i> Service Area 2: \$1,423
Step 3	<b>Determine Maximum Assessable Impact Fee</b>
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 150 * 3.72 * \$1,423 Maximum Assessable Impact Fee = \$794,034

## 7 Adoption and Administration of Roadway Impact Fees

---

### 7.1 Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and Roadway Impact Fee Capital Improvements Plan used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. The CIAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a public hearing on the Roadway Impact Fee Assumptions (Land Use and Capital Improvements Plan) and Roadway Impact Fee Ordinance.

Following policy adoption, the CIAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the Roadway Impact Fee Capital Improvements Plan at any time within five years of adoption. Finally, the CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

### 7.2 Collection and Use of Roadway Impact Fees

Roadway Impact Fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can only be used within the same service area. Finally, fees must be utilized within 10 years of collection, or must be refunded with interest.

## 8 Conclusions

---

The City of Anna has established a process to implement the assessment and collection of Roadway Impact Fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable Roadway Impact Fee that could be assessed by the City of Anna, as shown in the previously referenced **Table 12**. This document serves as a guide to the assessment of Roadway Impact Fees pertaining to future development, and the City's need for transportation improvements to accommodate that growth. Following the public hearing process, the City Council may establish an impact fee amount to be collected, up to the calculated maximum and establish the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this analysis are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Impact Fee Capital Improvements Plan are appropriately incorporated into the development of the maximum assessable Roadway Impact Fee.

**Table 14** below presents the 2022 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile) for the service areas:

**Table 14. Maximum Assessable Roadway Impact Fee Per Service Unit (Vehicle-Mile)**

Service Area	Maximum Fee Per Service Unit (per Vehicle-Mile)
1	\$ 1,845
2	\$ 1,423

Chapter 3  
Water Impact Fee Study for the  
2022 Impact Fee Study



July 2022 Prepared for the City of Anna

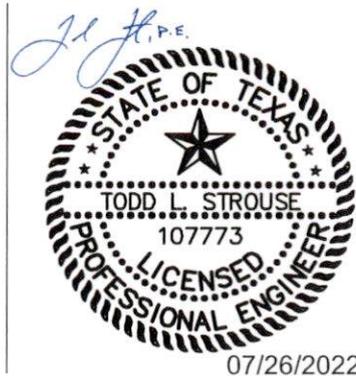
Prepared by:

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TBPE Firm Registration Number: F-928

Kimley-Horn Project Number: 064512909  
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# 1 Introduction

---

The City of Anna retained the services of Kimley-Horn and Associates, Inc., for the purpose of developing impact fees for water system improvements required to serve new development. These fees were developed in accordance with chapter 395 of the Local Government code (impact fees).

The purpose of this report is to satisfy the requirements of the law and provide the City with an impact fee capital improvement plan and associated fees.

For convenience and reference, the following is excerpted from Chapter 395 of the code:

*(α) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:*

- (1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
- (2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
- (3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
- (4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including but not limited to residential, commercial, and industrial;*
- (5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;*
- (6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and*
- (7) plan for awarding:
  - (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or**

*(B) in the alternative, a credit equal to 50 percent of the total project cost of implementing the capital improvements plan.*

This study was comprised of three tasks. These include land use assumptions, evaluation of the current water capital improvement plan and development of the impact fee capital improvement plan as well as impact fee analysis.

### *1.1 Land Use Assumptions*

The development of land use assumptions included the following:

- Establishing impact fee service areas (SA) for water and wastewater
- Collection/determination of population and employment data by SA; and
- Projection of the 10-year population and employment by SA

This information was determined based on information provided from the City of Anna in regard to planned developments as well as the future land use plan utilized in the 2050 Comprehensive Plan. The geographic boundary of the proposed impact fee water service area is shown in **Exhibit 3.1**. Additional information regarding land use assumptions can be found in Chapter 1 of this report.

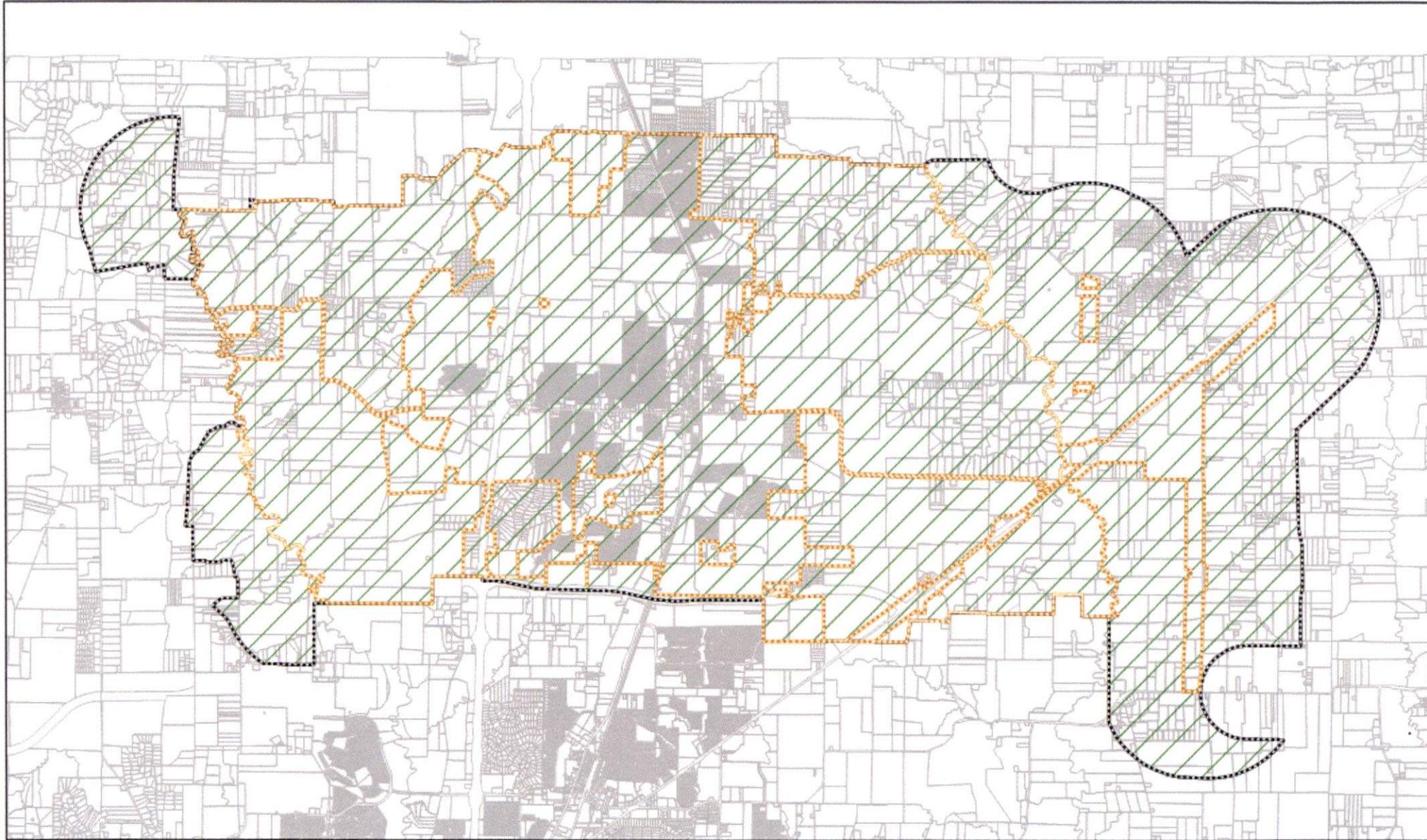
### *1.2 Evaluation of the Current Water Capital Improvement Plans and Development of the Impact Fee Capital Improvement Plan*

This task involved reviewing the City's current capital improvement plan and identify the proposed water capital improvements that will be built in the next 10 years. Input from the City helped to develop the impact fee capital improvement plan. Water demand projections were then used to determine the additional single-family equivalents (SFE).

### *1.3 Impact Fee Analysis and Report*

This task included calculating the additional single-family equivalent units and credit reduction. These values were then used to determine the impact fee per SFE and the maximum assessable impact fee by meter size.

*[Remainder of this page intentionally blank]*



MAP DATE: 8/2018, COORDINATE SYSTEM: NAD83, DATUM: NAD83, UTM, UTM ZONE: 18N, UTM PROJECTION: UTM, UTM UNIT: METERS



0 2,000 4,000  
 Feet

**Legend**  
 Water & Wastewater Service Area  
 City Limits

**Kimley»Horn**

THE CITY OF  
**Anna**

**CITY OF ANNA**  
 WATER & WASTEWATER SERVICE AREA

FIGURE

## 2 Design Criteria

---

In accordance with Chapter 290 of the Texas Administrative Code (Public Drinking Water) and the American Water Works Associations (AWWA) requirements for the design and operation of potable water systems, as well as communication between Kimley-Horn and the City of Anna, the following design criteria was followed when planning for future water infrastructure.

### 2.1 Water Lines

The transmission system's function is to transfer water across the water system and fill the elevated storage tanks. There are three conditions for which the highest fluctuation in operational pressures is experienced:

- Peak Hour Demand – this is the maximum demand the system experiences. It is the condition under which lowest operational pressures are experienced.
- Tank Filling (minimum hour demand) – this is the period during which elevated tanks are replenished. This is the period of lowest demand during peak day. It normally occurs after midnight and is the condition under which highest operational pressures are experienced.
- Fire flow demand – during the maximum day demand, the local transmission lines are tested to ensure fire protection requirements are met. Pressures can fall below normal operational pressures but should not drop below 20 psi at any point in the system.

The transmission system should be sized to maintain a minimum pressure of 40 psi during normal operation conditions and a minimum of 20 psi during extreme operating conditions. The transmission system should also be sized to limit maximum velocity in the pipe to seven feet per second. The maximum pressure in extreme conditions should be limited to 120 psi because high operating pressure will result in increased system maintenance and increased operational cost.

### 2.2 Storage Tanks

The Texas Commission on Environmental Quality (TCEQ) and the State board of Insurance (SBI) have established criteria for the ground and elevated storage. These criteria address volume and height requirements only. The layout of the distribution system, location of the storage facilities, and the interaction with the high service and booster pumps affect the amount of storage necessary for the most efficient and reliable operation of the system.

Ground storage serves two purposes:

- Equalization for different feed rates between water supply and pumping to the system.
- Emergency capacity in the event of temporary loss of water supply.

Generally, ground storage facilities are located at water supply points or at each pump station within the water distribution system. Although ground and elevated storage facilities perform separate functions within the system, both are aimed at decreasing the impact of demand fluctuations. Their capacities are established based on knowledge of how demand varies seasonally and daily. Due to inaccuracies in estimating growth and occasional extremes in usage exceeding design values, ground storage must provide sufficient capacity to supply any differences. It is a recommendation from Kimley-Horn that a ground storage capacity requirement of 50% max day demand be maintained in the system.

Elevated storage serves three purposes:

- Functionally, elevated storage equalizes pumping rate to compensate for daily variation in demand and to maintain a constant pumping rate (usually referred to as operational storage), or a pumping rate that conforms to the requirements of the electrical rate structure.
- Provides pressure maintenance and protection against surges created by instantaneous demands, such as fire flow and main breaks, and instantaneous change in supply, such as pumps turning on and off.
- Maintains a reserve capacity for fire protection and pressure maintenance in case of power failure to one or more pump stations. Sufficient storage should be maintained to provide for four hours of fire flow demand during a loss of power to a pump station or water treatment plant.

Elevated storage is evaluated separately for each pressure plane. Because elevated storage is more expensive than ground storage, an economical balance between elevated storage and pumping should be sought. The design requirement, per TCEQ, for elevated storage capacity is 200 gallons per connection to qualify for the lower TCEQ requirement for pumping of 0.6 gpm per connection.

### 2.3 Pump Stations

Pumping capacity must be able to provide the peak hourly demand with the largest pump out of service at each station, also known as the firm pumping capacity. If 200 gallons of storage per connection is met, then 0.6 gpm per connection is required at each pump station. If 200 gallons of storage per connection cannot be provided, 2.0 gpm per connection must be met.

## 3 Impact Fee Capital Improvement Plan

---

The purpose of a capital improvement program is to provide the City with a logical strategy for upgrading and expanding its water distribution system to accommodate future growth and for addressing existing system deficiencies. The impact fee capital improvements plan is developed using projects identified during the capital improvement program planning process. State law only allows cost recovery associated with eligible projects in a ten-year planning window from the time of the impact fee study.

Twenty-four (24) existing and eighty-four (84) proposed projects identified in the water capital improvements plan are determined eligible for recoverable cost over the next 10 years. The City of Anna's total cost of these projects is \$185,629,111. The projected recoverable cost through impact fees is \$232,036,389. After debt service costs are added and the credit reduction calculation is complete, \$116,018,194 is recoverable through impact fees serving the 10-year system needs. A breakdown of these amounts is shown in **Table 6**. These impact fee capital improvements are shown in **Exhibit 3.2** and **Table 1**.



**Table 1 – Water Impact Fee Capital Improvements Project Cost and 10-Year Recoverable Cost**

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
<b>PROPOSED 2022-2032 Project List</b>						
1	3 MG GST and (2) 3,450 gpm Pumps at Sherley Pump Station	0%	100%	100%	\$ 5,600,000	\$ 5,600,000
2	4 MG GST, (1) 3,450 GPM & (1) 2,733 GPM Pump at Collin Pump Station	0%	100%	100%	\$ 6,970,000	\$ 6,970,000
3	T-01 – 2.00 MG EST	0%	41%	41%	\$ 4,548,649	\$ 11,220,000
4	T-02 – 2.00 MG EST	0%	63%	63%	\$ 6,537,500	\$ 10,460,000
5	Outer Loop East 36" Water Line	0%	26%	26%	\$ 3,675,759	\$ 14,240,000
6	CR 419 16" Water Line	0%	100%	100%	\$ 3,880,000	\$ 3,880,000
7	Finely East 12" Water Line	0%	33%	33%	\$ 1,053,144	\$ 3,170,000
	Outer Loop West 24" Water Line	0%	72%	72%	\$ 5,810,211	\$ 8,110,000
9	US 75 East 12" Water Line	0%	100%	100%	\$ 690,000	\$ 690,000
10	West Crossing Road 12" Water Line	0%	100%	100%	\$ 1,080,000	\$ 1,080,000
11	South Ferguson 12" Water line	0%	87%	87%	\$ 2,756,007	\$ 3,170,000
12	CR 365 12" Water Line	0%	76%	76%	\$ 4,279,607	\$ 5,650,000
13	CR 422 12" Water Line	0%	32%	32%	\$ 234,808	\$ 740,000
14	East Taylor Blvd 12" Water Line	0%	60%	60%	\$ 3,991,496	\$ 6,670,000
15	West Taylor Blvd 12" Water Line	0%	55%	55%	\$ 2,777,197	\$ 5,070,000
16	West US 75 16" Water Line	0%	34%	34%	\$ 2,175,572	\$ 6,370,000
17	Throckmorton Blvd 16" Water Line	0%	43%	43%	\$ 3,123,835	\$ 7,340,000
18	CR 370 12" Water Line	0%	46%	46%	\$ 3,761,954	\$ 8,130,000
19	SH 5 12" & 16" Water line	0%	31%	31%	\$ 2,048,474	\$ 6,530,000
20	CR 371 16" Water Line	0%	41%	41%	\$ 1,409,638	\$ 3,420,000
21	West Crossing 16" Water Line	0%	34%	34%	\$ 1,387,864	\$ 4,030,000
22	CR 373 24" Water Line	0%	52%	52%	\$ 288,738	\$ 560,000
23	CR 373 48" Water Line	0%	34%	34%	\$ 2,793,376	\$ 8,100,000
24	CR 369 20" Water Line	0%	37%	37%	\$ 2,428,109	\$ 6,530,000
25	CR 371 36" Water Line	0%	42%	42%	\$ 795,994	\$ 1,900,000
26	CR 372 30" Water Line	0%	44%	44%	\$ 3,479,163	\$ 7,990,000
	CR 1101 24" Water Line	0%	29%	29%	\$ 565,901	\$ 1,960,000
28	CR 290 24" Water Line	0%	46%	46%	\$ 2,481,078	\$ 5,390,000
29	CR 290 to FM 455 20" Water Line	0%	59%	59%	\$ 1,606,799	\$ 2,740,000
30	CR 289 12" Water Line	0%	39%	39%	\$ 1,106,188	\$ 2,820,000

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
31	FM 455 16" & 12" Water line	0%	48%	48%	\$ 1,515,153	\$ 3,140,000
32	Cowan Road 12" Water Line	0%	95%	95%	\$ 6,807,575	\$ 7,180,000
33	FM 455 South 12" Water Line	0%	57%	57%	\$ 1,296,672	\$ 2,270,000
34	CR 288 & FM 455 16" & 20" Water Line	0%	58%	58%	\$ 3,114,368	\$ 5,350,000
35	CR 828 12" Water Line	0%	54%	54%	\$ 1,980,836	\$ 3,690,000
36	CR 1106 16" Water Line	0%	48%	48%	\$ 1,428,306	\$ 2,980,000
37	CR 376 12" Water Line	0%	71%	71%	\$ 2,301,663	\$ 3,230,000
38	CR 426 12" Water Line	0%	67%	67%	\$ 1,994,488	\$ 2,980,000
39	CR 427 12" Water Line	0%	48%	48%	\$ 1,001,763	\$ 2,070,000
40	Woodland Street 12" Water Line	0%	49%	49%	\$ 612,661	\$ 1,260,000
41	CR 422 South 12" Water Line	0%	65%	65%	\$ 1,103,063	\$ 1,710,000
42	Foster Crossing Road 12" Water Line	0%	53%	53%	\$ 2,124,232	\$ 4,020,000
43	Cain Dr. 12" Water Line	0%	71%	71%	\$ 602,408	\$ 850,000
44	CR 219 16" Water Line	0%	37%	37%	\$ 1,548,290	\$ 4,200,000
45	CR 177 12" Water Line	0%	32%	32%	\$ 957,641	\$ 3,020,000
46	FM 3356 12" Water Line	0%	34%	34%	\$ 3,127,514	\$ 9,140,000
47	Bourland Bnd 12" Water Line	0%	48%	48%	\$ 2,762,500	\$ 5,780,000
48	CR 206 12" Water Line	0%	59%	59%	\$ 1,460,571	\$ 2,470,000
49	CR 206 12" Water Line Loop	0%	88%	88%	\$ 6,572,495	\$ 7,470,000
50	CR 286 16" Water Line	0%	36%	36%	\$ 1,985,569	\$ 5,470,000
51	CR 206 North 12" Water Line	0%	51%	51%	\$ 1,730,033	\$ 3,410,000
52	Bourland Bnd to CR 285 12" Water Line	0%	16%	16%	\$ 525,382	\$ 3,360,000
53	CR 286 12" Water Line	0%	85%	85%	\$ 4,811,437	\$ 5,660,000
54	CR 937 12" Water Line	0%	74%	74%	\$ 1,658,759	\$ 2,250,000
55	East Outer Loop 24" Water Line	0%	2%	2%	\$ 50,158	\$ 2,160,000
56	Outer Loop 12" Water Line	0%	19%	19%	\$ 364,000	\$ 1,960,000
57	SH 121 12" Water Line	0%	5%	5%	\$ 156,896	\$ 3,210,000
58	SH 121 36" Water Line	0%	7%	7%	\$ 212,070	\$ 3,130,000
59	CR 419 12" Water Line	0%	30%	30%	\$ 391,736	\$ 1,310,000
60	Sheffield Drive to CR 472 12" Water Line	0%	56%	56%	\$ 4,502,575	\$ 8,070,000
61	Sheffield Drive to CR 429 12" Water Line	0%	26%	26%	\$ 1,890,860	\$ 7,380,000
62	CR 429 12" Water Line	0%	17%	17%	\$ 477,920	\$ 2,750,000
63	CR 429 16" Water Line	0%	29%	29%	\$ 1,082,780	\$ 3,760,000
64	CR 478 16" Water Line	0%	100%	100%	\$ 8,900,000	\$ 8,900,000
65	FM 455 16" Water Line	0%	30%	30%	\$ 2,140,735	\$ 7,040,000
66	CR 2862 16" Water Line	0%	16%	16%	\$ 373,864	\$ 2,350,000
67	CR 2862 to CR 477 12" Water Line	0%	13%	13%	\$ 386,843	\$ 2,980,000

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
68	CR 424 24" Water Line	0%	16%	16%	\$ 1,567,860	\$ 9,730,000
69	FM 455 24" Water Line	0%	9%	9%	\$ 440,199	\$ 4,720,000
70	FM 455 20" Water Line	0%	6%	6%	\$ 351,066	\$ 5,620,000
71	FM 455 12" Water Line	0%	100%	100%	\$ 1,190,000	\$ 1,190,000
72	CR 427 20" Water Line	0%	14%	14%	\$ 768,928	\$ 5,410,000
73	CR 2862 12" Water Line	0%	51%	51%	\$ 2,767,076	\$ 5,460,000
74	FM 455 to CR 2862 12" Water Line	0%	37%	37%	\$ 1,600,642	\$ 4,380,000
75	Wildwood Trail 12" Water Line	0%	29%	29%	\$ 420,033	\$ 1,430,000
76	CR 2862 East 12" Water Line	0%	88%	88%	\$ 1,163,750	\$ 1,330,000
77	Leonard Ave North 12" Water Line	0%	41%	41%	\$ 857,534	\$ 2,090,000
78	FM 455 to CR 2862 30" Water Line	0%	18%	18%	\$ 476,405	\$ 2,720,000
79	CR 2862 24" Water Line	0%	47%	47%	\$ 2,439,992	\$ 5,220,000
80	4 MG GST and (2) 5,000 gpm Pumps at Grayson Pump Station	0%	5%	5%	\$ 361,000	\$ 7,220,000
	4th Street 20" Water Line	0%	40%	40%	\$ 580,000	\$ 580,000
--	Riggins Street 12" Water Line	0%	40%	40%	\$ 420,000	\$ 420,000
83	6th Street 36" Water Line	0%	40%	40%	\$ 1,150,000	\$ 1,150,000
84	6th Street 24" Water Line	0%	40%	40%	\$ 2,270,000	\$ 2,270,000
<b>Proposed Subtotal</b>					<b>\$ 176,115,362</b>	<b>\$ 369,430,000</b>
<b>Existing Facilities or Facilities Under Construction</b>						
1	U.S. 75 Parallel Water Line South of F.M. 455	22%	26%	4%	\$ 522,500.00	\$ 1,900,000.00
2	CGMA Treated Surface Water System & Treated Supply Line	49%	51%	2%	\$ 387,600.00	\$ 760,000.00
3	18" Water Line from South Take Point to FM 455	20%	40%	20%	\$ 155,000.00	\$ 620,000.00
4	East Hackberry 16" Water Line	18%	22%	4%	\$ 266,539.50	\$ 1,184,620.00
5	Hackberry EST	82%	100%	18%	\$ 2,629,000.80	\$ 2,629,000.80
6	US 75 Parallel water Line north of FM 455	22%	26%	4%	\$ 90,420.00	\$ 328,800.00
7	CGMA Treated Surface Water System - Bloomdale PS and GSR	49%	51%	2%	\$ 357,000.00	\$ 700,000.00
8	Collin Take Point - PS	22%	24%	2%	\$ 467,500.00	\$ 1,700,000.00
9	Collin Take Point - GSR	21%	42%	21%	\$ 397,500.00	\$ 1,500,000.00
10	West Well EST	82%	100%	18%	\$ 500,000.00	\$ 500,000.00
11	South Grayson - .35 MG EST	82%	100%	18%	\$ 525,000.00	\$ 525,000.00
	South Grayson system - CCN Area	19%	38%	19%	\$ 27,500.00	\$ 100,000.00
13	South Well Surface Water	40%	60%	20%	\$ 100,000.00	\$ 200,000.00
14	North and West Well Surface water	40%	60%	20%	\$ 425,000.00	\$ 850,000.00
15	CR 1106 Water Line	7%	14%	7%	\$ 37,912.50	\$ 303,300.00

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
16	Disinfection	4%	8%	4%	\$ 25,000.00	\$ 500,000.00
17	Initial Collin Pump Station	40%	44%	4%	\$ 375,000.00	\$ 750,000.00
18	South Distribution line from west well EST	20%	24%	4%	\$ 290,790.75	\$ 1,163,163.00
19	Water Line from CR 422	22%	26%	4%	\$ 347,943.75	\$ 1,265,250.00
20	Water Line for CR 371 to Rosamond Pkwy	22%	26%	4%	\$ 248,036.25	\$ 901,950.00
21	Existing Waterline Facility 20	18%	22%	4%	\$ 751,950.00	\$ 3,342,000.00
22	Existing Waterline facility 21	22%	26%	4%	\$ 75,487.50	\$ 274,500.00
23	Suzie Lane Water Line		25%	25%	\$ 81,083.51	\$ 319,003.00
24	Foster Crossing Water Line		55%	55%	\$ 343,651.41	\$ 622,712.92
<b>Impact Fee and Master Plan Updates</b>					<b>\$ 86,333.00</b>	<b>\$ 86,333.00</b>
<b>Existing Subtotal</b>					<b>\$ 9,427,416</b>	<b>\$ 22,939,300</b>
<b>Total</b>					<b>\$ 185,629,111</b>	<b>\$ 392,455,633</b>

## 4 Water Impact Fee Calculation

Chapter 395 of the Local Government Code defines a service unit as follows, "Service Unit means a standardized measure of consumption attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years."

The service unit for the Anna's wastewater impact fee is the "single family equivalent" (SFE), which is based on the size of the base water meter. An SFE is the water demand associated with the smallest water meter issued for a new single-family development in the system (3/4-inch meter). The ratio of each larger meter's capacity to the capacity of the base meter determines the SFE multiplier applied to each large meter size. The current SFE equivalency factors are shown in **Table 2**.

**Table 2 – Meter Capacity Ratios**

Meter Size	Service Units/Meter
3/4"	1
1"	1.67
1-1/2"	3.33
2"	5.33
3"	23.33
4"	43.33
6"	93.33
8"	160
10"	233.33

Multiplying the number of existing connections for each meter size by the SFEs per meter yields the total SFEs for that meter size. Summing for all meter sizes yields the total number of water SFEs connected to the City's water system as shown in **Table 3**. The current population in the water service area is divided by the total number of SFEs yielding a Persons per SFE number.

**Table 3 – Capita per Single-Family Equivalent (SFE)**

Meter Size	Existing Connections	Service Units/Meter	Service Units
3/4"	8,135	1	8,135
1"	112	1.67	187
1-1/2"	25	3.33	83
2"	68	5.33	362
3"	34	23.33	793
4"	1	43.33	43
6"	1	93.33	93
8"	0	160	0
10"	0	233.33	0
Total Existing Connections:	8,376	Total Service Units:	9,696
		Total Population Served:	24,239
		<b>Persons per Service Unit:</b>	<b>2.50</b>

The City of Anna defines a single-family equivalent (SFE) based on historical water demand over the past 10 years. The single-family equivalent is the development type that predominately uses a 3/4-inch meter. The measure of consumption per SFE is based on a 3/4-inch meter, and the data shown in **Table 4**.

*[Remainder of this page intentionally blank]*

**Table 4 – SFE Consumption Calculation**

Year	Population	Service Unit (2.50 capita/service unit)	Water Average Day Demand MGD	Demand per Service Unit (GPD)
2011	8,448	3,380	1.25	370
2012	8,567	3,427	1.17	343
2013	9,604	3,842	1.32	342
2014	10,615	4,246	0.99	233
2015	11,541	4,617	1.45	315
2016	12,171	4,869	1.42	292
2017	12,782	5,113	1.71	335
2018	14,243	5,698	1.94	340
2019	15,700	6,280	2.12	338
2020	19,750	7,900	2.67	338
<b>Average Historical Demand per Service Unit</b>				<b>325</b>

(1) Data Sources: TWDB Historical Estimates

Based on the City's 10-year growth projections and the resulting water demand projections, water service will be required for an additional 12,495 SFEs by the year 2032 as shown in **Table 5**. The calculation is as follows:

- A single-family equivalent, which is a unit of development that consumes approximately **325** gallons per day (GPD), is a typical residential connection that uses a 3/4-inch meter.

**Table 5 – 10-year Additional Single-Family Equivalent Calculation**

Year	Population	Persons per Service Unit	Projected Service Units
2022	24,239	2.50	9,740
2032	55,588	2.50	22,235
<b>10-year Additional Service Units</b>			<b>12,495</b>

Impact fee law allows for a credit calculation to credit back the development community based on the utility revenues or ad valorem taxes that are allocated for paying a portion of future capital improvements. The intent of this credit is to prevent the City from double charging development for future capital improvements via impact fees and utility rates. If the city chooses not to do a financial analysis to determine the credit value, they are required by law to reduce the recoverable cost by 50 percent. The city has chosen not to calculate the credit value. Therefore, the maximum recoverable cost for impact fee shown below is 50 percent of the Pre-Credit Recoverable Cost.

A breakdown of the 10-year recoverable costs and the associated impact fee per service unit is shown in **Table 6** and below.

**Table 6 – Water 10-Year Recoverable Cost Breakdown**

Recoverable Impact Fee CIP Costs	\$185,629,111
Debt Service*	\$46,407,278
<b>Pre-Credit Recoverable Cost for Impact Fee</b>	<b>\$232,036,389</b>
Credit for Utility Revenues	\$116,018,194
<b>Maximum Recoverable Cost for Impact Fee</b>	<b>\$116,018,194</b>

\*Represents the interest costs associated with debt financing the new impact fee project costs

$$\text{Impact fee per SFE} = \frac{10 - \text{year recoverable costs}}{10 - \text{year additional SFEs}}$$

$$\text{Impact fee per SFE} = \frac{\$116,018,194}{12,495}$$

$$\text{Impact fee per SFE} = \$9,285$$

Therefore, the maximum assessable impact fee per SFE is **\$9,285**.

For a development that requires a different size meter, a service unit equivalent is established at a multiplier based on its capacity with respect to the 3/4-inch meter. The maximum impact fee that could be assessed for other meter sizes is based on the Equivalency Table (**Table 7**).

**Table 7 – Maximum Assessable Water Impact Fee for Commonly Used Meters**

Meter Size	Maximum Continuous Operating Capacity (GPM)**	Service Unit	Maximum Assessable Impact Fee
3/4"	15	1	\$9,285
1"	25	1.67	\$15,506
1-1/2"	50	3.33	\$30,919
2"	80	5.33	\$59,489
3"	350	23.33	\$216,619
4"	650	43.33	\$402,319
6"	1400	93.33	\$866,569
8"	2400	160	\$1,485,600
10"	3500	233.33	\$2,166,469

\*\*Operating capacities obtained from American Water Works Association (AWWA) C-700-15 and C-701-15

Chapter 3  
Wastewater Impact Fee Study for the  
2022 Impact Fee Study



June 2022 Prepared for the City of Anna

Prepared by:

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TBPE Firm Registration Number: F-928

Kimley-Horn Project Number: 064512909  
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06/28/2022

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# 1 Introduction

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The City of Anna retained the services of Kimley-Horn and Associates, Inc., for the purpose of developing impact fees for wastewater system improvements required to serve new development. These fees were developed in accordance with chapter 395 of the Local Government code (impact fees).

The purpose of this report is to satisfy the requirements of the law and provide the City with an impact fee capital improvement plan and associated fees.

For convenience and reference, the following is excerpted from Chapter 395 of the code:

- (a) *The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:*
- (1) *a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
  - (2) *an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
  - (3) *a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform such professional engineering services in this state;*
  - (4) *a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including but not limited to residential, commercial, and industrial;*
  - (5) *the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;*
  - (6) *the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and*
  - (7) *plan for awarding:*
    - (A) *a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements,*

*including the payment of debt, that are included in the capital improvements plan; or*

*(B) in the alternative, a credit equal to 50 percent of the total project cost of implementing the capital improvements plan.*

This study was comprised of three tasks. These include land use assumptions, evaluation of the current wastewater capital improvement plan and development of the impact fee capital improvement plan as well as impact fee analysis.

### *1.1 Land Use Assumptions*

The development of land use assumptions included the following:

- Establishing impact fee service areas (SA) for water and wastewater
- Collection/determination of population and employment data by SA; and
- Projection of the 10-year population and employment by SA

This information was determined based on information provided from the City of Anna in regard to planned developments as well as the future land use plan utilized in the 2050 Comprehensive Plan. The geographic boundary of the proposed impact fee water service area is shown in **Exhibit 4.1**. Additional information regarding land use assumptions can be found in Chapter 1 of this report.

### *1.2 Evaluation of the Current Wastewater Capital Improvement Plans and Development of the Impact Fee Capital Improvement Plan*

This task involved reviewing the City's current capital improvement plan and identify the proposed wastewater capital improvements that will be built in the next 10 years. Input from the City helped to develop the impact fee capital improvement plan. Wastewater demand projections were then used to determine the additional single-family equivalents (SFE).

### *1.3 Impact Fee Analysis and Report*

This task included calculating the additional single-family equivalent units and credit reduction. These values were then used to determine the impact fee per SFE and the maximum assessable impact fee by meter size.

*[Remainder of this page intentionally blank]*

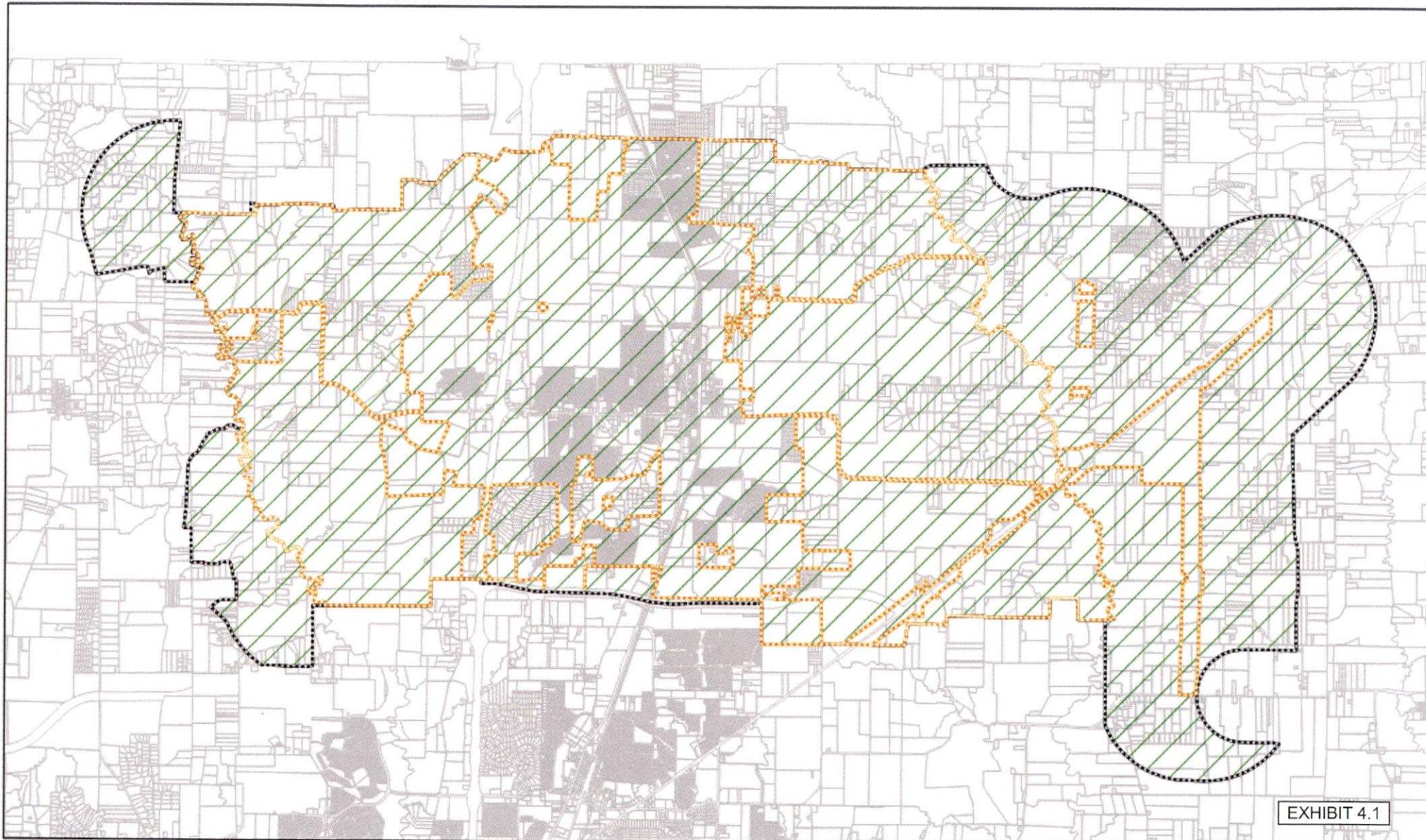


EXHIBIT 4.1

SOURCE: © 2014, CADDEN & ASSOCIATES, INC. MAPS & GIS SERVICES, L.L.P.



0 2,000 4,000  
Feet

**Legend**  
 Water & Wastewater Service Area  
 City Limits



**CITY OF ANNA**  
 WATER & WASTEWATER SERVICE AREA

FIGURE

## 2 Design Criteria

In accordance with Chapter 217 of the Texas Administrative Code (Design Criteria for Domestic Wastewater Systems), as well as communication between Kimley-Horn and the City of Anna, the following design criteria was followed when planning for future wastewater infrastructure. These criteria could change over time based on demand patterns and regulatory mandates. The assumptions used throughout this study are shown in **Table 1**.

**Table 1 – Wastewater Criteria Used**

Assumptions	Value	Units
Non-residential – Light Office	25	gpcd
Non-residential – Manufacturing	20	gpcd
Non-residential – School	20	gpcd
Non- Residential – Rural/ Open Space	150	gpad
Residential Demand	90	gpcd
Peaking Factor	4	
Single Family Residential Density	3.1	people/ unit
Multifamily Residential Density	1.8	people/ unit

### 2.1 Pipe Design

**Table 2** shows the minimum slope requirements from the TCEQ. The design of the wastewater lines for the City of Anna utilized the TCEQ minimum slope unless the size of the line was larger than 36", then a slope was determined to maintain a velocity that satisfied the TCEQ requirements. All lines were sized based on the peak flow within each basin and subbasin.

**Table 2 – Minimum Slopes**

Pipe Size	Minimum Slope	Capacity
12	0.20	1.03
15	0.15	1.617
18	0.115	2.302
21	0.095	3.156
24	0.08	4.135
27	0.07	5.296
30	0.06	6.494

### 2.2 Lift Station and Force Main Design

The various proposed lift stations and force mains in the City of Anna allow for wastewater to be conveyed in areas where gravity flow cannot be achieved. Proposed lift stations are sized to meet peak day demands. The force mains are sized to be able to stay between 3-6 fps for peak day demands.

### 2.3 Water Reclamation Facility Design

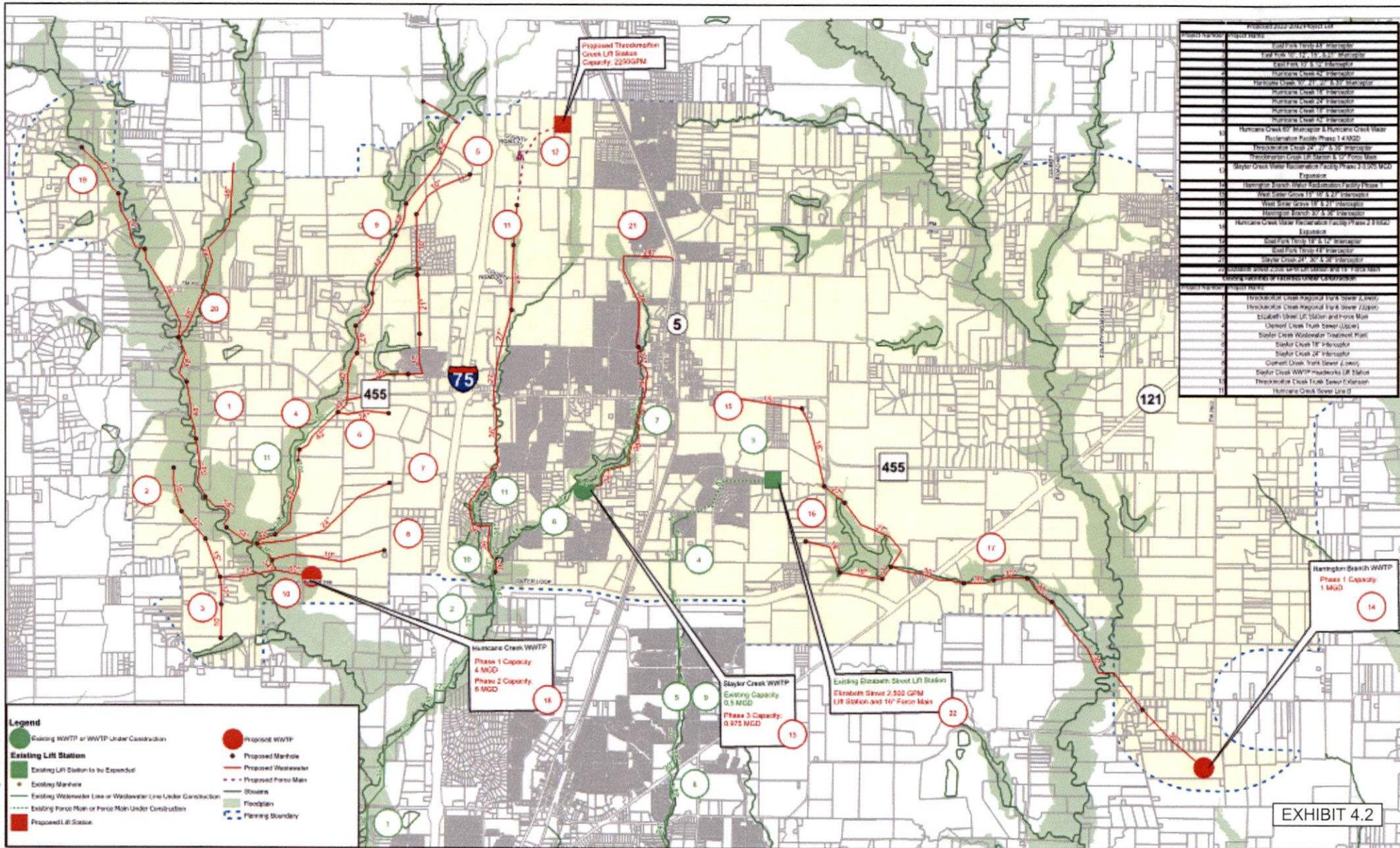
The proposed water reclamation facilities within the City of were sized based on average daily flow into the water reclamation facility.

## 3 Impact Fee Capital Improvement Plan

The purpose of a capital improvement program is to provide the City with a logical strategy for upgrading and expanding its wastewater distribution system to accommodate future growth and for addressing existing system deficiencies. The impact fee capital improvements plan is developed using projects identified during the capital improvement program planning process. State law only allows cost recovery associated with eligible projects in a 10-year planning window from the time of the impact fee study.

Eleven (11) existing and twenty-two (22) proposed projects identified in the wastewater capital improvements plan are determined eligible for recoverable cost over the next 10 years. The City of Anna's total cost of these projects is \$233,332,732. The projected recoverable cost through impact fees is \$291,665,915. After debt service costs are added and the credit reduction calculation is complete, \$145,832,957 is recoverable through impact fees serving the 10-year system needs. A breakdown of these amounts is shown in **Table 8**. These impact fee capital improvements are shown in **Table 3** and illustrated in **Exhibit 4.2**.

*[Remainder of this page intentionally blank]*



**Table 3 – Wastewater Impact Fee Capital Improvements Project Cost and 10-Year Recoverable Cost**

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
<b>Proposed 2022-2032 Project List</b>						
1	East Fork Trinity 30" Interceptor	0%	33%	33%	\$ 8,801,590	\$ 26,290,000
2	East Fork 10", 12", 15", & 21" Interceptor	0%	10%	10%	\$ 68,913	\$ 6,920,000
3	East Fork 10" & 12" Interceptor	0%	10%	10%	\$ 11,728	\$ 1,180,000
4	Hurricane Creek 54" Interceptor	0%	45%	45%	\$ 5,530,532	\$ 15,790,000
5	Hurricane Creek 10", 21", 27" & 30" Interceptor	0%	36%	36%	\$ 4,862,127	\$ 13,520,000
6	Hurricane Creek 18" Interceptor	0%	10%	10%	\$ 221,000	\$ 2,210,000
7	Hurricane Creek 24" Interceptor	0%	10%	10%	\$ 676,000	\$ 6,760,000
8	Hurricane Creek 10" Interceptor	0%	10%	10%	\$ 396,000	\$ 3,960,000
9	Hurricane Creek 48" Interceptor	0%	96%	96%	\$ 14,920,147	\$ 28,890,000
10	Hurricane Creek 60" Interceptor & Hurricane Creek Water Reclamation Facility Phase 1 4 MGD	0%	100%	100%	\$ 81,118,000	\$ 81,118,000
11	Throckmorton Creek 24", 27" & 36" Interceptor	0%	41%	41%	\$ 2,493,661	\$ 6,040,000
12	Throckmorton Creek Lift Station & 14" Force Main	0%	49%	49%	\$ 2,085,601	\$ 4,240,000
13	Slyter Creek Water Reclamation Facility Phase 3 0.975 MGD Expansion	0%	100%	100%	\$ 26,910,000	\$ 26,910,000
14	Harrington Branch Water Reclamation Facility Phase 1	0%	79%	79%	\$ 26,026,161	\$ 33,010,000
15	West Sister Grove 15" 18" & 27" Interceptor	0%	53%	53%	\$ 3,977,289	\$ 7,510,000
16	West Sister Grove 18" & 21" Interceptor	0%	60%	60%	\$ 2,585,397	\$ 4,300,000
17	Harrington Branch 30" & 36" Interceptor	0%	54%	54%	\$ 11,180,687	\$ 20,590,000
18	Hurricane Creek Water Reclamation Facility Phase 2 8 MGD Expansion	0%	69%	69%	\$ 19,502,042	\$ 28,422,000
19	East Fork Trinity 18" & 12" Interceptor	0%	8%	8%	\$ 692,301	\$ 9,050,000

Proj. #	Description	2022 Required Capacity (Percent Utilization)	2032 Required Capacity (Percent Utilization)	2022-2032 Required Capacity (Percent Utilization)	2032 Projected Recoverable Cost	Total Project Cost
20	East Fork Trinity 21" Interceptor	0%	13%	13%	\$ 1,039,137	\$ 8,070,000
21	Slayter Creek 24", 30" & 36" Interceptor	0%	56%	56%	\$ 7,548,465	\$ 13,390,000
22	Elizabeth Street 2,500 GPM Lift Station and 16" Force Main	0%	100%	100%	\$ 4,660,000	\$ 4,660,000
<b>Proposed Subtotal</b>					<b>\$ 225,306,777</b>	<b>\$ 352,830,000</b>
<b>Existing Facilities or Facilities Under Construction</b>						
1	Throckmorton Creek Regional Trunk Sewer (Lower)	7%	100%	93%	\$ 1,914,700	\$ 2,050,000
2	Throckmorton Creek Regional Trunk Sewer (Upper)	12%	100%	88%	\$ 954,840	\$ 1,090,000
3	Elizabeth Street Lift Station and Force Main	40%	100%	60%	\$ 600,000	\$ 1,000,000
	Clement Creek Trunk Sewer (Upper)	87%	100%	13%	\$ 181,660	\$ 1,376,210
5	Slayter Creek Wastewater Treatment Plant	9%	100%	91%	\$ 1,784,975	\$ 1,965,832
6	Slayter Creek 18" Interceptor	13%	100%	87%	\$ 959,140	\$ 1,105,000
7	Slayter Creek 24" Interceptor	13%	43%	30%	\$ 270,000	\$ 900,000
8	Clement Creek Trunk Sewer (Lower)	13%	43%	30%	\$ 514,500	\$ 1,715,000
9	Slayter Creek WWTP Headworks Lift Station	82%	100%	18%	\$ 117,330	\$ 651,832
10	Throckmorton Creek Trunk Sewer Extension	25%	75%	50%	\$ 607,477	\$ 1,214,953
11	Hurricane Creek Sewer Line B	0%	100%	100%	\$ 4,842,538	\$ 4,842,538
<b>Impact Fee and Master Plan Updates</b>					<b>\$ 121,333</b>	<b>\$ 121,333</b>
<b>Existing Subtotal</b>					<b>\$ 7,904,621</b>	<b>\$ 13,068,827</b>
<b>Total</b>					<b>\$ 233,332,732</b>	<b>\$ 366,020,160</b>

## 4 Wastewater Impact Fee Calculation

Chapter 395 of the Local Government Code defines a service unit as follows, "Service Unit means a standardized measure of consumption attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years."

The service unit for the Anna's wastewater impact fee is the "single family equivalent" (SFE), which is based on the size of the base water meter. A SFE is the wastewater flow associated with the smallest water meter issued for a new single-family development in the system (3/4-inch meter). The ratio of each larger meter's capacity to the capacity of the base meter determines the SFE multiplier applied to each large meter size. The current SFE equivalency factors are shown in **Table 4**.

**Table 4 – Meter Capacity Ratios**

Meter Size	Service Units/Meter
3/4"	1
1"	1.67
1-1/2"	3.33
2"	5.33
3"	23.33
4"	43.33
6"	93.33
8"	160
10"	233.33

Multiplying the number of existing connections for each meter size by the SFEs per meter yields the total SFEs for that meter size. Summing for all meter sizes yields the total number of wastewater SFEs connected to the City's wastewater system as shown in **Table 5**. The current population in the wastewater service area is divided by the total number of SFEs yielding a Persons per SFE number.

**Table 5 – Capita per Single-Family Equivalent (SFE)**

Meter Size	Existing Connections <sup>1</sup>	Service Units/Meter	Service Units
3/4"	7,941	1.0	7,941
1"	32	1.7	53
1-1/2"	12	3.3	40
2"	38	5.3	203
3"	2	23.3	47
4"	3	43.3	130
6"	1	93.3	93
8"		160.0	0
10"		233.3	0
Total Existing Connections:		8,029	Total Service Units: 8,507
			Total Population Served: 21,268
			<b>Persons per Service Unit: 2.50</b>

(1) Data Sources: City of Anna

The City of Anna defines a single-family equivalent (SFE) based on historical wastewater discharge over the past 10 years. The single-family equivalent is the development type that predominately uses a 3/4-inch meter. The measure of consumption per SFE is based on a 3/4-inch meter and the data shown in **Table 6**.

**Table 6 – SFE Consumption Calculation**

Year	Population <sup>1</sup>	Service Unit (2.50 capita/service unit)	Wastewater Average Day Flow (MGD)	Flow per Service Unit (GPD)
2011	8,448	3,379	1.09	323
2012	8,567	3,427	1.02	298
2013	9,604	3,842	1.15	299
2014	10,615	4,246	0.86	203
2015	11,541	4,616	1.26	273
2016	12,171	4,868	1.24	255
2017	12,782	5,113	1.49	291
2018	14,243	5,697	1.69	297
2019	15,700	6,280	1.85	295
2020	19,750	7,900	2.33	295
<b>Average Historical Flow per Service Unit</b>				<b>296</b>

Based on the City's 10-year growth projections and the resulting wastewater flow projections, wastewater service will be required for an additional 12,495 SFEs by the year 2032 as shown in **Table 7**. The calculation is as follows:

- A single-family equivalent, which is a unit of development that discharges approximately **296** gallons per day (GPD), is a typical residential connection that uses a 3/4-inch meter.

**Table 7 – 10-year Additional Single-Family Equivalent Calculation**

Year	Population	Persons per Service Unit	Projected Service Units
2022	24,350	2.50	9,740
2032	55,588	2.50	22,235
<b>10-year Additional Service Units</b>			<b>12,495</b>

Impact fee law allows for a credit calculation to credit back the development community based on the utility revenues or ad valorem taxes that are allocated for paying a portion of future capital improvements. The intent of this credit is to prevent the City from double charging development for future capital improvements via impact fees and utility rates. If the city chooses not to do a financial analysis to determine the credit value, they are required by law to reduce the recoverable cost by 50 percent. The city has chosen not to calculate the credit value. Therefore, the maximum recoverable cost for impact fee shown below is 50 percent of the Pre-Credit Recoverable Cost.

A breakdown of the 10-year recoverable costs and the associated impact fee per service unit is shown in **Table 8** and below.

**Table 8 – Wastewater 10-Year Recoverable Cost Breakdown**

Recoverable Impact Fee CIP Costs	\$	233,332,732
Debt Service*	\$	58,333,183
<b>Pre-Credit Recoverable Cost for Impact Fee</b>	\$	291,665,915
Credit for Utility Revenues	\$	145,832,957
<b>Maximum Recoverable Cost for Impact Fee</b>	\$	145,832,957

\*Represents the interest costs associated with debt financing the new impact fee project costs

$$\text{Impact fee per SFE} = \frac{10 \text{ year recoverable costs}}{10 \text{ year additional SFEs}}$$

$$\text{Impact fee per SFE} = \frac{\$145,832,957}{12,495}$$

$$\text{Impact fee per SFE} = \$11,671$$

Therefore, the maximum assessable impact fee per SFE is **\$11,671**.

For a development that requires a different size meter, a service unit equivalent is established at a multiplier based on its capacity with respect to the 3/4-inch meter. The maximum impact fee that could be assessed for other meter sizes is based on the Equivalency Table (Table 9).

**Table 9 – Maximum Assessable Wastewater Impact Fee for Commonly Used Meters**

Meter Size	Maximum Continuous Operating Capacity (GPM)	Service Unit	Maximum Assessable Impact Fee
3/4"	15	1	\$11,671
1"	25	1.67	\$19,491
1-1/2"	50	3.33	\$38,864
2"	80	5.33	\$62,206
3"	350	23.33	\$272,284
4"	650	43.33	\$505,704
6"	1400	93.33	\$1,089,254
8"	2400	160	\$1,867,360
10"	3500	233.33	\$2,723,194

\*\*Operating capacities obtained from American Water Works Association (AWWA) C-700-20 and C-701-19

# Appendices

Appendix A – Conceptual Level Project Cost Projections

Appendix B – Capital Improvements Plan Units of Supply

Appendix C – Existing Roadway Facilities Inventory

## **Appendix A – Conceptual Level Project Cost Projections**

Project Information:		Description:	Project No.
Name:	CR 373	This project consists of widening the existing facility to a four-lane divided arterial.	1
Limits:	595' W OF N POWELL PKWY to N POWELL PKWY		
Impact Fee Class:	Minor Arterial		
Length (lf):	595		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	1,851	cy	\$ 16.00	\$ 29,618
202	8" Lime-Treated Subgrade	3,570	sy	\$ 20.00	\$ 71,400
302	8" Concrete Pavement	3,173	sy	\$ 100.00	\$ 317,333
402	6' Concrete Sidewalk	7,140	sf	\$ 10.00	\$ 71,400
502	Curb & Gutter	2,380	lf	\$ 40.00	\$ 95,200
602	Topsoil	1,983	sy	\$ 10.00	\$ 19,833
702	Turn Lanes	201	sy	\$ 120.00	\$ 24,070
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 628,855</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 31,443
√ Pavement Markings/Markers		3%	\$ 18,866
√ Roadway Drainage	Standard Internal System	30%	\$ 188,656
√ Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 31,443
√ Sewer	Minor Adjustments	5%	\$ 31,443
√ Landscaping and Irrigation		6%	\$ 37,731
√ Illumination	Standard Illumination System	6%	\$ 37,731
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 377,313</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,006,168</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 201,234</b>
		<b>Mobilization:</b> 5%	<b>\$ 50,308</b>
		<b>Prep ROW:</b> 5%	<b>\$ 50,308</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,309,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,309,000
Engineering/Survey/Testing:		16%	\$ 209,440
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 130,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,649,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 2</b>
Name:	CR 371 (1)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
Limits:	245' W OF CR 368 to CENTRAL EXPRESSWAY SB		
Impact Fee Class:	Major Arterial		
Length (lf):	1,910		
Service Area(s):	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	8,489	cy	\$ 16.00	\$ 135,822
201	8" Lime-Treated Subgrade	16,553	sy	\$ 20.00	\$ 331,067
301	8" Concrete Pavement	15,280	sy	\$ 100.00	\$ 1,528,000
401	6' Concrete Sidewalk	22,920	sf	\$ 10.00	\$ 229,200
501	Curb & Gutter	7,640	lf	\$ 40.00	\$ 305,600
601	Topsoil	7,640	sy	\$ 10.00	\$ 76,400
701	Turn Lanes	658	sy	\$ 120.00	\$ 79,005
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,685,093</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 80,553
√ Roadway Drainage	Standard Internal System	30%	\$ 805,528
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 134,255
√ Sewer	Minor Adjustments	5%	\$ 134,255
√ Landscaping and Irrigation		6%	\$ 161,106
√ Illumination	Standard Illumination System	6%	\$ 161,106
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 1,476,801</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,161,895</b>
		<b>Construction Contingency:</b>	<b>20% \$ 832,379</b>
		<b>Mobilization</b>	<b>5% \$ 208,095</b>
		<b>Prep ROW</b>	<b>1% \$ 41,619</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 5,244,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,244,000
Engineering/Survey/Testing:		16%	\$ 839,040
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,048,800
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 7,132,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna**

**2022 Roadway Impact Fee Study  
Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 371 (2)	This project consists of widening the existing facility to a six-lane divided arterial.	3
Limits:	CENTRAL EXPRESSWAY SB to 910' E OF CENTRAL EXPRESSWAY NB		
Impact Fee Class:	Major Arterial		
Length (lf):	1,610		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	7,156	cy	\$ 16.00	\$ 114,489
201	8" Lime-Treated Subgrade	13,953	sy	\$ 20.00	\$ 279,067
301	8" Concrete Pavement	12,880	sy	\$ 100.00	\$ 1,288,000
401	6' Concrete Sidewalk	19,320	sf	\$ 10.00	\$ 193,200
501	Curb & Gutter	6,440	lf	\$ 40.00	\$ 257,600
601	Topsoil	6,440	sy	\$ 10.00	\$ 64,400
701	Turn Lanes	555	sy	\$ 120.00	\$ 66,595
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,263,351</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 113,168
✓ Pavement Markings/Markers		3%	\$ 67,901
✓ Roadway Drainage	Standard Internal System	30%	\$ 679,005
✓ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
✓ Water	Minor Adjustments	5%	\$ 113,168
✓ Sewer	Minor Adjustments	5%	\$ 113,168
✓ Landscaping and Irrigation		6%	\$ 135,801
✓ Illumination	Standard Illumination System	6%	\$ 135,801
✓ Other:	Grade Separated Crossing		\$ 1,000,000
<b>Allowance Subtotal:</b>			<b>\$ 2,608,011</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,871,362</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 974,272
		<b>Mobilization</b>	<b>5%</b> \$ 243,568
		<b>Prep ROW</b>	<b>5%</b> \$ 243,568
<b>Construction Cost TOTAL:</b>			<b>\$ 6,333,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,333,000
Engineering/Survey/Testing:		16%	\$ 1,013,280
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 633,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 7,980,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 4</b>
<b>Name:</b>	CR 371 (3)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
<b>Limits:</b>	910' E OF CENTRAL EXPRESSWAY NB to 1,075' E OF CR 374		
<b>Impact Fee Class:</b>	Major Arterial		
<b>Length (lf):</b>	1,285		
<b>Service Area(s):</b>	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	5,711	cy	\$ 16.00	\$ 91,378
201	8" Lime-Treated Subgrade	11,137	sy	\$ 20.00	\$ 222,733
301	8" Concrete Pavement	10,280	sy	\$ 100.00	\$ 1,028,000
401	6' Concrete Sidewalk	15,420	sf	\$ 10.00	\$ 154,200
501	Curb & Gutter	5,140	lf	\$ 40.00	\$ 205,600
601	Topsoil	5,140	sy	\$ 10.00	\$ 51,400
701	Turn Lanes	443	sy	\$ 120.00	\$ 53,152
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,806,463</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 54,194
√ Roadway Drainage	Standard Internal System	30%	\$ 541,939
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 90,323
√ Sewer	Minor Adjustments	5%	\$ 90,323
√ Landscaping and Irrigation		6%	\$ 108,388
√ Illumination	Standard Illumination System	6%	\$ 108,388
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 993,555</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,800,018</b>
<b>Construction Contingency:</b>	<b>20% \$ 560,004</b>
<b>Mobilization</b>	<b>5% \$ 140,001</b>
<b>Prep ROW</b>	<b>1% \$ 28,000</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 3,529,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,529,000
Engineering/Survey/Testing:		16%	\$ 564,640
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 705,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,799,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**

**2022 Roadway Impact Fee Study  
Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/28/2022

**Project Information:**

Name: CR 371 (4)  
Limits: 595' W OF BRYANT FARM RD to BRYANT FARM RD  
Impact Fee Class: Major Arterial  
Length (lf): 595  
Service Area(s): Service Area 1

Description: Project No. **5**  
**This project consists of the construction of a new six-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	2,644	cy	\$ 16.00	\$ 42,311
201	8" Lime-Treated Subgrade	5,157	sy	\$ 20.00	\$ 103,133
301	8" Concrete Pavement	4,760	sy	\$ 100.00	\$ 476,000
401	6' Concrete Sidewalk	7,140	sf	\$ 10.00	\$ 71,400
501	Curb & Gutter	2,380	lf	\$ 40.00	\$ 95,200
601	Topsoil	2,380	sy	\$ 10.00	\$ 23,800
701	Turn Lanes	205	sy	\$ 120.00	\$ 24,611
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 836,456</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 25,094
√ Roadway Drainage	Standard Internal System	30%	\$ 250,937
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 41,823
√ Sewer	Minor Adjustments	5%	\$ 41,823
√ Landscaping and Irrigation		6%	\$ 50,187
√ Illumination	Standard Illumination System	6%	\$ 50,187
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 460,051</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,296,507</b>
<b>Construction Contingency:</b> 20%	\$ 259,301
<b>Mobilization:</b> 5%	\$ 64,825
<b>Prep ROW:</b> 1%	\$ 12,965
<b>Construction Cost TOTAL:</b>	<b>\$ 1,634,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,634,000
Engineering/Survey/Testing:		16%	\$ 261,440
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 326,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,222,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 371 (5)	This project consists of widening the existing facility to a six-lane divided arterial.	6
Limits:	BRYANT FARM RD to N POWELL PKWY		
Impact Fee Class:	Major Arterial		
Length (lf):	3,745		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	16,644	cy	\$ 16.00	\$ 266,311
201	8" Lime-Treated Subgrade	32,457	sy	\$ 20.00	\$ 649,133
301	8" Concrete Pavement	29,960	sy	\$ 100.00	\$ 2,996,000
401	6' Concrete Sidewalk	44,940	sf	\$ 10.00	\$ 449,400
501	Curb & Gutter	14,980	lf	\$ 40.00	\$ 599,200
601	Topsoil	14,980	sy	\$ 10.00	\$ 149,800
701	Turn Lanes	1,291	sy	\$ 120.00	\$ 154,907
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 5,264,751</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 263,238
√ Pavement Markings/Markers		3%	\$ 157,943
√ Roadway Drainage	Standard Internal System	30%	\$ 1,579,425
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 263,238
√ Sewer	Minor Adjustments	5%	\$ 263,238
√ Landscaping and Irrigation		6%	\$ 315,885
√ Illumination	Standard Illumination System	6%	\$ 315,885
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 3,408,851</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 8,673,602</b>
		<b>Construction Contingency:</b>	<b>20% \$ 1,734,720</b>
		<b>Mobilization</b>	<b>5% \$ 433,680</b>
		<b>Prep ROW</b>	<b>5% \$ 433,680</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 11,276,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 11,276,000
Engineering/Survey/Testing:		16%	\$ 1,804,160
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 1,127,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 14,208,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 370 (1)	This project consists of the construction of a new six-lane divided arterial.	7
Limits:	5,795' W OF CR 368 to CR 368		
Impact Fee Class:	Major Arterial		
Length (lf):	5,795		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	25,756	cy	\$ 16.00	\$ 412,089
201	8" Lime-Treated Subgrade	50,223	sy	\$ 20.00	\$ 1,004,467
301	8" Concrete Pavement	46,360	sy	\$ 100.00	\$ 4,636,000
401	6' Concrete Sidewalk	69,540	sf	\$ 10.00	\$ 695,400
501	Curb & Gutter	23,180	lf	\$ 40.00	\$ 927,200
601	Topsoil	23,180	sy	\$ 10.00	\$ 231,800
701	Turn Lanes	1,998	sy	\$ 120.00	\$ 239,702
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 8,146,658</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 244,400
√ Roadway Drainage	Standard Internal System	30%	\$ 2,443,997
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 407,333
√ Sewer	Minor Adjustments	5%	\$ 407,333
√ Landscaping and Irrigation		6%	\$ 488,799
√ Illumination	Standard Illumination System	6%	\$ 488,799
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 4,480,662</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 12,627,320</b>
<b>Construction Contingency:</b>	<b>20%</b> \$ 2,525,464
<b>Mobilization</b>	<b>5%</b> \$ 631,366
<b>Prep ROW</b>	<b>1%</b> \$ 126,273
<b>Construction Cost TOTAL:</b>	<b>\$ 15,911,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 15,911,000
Engineering/Survey/Testing:		16%	\$ 2,545,760
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 3,182,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 21,639,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: CR 370 (2)  
 Limits: CR 368 to CENTRAL EXPRESSWAY SB  
 Impact Fee Class: Major Arterial  
 Length (lf): 970  
 Service Area(s): Service Area 1

Description: Project No. **8**  
**This project consists of widening the existing facility to a six-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	4,311	cy	\$ 16.00	\$ 68,978
201	8" Lime-Treated Subgrade	8,407	sy	\$ 20.00	\$ 168,133
301	8" Concrete Pavement	7,760	sy	\$ 100.00	\$ 776,000
401	6' Concrete Sidewalk	11,640	sf	\$ 10.00	\$ 116,400
501	Curb & Gutter	3,880	lf	\$ 40.00	\$ 155,200
601	Topsoil	3,880	sy	\$ 10.00	\$ 38,800
701	Turn Lanes	334	sy	\$ 120.00	\$ 40,123
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,363,634</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 68,182
✓ Pavement Markings/Markers		3%	\$ 40,909
✓ Roadway Drainage	Standard Internal System	30%	\$ 409,090
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 68,182
✓ Sewer	Minor Adjustments	5%	\$ 68,182
✓ Landscaping and Irrigation		6%	\$ 81,818
✓ Illumination	Standard Illumination System	6%	\$ 81,818
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 818,180</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,181,814</b>
<b>Construction Contingency:</b>	<b>20% \$ 436,363</b>
<b>Mobilization</b>	<b>5% \$ 109,091</b>
<b>Prep ROW</b>	<b>5% \$ 109,091</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 2,837,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,837,000
Engineering/Survey/Testing:		16%	\$ 453,920
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 283,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,575,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W ROSAMOND PKWY (1)	This project consists of widening the existing facility to a six-lane divided arterial.	9
Limits:	CENTRAL EXPRESSWAY NB to CR 374		
Impact Fee Class:	Major Arterial		
Length (lf):	1,140		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	5,067	cy	\$ 16.00	\$ 81,067
201	8" Lime-Treated Subgrade	9,880	sy	\$ 20.00	\$ 197,600
301	8" Concrete Pavement	9,120	sy	\$ 100.00	\$ 912,000
401	6' Concrete Sidewalk	13,680	sf	\$ 10.00	\$ 136,800
501	Curb & Gutter	4,560	lf	\$ 40.00	\$ 182,400
601	Topsoil	4,560	sy	\$ 10.00	\$ 45,600
701	Turn Lanes	393	sy	\$ 120.00	\$ 47,155
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,602,621</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 80,131
√ Pavement Markings/Markers		3%	\$ 48,079
√ Roadway Drainage	Standard Internal System	30%	\$ 480,786
√ Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 80,131
√ Sewer	Minor Adjustments	5%	\$ 80,131
√ Landscaping and Irrigation		6%	\$ 96,157
√ Illumination	Standard Illumination System	6%	\$ 96,157
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 961,573</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,564,194</b>
<b>Construction Contingency:</b>	<b>20%</b> \$ 512,839
<b>Mobilization</b>	<b>5%</b> \$ 128,210
<b>Prep ROW</b>	<b>5%</b> \$ 128,210
<b>Construction Cost TOTAL:</b>	<b>\$ 3,334,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,334,000
Engineering/Survey/Testing:		16%	\$ 533,440
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 333,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,201,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 10
Name:	W ROSAMOND PKWY (2)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
Limits:	CR 374 to 1,170' W OF W CROSSING BLVD		
Impact Fee Class:	Major Arterial		
Length (lf):	4,520		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	20,089	cy	\$ 16.00	\$ 321,422
201	8" Lime-Treated Subgrade	39,173	sy	\$ 20.00	\$ 783,467
301	8" Concrete Pavement	36,160	sy	\$ 100.00	\$ 3,616,000
401	6' Concrete Sidewalk	54,240	sf	\$ 10.00	\$ 542,400
501	Curb & Gutter	18,080	lf	\$ 40.00	\$ 723,200
601	Topsoil	18,080	sy	\$ 10.00	\$ 180,800
701	Turn Lanes	1,558	sy	\$ 120.00	\$ 186,964
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 6,354,253</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 190,628
√ Roadway Drainage	Standard Internal System	30%	\$ 1,906,276
√ Special Drainage Structures	Minor Stream Crossing (2)	-	\$ 500,000
√ Water	Minor Adjustments	5%	\$ 317,713
√ Sewer	Minor Adjustments	5%	\$ 317,713
√ Landscaping and Irrigation		6%	\$ 381,255
√ Illumination	Standard Illumination System	6%	\$ 381,255
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 3,994,839</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 10,349,091</b>
<b>Construction Contingency:</b> 20%	\$ 2,069,818
<b>Mobilization:</b> 5%	\$ 517,455
<b>Prep ROW:</b> 1%	\$ 103,491
<b>Construction Cost TOTAL:</b>	<b>\$ 13,040,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 13,040,000
Engineering/Survey/Testing:		16%	\$ 2,086,400
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 2,608,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 17,734,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W ROSAMOND PKWY (3)	<b>This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.</b>	<b>11</b>
Limits:	1,170' W OF W CROSSING BLVD to LANGDON DR		
Impact Fee Class:	Major Arterial (2/3)		
Length (If):	2,810		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	8,430	cy	\$ 16.00	\$ 134,880
208	8" Lime-Treated Subgrade	16,392	sy	\$ 20.00	\$ 327,833
308	8" Concrete Pavement	14,987	sy	\$ 100.00	\$ 1,498,667
408	6' Concrete Sidewalk	16,860	sf	\$ 10.00	\$ 168,600
508	Curb & Gutter	8,430	lf	\$ 40.00	\$ 337,200
608	Topsoil	8,118	sy	\$ 10.00	\$ 81,178
708	Turn Lanes	880	sy	\$ 120.00	\$ 105,588
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,653,946</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 132,697
√ Pavement Markings/Markers		3%	\$ 79,618
Roadway Drainage	None Anticipated	0%	\$ -
√ Special Drainage Structures	Major Stream Crossing	-	\$ 500,000
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 159,237
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 871,552</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 3,525,498</b>
<b>Construction Contingency:</b>	<b>20% \$ 705,100</b>
<b>Mobilization</b>	<b>5% \$ 176,275</b>
<b>Prep ROW</b>	<b>5% \$ 176,275</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 4,584,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,584,000
Engineering/Survey/Testing:		16%	\$ 733,440
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,317,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 12
Name:	W ROSAMOND PKWY (4)	<b>This project consists of the construction of the additional two lanes of the ultimate six-lane divided arterial.</b>	
Limits:	LANGDON DR to 740' E OF LANGDON DR		
Impact Fee Class:	Major Arterial (1/3)		
Length (lf):	740		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	1,151	cy	\$ 16.00	\$ 18,418
207	8" Lime-Treated Subgrade	2,220	sy	\$ 20.00	\$ 44,400
307	8" Concrete Pavement	1,973	sy	\$ 100.00	\$ 197,333
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	1,480	lf	\$ 40.00	\$ 59,200
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	164	sy	\$ 120.00	\$ 19,621
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 338,972</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 16,949
√ Pavement Markings/Markers		3%	\$ 10,169
Roadway Drainage	None Anticipated	0%	\$ -
√ Special Drainage Structures	Major Stream Crossing	-	\$ 500,000
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 20,338
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 547,456</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 886,428</b>
		<b>Construction Contingency:</b>	<b>20% \$ 177,286</b>
		<b>Mobilization</b>	<b>5% \$ 44,321</b>
		<b>Prep ROW</b>	<b>5% \$ 44,321</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,153,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,153,000
Engineering/Survey/Testing:		16%	\$ 184,480
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,337,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W ROSAMOND PKWY (5)	<b>This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.</b>	<b>13</b>
Limits:	740' E OF LANGDON DR to N POWELL PKWY		
Impact Fee Class:	Major Arterial (2/3)		
Length (lf):	1,190		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	3,570	cy	\$ 16.00	\$ 57,120
208	8" Lime-Treated Subgrade	6,942	sy	\$ 20.00	\$ 138,833
308	8" Concrete Pavement	6,347	sy	\$ 100.00	\$ 634,667
408	6' Concrete Sidewalk	7,140	sf	\$ 10.00	\$ 71,400
508	Curb & Gutter	3,570	lf	\$ 40.00	\$ 142,800
608	Topsoil	3,438	sy	\$ 10.00	\$ 34,378
708	Turn Lanes	373	sy	\$ 120.00	\$ 44,715
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,123,913</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 56,196
√ Pavement Markings/Markers		3%	\$ 33,717
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 67,435
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 157,348</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,281,261</b>
<b>Construction Contingency:</b> 20%	\$ 256,252
<b>Mobilization:</b> 5%	\$ 64,063
<b>Prep ROW:</b> 5%	\$ 64,063
<b>Construction Cost TOTAL:</b>	<b>\$ 1,666,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,666,000
Engineering/Survey/Testing:		16%	\$ 266,560
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,933,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 14</b>
Name:	ROLLINS RD (1)	<b>This project consists of widening the existing facility to a three-lane undivided collector.</b>	
Limits:	CR 374 to 615' W OF W CROSSING BLVD		
Impact Fee Class:	Minor Collector		
Length (lf):	5,355		
Service Area(s):	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	12,495	cy	\$ 16.00	\$ 199,920
204	8" Lime-Treated Subgrade	24,395	sy	\$ 20.00	\$ 487,900
304	8" Concrete Pavement	22,610	sy	\$ 100.00	\$ 2,261,000
404	6" Concrete Sidewalk	64,260	sf	\$ 10.00	\$ 642,600
504	Curb & Gutter	10,710	lf	\$ 40.00	\$ 428,400
604	Topsoil	5,950	sy	\$ 10.00	\$ 59,500
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 4,079,320</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 203,966
√ Pavement Markings/Markers		3%	\$ 122,380
√ Roadway Drainage	Standard Internal System	30%	\$ 1,223,796
√ Special Drainage Structures	Minor Stream Crossing (2)	-	\$ 500,000
√ Water	Minor Adjustments	5%	\$ 203,966
√ Sewer	Minor Adjustments	5%	\$ 203,966
√ Landscaping and Irrigation		6%	\$ 244,759
√ Illumination	Standard Illumination System	6%	\$ 244,759
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 2,947,592</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 7,026,912</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 1,405,382
<b>Mobilization</b>			<b>5%</b> \$ 351,346
<b>Prep ROW</b>			<b>5%</b> \$ 351,346
<b>Construction Cost TOTAL:</b>			<b>\$ 9,135,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,135,000
Engineering/Survey/Testing:		16%	\$ 1,461,600
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 913,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 11,510,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 15
Name:	ROLLINS RD (2)	<b>This project consists of the construction of a new three-lane undivided collector.</b>	
Limits:	615' W OF W CROSSING BLVD to W CROSSING BLVD		
Impact Fee Class:	Minor Collector		
Length (lf):	615		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	1,435	cy	\$ 16.00	\$ 22,960
204	8" Lime-Treated Subgrade	2,802	sy	\$ 20.00	\$ 56,033
304	8" Concrete Pavement	2,597	sy	\$ 100.00	\$ 259,667
404	6' Concrete Sidewalk	7,380	sf	\$ 10.00	\$ 73,800
504	Curb & Gutter	1,230	lf	\$ 40.00	\$ 49,200
604	Topsoil	683	sy	\$ 10.00	\$ 6,833
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 468,493</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 14,055
✓ Roadway Drainage	Standard Internal System	30%	\$ 140,548
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 23,425
✓ Sewer	Minor Adjustments	5%	\$ 23,425
✓ Landscaping and Irrigation		6%	\$ 28,110
✓ Illumination	Standard Illumination System	6%	\$ 28,110
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 257,671</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 726,165</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 145,233
		<b>Mobilization</b>	<b>5%</b> \$ 36,308
		<b>Prep ROW</b>	<b>1%</b> \$ 7,262
<b>Construction Cost TOTAL:</b>			<b>\$ 915,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 915,000
Engineering/Survey/Testing:		16%	\$ 146,400
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 183,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,244,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: HACKBERRY DR (1)  
 Limits: CR 374 to 1,365' W OF N FERGUSON PKWY  
 Impact Fee Class: Minor Arterial  
 Length (lf): 2,870  
 Service Area(s): Service Area 1

Description: Project No. **16**  
**This project consists of the construction of a new four-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	8,929	cy	\$ 16.00	\$ 142,862
202	8" Lime-Treated Subgrade	17,220	sy	\$ 20.00	\$ 344,400
302	8" Concrete Pavement	15,307	sy	\$ 100.00	\$ 1,530,667
402	6' Concrete Sidewalk	34,440	sf	\$ 10.00	\$ 344,400
502	Curb & Gutter	11,480	lf	\$ 40.00	\$ 459,200
602	Topsoil	9,567	sy	\$ 10.00	\$ 95,667
702	Turn Lanes	968	sy	\$ 120.00	\$ 116,105
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,033,300</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 90,999
√ Roadway Drainage	Standard Internal System	30%	\$ 909,990
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 151,665
√ Sewer	Minor Adjustments	5%	\$ 151,665
√ Landscaping and Irrigation		6%	\$ 181,998
√ Illumination	Standard Illumination System	6%	\$ 181,998
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,918,315</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,951,615</b>
Construction Contingency:	20% \$ 990,323
Mobilization	5% \$ 247,581
Prep ROW	1% \$ 49,516
<b>Construction Cost TOTAL:</b>	<b>\$ 6,240,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,240,000
Engineering/Survey/Testing:		16%	\$ 998,400
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,248,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 8,486,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 17
Name:	HACKBERRY DR (2)	<b>This project consists of the construction of the additional two lanes of the ultimate four-lane divided arterial.</b>	
Limits:	1,365' W OF N FERGUSON PKWY to N FERGUSON PKWY		
Impact Fee Class:	Minor Arterial (1/2)		
Length (lf):	1,365		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Roadway Excavation	2,123	cy	\$ 16.00	\$ 33,973
209	8" Lime-Treated Subgrade	4,095	sy	\$ 20.00	\$ 81,900
309	8" Concrete Pavement	3,640	sy	\$ 100.00	\$ 364,000
409	6' Concrete Sidewalk	8,190	sf	\$ 10.00	\$ 81,900
509	Curb & Gutter	2,730	lf	\$ 40.00	\$ 109,200
609	Topsoil	3,337	sy	\$ 10.00	\$ 33,367
709	Turn Lanes	417	sy	\$ 120.00	\$ 50,050
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 754,390</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 37,720
√ Pavement Markings/Markers		3%	\$ 22,632
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 45,263
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 105,615</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 860,005</b>
		<b>Construction Contingency:</b> 20%	\$ 172,001
		<b>Mobilization:</b> 5%	\$ 43,000
		<b>Prep ROW:</b> 5%	\$ 43,000
<b>Construction Cost TOTAL:</b>			<b>\$ 1,119,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,119,000
Engineering/Survey/Testing:		16%	\$ 179,040
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,298,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: HACKBERRY LN (1)  
 Limits: 640' W OF N JAMES ST to N POWELL PKWY  
 Impact Fee Class: Minor Arterial  
 Length (lf): 970  
 Service Area(s): Service Area 1

Description: Project No. **18**

**This project consists of widening the existing facility to a four-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	3,018	cy	\$ 16.00	\$ 48,284
202	8" Lime-Treated Subgrade	5,820	sy	\$ 20.00	\$ 116,400
302	8" Concrete Pavement	5,173	sy	\$ 100.00	\$ 517,333
402	6' Concrete Sidewalk	11,640	sf	\$ 10.00	\$ 116,400
502	Curb & Gutter	3,880	lf	\$ 40.00	\$ 155,200
602	Topsoil	3,233	sy	\$ 10.00	\$ 32,333
702	Turn Lanes	327	sy	\$ 120.00	\$ 39,241
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,025,192</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 51,260
√ Pavement Markings/Markers		3%	\$ 30,756
√ Roadway Drainage	Standard Internal System	30%	\$ 307,558
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 51,260
√ Sewer	Minor Adjustments	5%	\$ 51,260
√ Landscaping and Irrigation		6%	\$ 61,512
√ Illumination	Standard Illumination System	6%	\$ 61,512
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 615,115</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,640,307</b>
<b>Construction Contingency:</b> 20%	\$ 328,061
<b>Mobilization:</b> 5%	\$ 82,015
<b>Prep ROW:</b> 5%	\$ 82,015
<b>Construction Cost TOTAL:</b>	<b>\$ 2,133,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,133,000
Engineering/Survey/Testing:		16%	\$ 341,280
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 213,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,688,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: W 2ND ST (1)  
 Limits: 340' W OF N JAMES DR to N POWELL PKWY  
 Impact Fee Class: Downtown Type B  
 Length (lf): 665  
 Service Area(s): Service Area 1

Description: Project No. **19**

**This project consists of widening the existing facility to a two-lane undivided Downtown street.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,256	cy	\$ 16.00	\$ 20,098
205	8" Lime-Treated Subgrade	2,438	sy	\$ 20.00	\$ 48,767
305	8" Concrete Pavement	2,217	sy	\$ 100.00	\$ 221,667
405	6' Concrete Sidewalk	7,980	sf	\$ 10.00	\$ 79,800
505	Curb & Gutter	1,330	lf	\$ 40.00	\$ 53,200
605	Topsoil	591	sy	\$ 10.00	\$ 5,911
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 429,442</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 21,472
✓ Pavement Markings/Markers		3%	\$ 12,883
✓ Roadway Drainage	Standard Internal System	30%	\$ 128,833
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 21,472
✓ Sewer	Minor Adjustments	5%	\$ 21,472
✓ Landscaping and Irrigation		6%	\$ 25,767
✓ Illumination	Standard Illumination System	6%	\$ 25,767
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 257,665</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 687,108</b>
<b>Construction Contingency:</b> 20%	\$ 137,422
<b>Mobilization:</b> 5%	\$ 34,355
<b>Prep ROW:</b> 5%	\$ 34,355
<b>Construction Cost TOTAL:</b>	<b>\$ 894,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 894,000
Engineering/Survey/Testing:		16%	\$ 143,040
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 89,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,126,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 20
Name:	W 3RD ST (1)	<b>This project consists of widening the existing facility to a two-lane undivided Downtown street.</b>	
Limits:	HARPER DR to N POWELL PKWY		
Impact Fee Class:	Downtown Type B		
Length (lf):	585		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,105	cy	\$ 16.00	\$ 17,680
205	8" Lime-Treated Subgrade	2,145	sy	\$ 20.00	\$ 42,900
305	8" Concrete Pavement	1,950	sy	\$ 100.00	\$ 195,000
405	6' Concrete Sidewalk	7,020	sf	\$ 10.00	\$ 70,200
505	Curb & Gutter	1,170	lf	\$ 40.00	\$ 46,800
605	Topsoil	520	sy	\$ 10.00	\$ 5,200
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 377,780</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 18,889
√ Pavement Markings/Markers		3%	\$ 11,333
√ Roadway Drainage	Standard Internal System	30%	\$ 113,334
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 18,889
√ Sewer	Minor Adjustments	5%	\$ 18,889
√ Landscaping and Irrigation		6%	\$ 22,667
√ Illumination	Standard Illumination System	6%	\$ 22,667
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 226,668</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 604,448</b>
		<b>Construction Contingency:</b> 20%	\$ 120,890
		<b>Mobilization</b> 5%	\$ 30,222
		<b>Prep ROW</b> 5%	\$ 30,222
		<b>Construction Cost TOTAL:</b>	<b>\$ 786,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 786,000
Engineering/Survey/Testing:		16%	\$ 125,760
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 78,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 990,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	HARPER DR	<b>This project consists of widening the existing facility to a two-lane undivided Downtown street.</b>	<b>21</b>
Limits:	W 3RD ST to N JAMES DR		
Impact Fee Class:	Downtown Type B		
Length (lf):	565		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,067	cy	\$ 16.00	\$ 17,076
205	8" Lime-Treated Subgrade	2,072	sy	\$ 20.00	\$ 41,433
305	8" Concrete Pavement	1,883	sy	\$ 100.00	\$ 188,333
405	6' Concrete Sidewalk	6,780	sf	\$ 10.00	\$ 67,800
505	Curb & Gutter	1,130	lf	\$ 40.00	\$ 45,200
605	Topsoil	502	sy	\$ 10.00	\$ 5,022
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 364,864</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 18,243
✓ Pavement Markings/Markers		3%	\$ 10,946
✓ Roadway Drainage	Standard Internal System	30%	\$ 109,459
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 18,243
✓ Sewer	Minor Adjustments	5%	\$ 18,243
✓ Landscaping and Irrigation		6%	\$ 21,892
✓ Illumination	Standard Illumination System	6%	\$ 21,892
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 218,919</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$</b>	<b>583,783</b>
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 116,757</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 29,189</b>
<b>Prep ROW</b>		<b>5%</b>	<b>\$ 29,189</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 759,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 759,000
Engineering/Survey/Testing:		16%	\$ 121,440
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 75,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 956,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>22</b>
Name:	W 5TH ST (1)	<b>This project consists of the construction of a new two-lane undivided Downtown street.</b>	
Limits:	215' W OF S JAMES DR to S JAMES DR		
Impact Fee Class:	Downtown Type B		
Length (lf):	215		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	406	cy	\$ 16.00	\$ 6,498
205	8" Lime-Treated Subgrade	788	sy	\$ 20.00	\$ 15,767
305	8" Concrete Pavement	717	sy	\$ 100.00	\$ 71,667
405	6' Concrete Sidewalk	2,580	sf	\$ 10.00	\$ 25,800
505	Curb & Gutter	430	lf	\$ 40.00	\$ 17,200
605	Topsoil	191	sy	\$ 10.00	\$ 1,911
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 138,842</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 4,165
√ Roadway Drainage	Standard Internal System	30%	\$ 41,653
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 6,942
√ Sewer	Minor Adjustments	5%	\$ 6,942
√ Landscaping and Irrigation		6%	\$ 8,331
√ Illumination	Standard Illumination System	6%	\$ 8,331
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 76,363</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$</b>	<b>215,205</b>
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 43,041</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 10,760</b>
<b>Prep ROW</b>		<b>1%</b>	<b>\$ 2,152</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 272,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 272,000
Engineering/Survey/Testing:		16%	\$ 43,520
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 54,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 370,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>23</b>
Name:	W 5TH ST (2)	This project consists of widening the existing facility to a two-lane undivided Downtown street.	
Limits:	S JAMES DR to S POWELL PKWY		
Impact Fee Class:	Downtown Type B		
Length (lf):	305		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	576	cy	\$ 16.00	\$ 9,218
205	8" Lime-Treated Subgrade	1,118	sy	\$ 20.00	\$ 22,367
305	8" Concrete Pavement	1,017	sy	\$ 100.00	\$ 101,667
405	6' Concrete Sidewalk	3,660	sf	\$ 10.00	\$ 36,600
505	Curb & Gutter	610	lf	\$ 40.00	\$ 24,400
605	Topsoil	271	sy	\$ 10.00	\$ 2,711
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 196,962</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 9,848
✓ Pavement Markings/Markers		3%	\$ 5,909
✓ Roadway Drainage	Standard Internal System	30%	\$ 59,089
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 9,848
✓ Sewer	Minor Adjustments	5%	\$ 9,848
✓ Landscaping and Irrigation		6%	\$ 11,818
✓ Illumination	Standard Illumination System	6%	\$ 11,818
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 118,177</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 315,140</b>
		<b>Construction Contingency:</b> 20%	\$ 63,028
		<b>Mobilization</b> 5%	\$ 15,757
		<b>Prep ROW</b> 5%	\$ 15,757
<b>Construction Cost TOTAL:</b>			<b>\$ 410,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 410,000
Engineering/Survey/Testing:		16%	\$ 65,600
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 41,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 517,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 24
Name:	FM 455 (1)	This project consists of widening the existing facility to a six-lane divided TxDOT arterial.	
Limits:	1,330' W OF FM 3356 to 140' W OF CR 289		
Impact Fee Class:	Major Arterial		
Length (lf):	6,770		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	30,089	cy	\$ 16.00	\$ 481,422
201	8" Lime-Treated Subgrade	58,673	sy	\$ 20.00	\$ 1,173,467
301	8" Concrete Pavement	54,160	sy	\$ 100.00	\$ 5,416,000
401	6' Concrete Sidewalk	81,240	sf	\$ 10.00	\$ 812,400
501	Curb & Gutter	27,080	lf	\$ 40.00	\$ 1,083,200
601	Topsoil	27,080	sy	\$ 10.00	\$ 270,800
701	Turn Lanes	2,334	sy	\$ 120.00	\$ 280,032
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 9,517,321</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 475,866
√ Pavement Markings/Markers		3%	\$ 285,520
√ Roadway Drainage	Standard Internal System	30%	\$ 2,855,196
√ Special Drainage Structures	Bridge Crossing (4)	-	\$ 2,500,000
√ Water	Minor Adjustments	5%	\$ 475,866
√ Sewer	Minor Adjustments	5%	\$ 475,866
√ Landscaping and Irrigation		6%	\$ 571,039
√ Illumination	Standard Illumination System	6%	\$ 571,039
Other:		\$0	-
<b>Allowance Subtotal:</b>			<b>\$ 8,210,392</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 17,727,713</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 3,545,543
		<b>Mobilization</b>	<b>5%</b> \$ 886,386
		<b>Prep ROW</b>	<b>5%</b> \$ 886,386
<b>Construction Cost TOTAL:</b>			<b>\$ 23,047,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 23,047,000
Engineering/Survey/Testing:		16%	\$ 3,687,520
ROW/Easement Acquisition:	TxDOT Roadway	0%	-
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 5,347,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: FM 455 (2)  
 Limits: 80' S OF FM 290 to 180' N OF COWAN RD  
 Impact Fee Class: Major Arterial  
 Length (lf): 4,400  
 Service Area(s): Service Area 1

Description: Project No. **25**

**This project consists of widening the existing facility to a six-lane divided TxDOT arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	19,556	cy	\$ 16.00	\$ 312,889
201	8" Lime-Treated Subgrade	38,133	sy	\$ 20.00	\$ 762,667
301	8" Concrete Pavement	35,200	sy	\$ 100.00	\$ 3,520,000
401	6' Concrete Sidewalk	52,800	sf	\$ 10.00	\$ 528,000
501	Curb & Gutter	17,600	lf	\$ 40.00	\$ 704,000
601	Topsoil	17,600	sy	\$ 10.00	\$ 176,000
701	Turn Lanes	1,517	sy	\$ 120.00	\$ 182,000
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 6,185,556</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 309,278
√ Pavement Markings/Markers		3%	\$ 185,567
√ Roadway Drainage	Standard Internal System	30%	\$ 1,855,667
√ Special Drainage Structures	Major Stream Crossing (3)	-	\$ 1,500,000
√ Water	Minor Adjustments	5%	\$ 309,278
√ Sewer	Minor Adjustments	5%	\$ 309,278
√ Landscaping and Irrigation		6%	\$ 371,133
√ Illumination	Standard Illumination System	6%	\$ 371,133
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 5,211,333</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 11,396,889</b>
<b>Construction Contingency:</b>	<b>20% \$ 2,279,378</b>
<b>Mobilization</b>	<b>5% \$ 569,844</b>
<b>Prep ROW</b>	<b>5% \$ 569,844</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 14,816,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 14,816,000
Engineering/Survey/Testing:		16%	\$ 2,370,560
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 3,437,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 26
Name:	FM 455 (3)	This project consists of widening the existing facility to a six-lane divided TxDOT arterial.	
Limits:	180' E OF COWAN RD to W WHITE ST		
Impact Fee Class:	Major Arterial		
Length (lf):	6,400		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	28,444	cy	\$ 16.00	\$ 455,111
201	8" Lime-Treated Subgrade	55,467	sy	\$ 20.00	\$ 1,109,333
301	8" Concrete Pavement	51,200	sy	\$ 100.00	\$ 5,120,000
401	6' Concrete Sidewalk	76,800	sf	\$ 10.00	\$ 768,000
501	Curb & Gutter	25,600	lf	\$ 40.00	\$ 1,024,000
601	Topsoil	25,600	sy	\$ 10.00	\$ 256,000
701	Turn Lanes	2,206	sy	\$ 120.00	\$ 264,727
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 8,997,172</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 449,859
√ Pavement Markings/Markers		3%	\$ 269,915
√ Roadway Drainage	Standard Internal System	30%	\$ 2,699,152
√ Special Drainage Structures	Minor Stream Crossing (3), Major Stream Crossing, Bridge Crossing	-	\$ 2,250,000
√ Water	Minor Adjustments	5%	\$ 449,859
√ Sewer	Minor Adjustments	5%	\$ 449,859
√ Landscaping and Irrigation		6%	\$ 539,830
√ Illumination	Standard Illumination System	6%	\$ 539,830
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 7,648,303</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 16,645,475</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 3,329,095</b>
		<b>Mobilization</b> 5%	<b>\$ 832,274</b>
		<b>Prep ROW</b> 5%	<b>\$ 832,274</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 21,640,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 21,640,000
Engineering/Survey/Testing:		16%	\$ 3,462,400
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
		<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>	<b>\$ 5,020,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: W WHITE ST (1)  
 Limits: FM 455 to CR 286  
 Impact Fee Class: Major Arterial  
 Length (lf): 2,700  
 Service Area(s): Service Area 1

Description: Project No. **27**  
**This project consists of widening the existing facility to a six-lane divided TxDOT arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	12,000	cy	\$ 16.00	\$ 192,000
201	8" Lime-Treated Subgrade	23,400	sy	\$ 20.00	\$ 468,000
301	8" Concrete Pavement	21,600	sy	\$ 100.00	\$ 2,160,000
401	6' Concrete Sidewalk	32,400	sf	\$ 10.00	\$ 324,000
501	Curb & Gutter	10,800	lf	\$ 40.00	\$ 432,000
601	Topsoil	10,800	sy	\$ 10.00	\$ 108,000
701	Turn Lanes	931	sy	\$ 120.00	\$ 111,682
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,795,682</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 189,784
✓ Pavement Markings/Markers		3%	\$ 113,870
✓ Roadway Drainage	Standard Internal System	30%	\$ 1,138,705
✓ Special Drainage Structures	Major Stream Crossing	-	\$ 500,000
✓ Water	Minor Adjustments	5%	\$ 189,784
✓ Sewer	Minor Adjustments	5%	\$ 189,784
✓ Landscaping and Irrigation		6%	\$ 227,741
✓ Illumination	Standard Illumination System	6%	\$ 227,741
Other:		\$0	-
<b>Allowance Subtotal:</b>			<b>\$ 2,777,409</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 6,573,091</b>
<b>Construction Contingency:</b>	<b>20% \$ 1,314,618</b>
<b>Mobilization</b>	<b>5% \$ 328,655</b>
<b>Prep ROW</b>	<b>5% \$ 328,655</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 8,546,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,546,000
Engineering/Survey/Testing:		16%	\$ 1,367,360
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 1,983,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W WHITE ST (2)	This project consists of the construction of the additional two lanes of the ultimate six-lane divided TxDOT arterial.	28
Limits:	CR 286 to CENTRAL EXPRESSWAY SB		
Impact Fee Class:	Major Arterial (1/3)		
Length (lf):	1,430		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	2,224	cy	\$ 16.00	\$ 35,591
207	8" Lime-Treated Subgrade	4,290	sy	\$ 20.00	\$ 85,800
307	8" Concrete Pavement	3,813	sy	\$ 100.00	\$ 381,333
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	2,860	lf	\$ 40.00	\$ 114,400
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	316	sy	\$ 120.00	\$ 37,917
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 655,041</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 32,752
√ Pavement Markings/Markers		3%	\$ 19,651
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 39,302
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 91,706</b>
**Allowances based on % of Paving Construction Cost Subtotal			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 746,747</b>
		<b>Construction Contingency:</b>	<b>20% \$ 149,349</b>
		<b>Mobilization</b>	<b>5% \$ 37,337</b>
		<b>Prep ROW</b>	<b>5% \$ 37,337</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 971,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 971,000
Engineering/Survey/Testing:		16%	\$ 155,360
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 225,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W WHITE ST (3)	<b>This project consists of the construction of the additional two lanes of the ultimate six-lane divided TxDOT arterial.</b>	<b>29</b>
Limits:	CENTRAL EXPRESSWAY NB to S POWELL PKWY		
Impact Fee Class:	Major Arterial (1/3)		
Length (lf):	10,435		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	16,232	cy	\$ 16.00	\$ 259,716
207	8" Lime-Treated Subgrade	31,305	sy	\$ 20.00	\$ 626,100
307	8" Concrete Pavement	27,827	sy	\$ 100.00	\$ 2,782,667
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	20,870	lf	\$ 40.00	\$ 834,800
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	2,306	sy	\$ 120.00	\$ 276,686
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 4,779,968</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 238,998
√ Pavement Markings/Markers		3%	\$ 143,399
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 286,798
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 669,195</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 5,449,163</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 1,089,833</b>
		<b>Mobilization:</b> 5%	<b>\$ 272,458</b>
		<b>Prep ROW:</b> 5%	<b>\$ 272,458</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 7,084,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,084,000
Engineering/Survey/Testing:		16%	\$ 1,133,440
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
		<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>	<b>\$ 1,643,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 30</b>
Name:	CR 284 (1)	<b>This project consists of the construction of a new four-lane undivided collector.</b>	
Limits:	2,860' W OF CR 286 to 415' E OF CR 286		
Impact Fee Class:	Major Collector		
Length (lf):	3,275		
Service Area(s):	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	9,461	cy	\$ 16.00	\$ 151,378
203	8" Lime-Treated Subgrade	18,558	sy	\$ 20.00	\$ 371,167
303	8" Concrete Pavement	17,467	sy	\$ 100.00	\$ 1,746,667
403	6' Concrete Sidewalk	39,300	sf	\$ 10.00	\$ 393,000
503	Curb & Gutter	6,550	lf	\$ 40.00	\$ 262,000
603	Topsoil	7,278	sy	\$ 10.00	\$ 72,778
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,996,989</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 89,910
√ Roadway Drainage	Standard Internal System	30%	\$ 899,097
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 149,849
√ Sewer	Minor Adjustments	5%	\$ 149,849
√ Landscaping and Irrigation		6%	\$ 179,819
√ Illumination	Standard Illumination System	6%	\$ 179,819
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,648,344</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,645,333</b>
		<b>Construction Contingency:</b> 20%	\$ 929,067
		<b>Mobilization</b> 5%	\$ 232,267
		<b>Prep ROW</b> 1%	\$ 46,453
<b>Construction Cost TOTAL:</b>			<b>\$ 5,854,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,854,000
Engineering/Survey/Testing:		16%	\$ 936,640
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,170,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 7,961,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>31</b>
Name:	CR 284 (2)	This project consists of widening the existing facility to a four-lane undivided collector.	
Limits:	1,905' W OF CENTRAL EXPRESSWAY SB to 610' W OF CENTRAL EXPRESSWAY SB		
Impact Fee Class:	Major Collector		
Length (lf):	1,295		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	3,741	cy	\$ 16.00	\$ 59,858
203	8" Lime-Treated Subgrade	7,338	sy	\$ 20.00	\$ 146,767
303	8" Concrete Pavement	6,907	sy	\$ 100.00	\$ 690,667
403	6' Concrete Sidewalk	15,540	sf	\$ 10.00	\$ 155,400
503	Curb & Gutter	2,590	lf	\$ 40.00	\$ 103,600
603	Topsoil	2,878	sy	\$ 10.00	\$ 28,778
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,185,069</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 59,253
√ Pavement Markings/Markers		3%	\$ 35,552
√ Roadway Drainage	Standard Internal System	30%	\$ 355,521
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 59,253
√ Sewer	Minor Adjustments	5%	\$ 59,253
√ Landscaping and Irrigation		6%	\$ 71,104
√ Illumination	Standard Illumination System	6%	\$ 71,104
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 961,041</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$ 2,146,110</b>	
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 429,222</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 107,306</b>
<b>Prep ROW</b>		<b>5%</b>	<b>\$ 107,306</b>
<b>Construction Cost TOTAL:</b>		<b>\$ 2,790,000</b>	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,790,000
Engineering/Survey/Testing:		16%	\$ 446,400
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 279,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,515,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	CR 284 (3)	<b>This project consists of the construction of a new four-lane undivided collector.</b>	<b>32</b>
<b>Limits:</b>	610' W OF CENTRAL EXPRESSWAY SB to CENTRAL EXPRESSWAY NB		
<b>Impact Fee Class:</b>	Major Collector		
<b>Length (lf):</b>	930		
<b>Service Area(s):</b>	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	2,687	cy	\$ 16.00	\$ 42,987
203	8" Lime-Treated Subgrade	5,270	sy	\$ 20.00	\$ 105,400
303	8" Concrete Pavement	4,960	sy	\$ 100.00	\$ 496,000
403	6' Concrete Sidewalk	11,160	sf	\$ 10.00	\$ 111,600
503	Curb & Gutter	1,860	lf	\$ 40.00	\$ 74,400
603	Topsoil	2,067	sy	\$ 10.00	\$ 20,667
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 851,053</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 25,532
√ Roadway Drainage	Standard Internal System	30%	\$ 255,316
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 42,553
√ Sewer	Minor Adjustments	5%	\$ 42,553
√ Landscaping and Irrigation		6%	\$ 51,063
√ Illumination	Standard Illumination System	6%	\$ 51,063
√ Other:	Grade Separated Crossing	\$1,500,000	\$ 1,500,000
		<b>Allowance Subtotal:</b>	<b>\$ 1,968,079</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,819,133</b>
		<b>Construction Contingency:</b>	<b>20% \$ 563,827</b>
		<b>Mobilization</b>	<b>5% \$ 140,957</b>
		<b>Prep ROW</b>	<b>1% \$ 28,191</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 3,553,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,553,000
Engineering/Survey/Testing:		16%	\$ 568,480
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 710,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 4,832,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	TAYLOR BLVD (1)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	<b>33</b>
Limits:	CENTRAL EXPRESSWAY NB to 3,775' E OF CENTRAL EXPRESSWAY NB		
Impact Fee Class:	Major Collector		
Length (lf):	3,775		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	10,906	cy	\$ 16.00	\$ 174,489
203	8" Lime-Treated Subgrade	21,392	sy	\$ 20.00	\$ 427,833
303	8" Concrete Pavement	20,133	sy	\$ 100.00	\$ 2,013,333
403	6' Concrete Sidewalk	45,300	sf	\$ 10.00	\$ 453,000
503	Curb & Gutter	7,550	lf	\$ 40.00	\$ 302,000
603	Topsoil	8,389	sy	\$ 10.00	\$ 83,889
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,454,544</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 172,727
√ Pavement Markings/Markers		3%	\$ 103,636
√ Roadway Drainage	Standard Internal System	30%	\$ 1,036,363
√ Special Drainage Structures	Minor Stream Crossing (2), Bridge Crossing	-	\$ 1,500,000
√ Water	Minor Adjustments	5%	\$ 172,727
√ Sewer	Minor Adjustments	5%	\$ 172,727
√ Landscaping and Irrigation		6%	\$ 207,273
√ Illumination	Standard Illumination System	6%	\$ 207,273
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 3,572,727</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 7,027,271</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 1,405,454</b>
		<b>Mobilization</b> 5%	<b>\$ 351,364</b>
		<b>Prep ROW</b> 5%	<b>\$ 351,364</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 9,136,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,136,000
Engineering/Survey/Testing:		16%	\$ 1,461,760
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 913,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 11,511,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>34</b>
Name:	TAYLOR BLVD (2)	This project consists of widening the existing facility to a four-lane undivided collector.	
Limits:	3,775' E OF CENTRAL EXPRESSWAY NB to 4,600' E OF CENTRAL EXPRESSWAY NB		
Impact Fee Class:	Major Collector		
Length (lf):	825		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	2,383	cy	\$ 16.00	\$ 38,133
203	8" Lime-Treated Subgrade	4,675	sy	\$ 20.00	\$ 93,500
303	8" Concrete Pavement	4,400	sy	\$ 100.00	\$ 440,000
403	6' Concrete Sidewalk	9,900	sf	\$ 10.00	\$ 99,000
503	Curb & Gutter	1,650	lf	\$ 40.00	\$ 66,000
603	Topsoil	1,833	sy	\$ 10.00	\$ 18,333
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 754,967</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 37,748
√ Pavement Markings/Markers		3%	\$ 22,649
√ Roadway Drainage	Standard Internal System	30%	\$ 226,490
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 37,748
√ Sewer	Minor Adjustments	5%	\$ 37,748
√ Landscaping and Irrigation		6%	\$ 45,298
√ Illumination	Standard Illumination System	6%	\$ 45,298
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 452,980</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,207,947</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 241,589
		<b>Mobilization</b>	<b>5%</b> \$ 60,397
		<b>Prep ROW</b>	<b>5%</b> \$ 60,397
<b>Construction Cost TOTAL:</b>			<b>\$ 1,571,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,571,000
Engineering/Survey/Testing:		16%	\$ 251,360
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 157,100
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,979,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: TAYLOR BLVD (3)  
 Limits: 4,600' E OF CENTRAL EXPRESSWAY NB to 4,825' E OF CENTRAL EXPRESSWAY NB  
 Impact Fee Class: Major Collector  
 Length (lf): 225  
 Service Area(s): Service Area 1

Description: Project No. **35**

This project consists of widening the existing facility to a four-lane undivided collector.

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	650	cy	\$ 16.00	\$ 10,400
203	8" Lime-Treated Subgrade	1,275	sy	\$ 20.00	\$ 25,500
303	8" Concrete Pavement	1,200	sy	\$ 100.00	\$ 120,000
403	6' Concrete Sidewalk	2,700	sf	\$ 10.00	\$ 27,000
503	Curb & Gutter	450	lf	\$ 40.00	\$ 18,000
603	Topsoil	500	sy	\$ 10.00	\$ 5,000
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 205,900</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 10,295
✓ Pavement Markings/Markers		3%	\$ 6,177
✓ Roadway Drainage	Standard Internal System	30%	\$ 61,770
✓ Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 10,295
✓ Sewer	Minor Adjustments	5%	\$ 10,295
✓ Landscaping and Irrigation		6%	\$ 12,354
✓ Illumination	Standard Illumination System	6%	\$ 12,354
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 123,540</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>			<b>\$ 329,440</b>
<b>Construction Contingency:</b>			<b>20%</b>
<b>Mobilization</b>			<b>5%</b>
<b>Prep ROW</b>			<b>5%</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 429,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 429,000
Engineering/Survey/Testing:		16%	\$ 68,640
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 42,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 541,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>36</b>
Name:	W FINLEY BLVD (1)	This project consists of the construction of a new four-lane divided collector. The costing assumes a four-lane divided ultimate section in continuity with the adjacent cross-sections.	
Limits:	S FERGUSON PKWY to 2,700' E OF S FERGUSON PKWY		
Impact Fee Class:	Minor Collector (4D)		
Length (lf):	2,700		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Roadway Excavation	8,400	cy	\$ 16.00	\$ 134,400
211	8" Lime-Treated Subgrade	16,200	sy	\$ 20.00	\$ 324,000
311	8" Concrete Pavement	14,400	sy	\$ 100.00	\$ 1,440,000
411	6' Concrete Sidewalk	32,400	sf	\$ 10.00	\$ 324,000
511	Curb & Gutter	10,800	lf	\$ 40.00	\$ 432,000
611	Topsoil	9,000	sy	\$ 10.00	\$ 90,000
711	Turn Lanes	910	sy	\$ 120.00	\$ 109,227
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,853,627</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 85,609
√ Roadway Drainage	Standard Internal System	30%	\$ 856,088
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 142,681
√ Sewer	Minor Adjustments	5%	\$ 142,681
√ Landscaping and Irrigation		6%	\$ 171,218
√ Illumination	Standard Illumination System	6%	\$ 171,218
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,569,495</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,423,122</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 884,624
		<b>Mobilization</b>	<b>5%</b> \$ 221,156
		<b>Prep ROW</b>	<b>1%</b> \$ 44,231
<b>Construction Cost TOTAL:</b>			<b>\$ 5,574,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,574,000
Engineering/Survey/Testing:		16%	\$ 891,840
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,114,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 7,581,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W FINLEY BLVD (2)	This project consists of the construction of the additional two lanes of the four-lane collector. The costing assumes a four-lane divided ultimate section in continuity with the adjacent cross-sections.	37
Limits:	2,700' E OF S FERGUSON PKWY to SILVER LEAF LN		
Impact Fee Class:	Minor Collector (4D) (1/2)		
Length (lf):	425		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
112	Unclassified Roadway Excavation	661	cy	\$ 16.00	\$ 10,578
212	8" Lime-Treated Subgrade	1,275	sy	\$ 20.00	\$ 25,500
312	8" Concrete Pavement	1,133	sy	\$ 100.00	\$ 113,333
412	6' Concrete Sidewalk	2,550	sf	\$ 10.00	\$ 25,500
512	Curb & Gutter	850	lf	\$ 40.00	\$ 34,000
612	Topsoil	1,039	sy	\$ 10.00	\$ 10,389
712	Turn Lanes	130	sy	\$ 120.00	\$ 15,583
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 234,883</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 11,744
√ Pavement Markings/Markers		3%	\$ 7,047
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 14,093
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 32,884</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 267,767</b>
		<b>Construction Contingency:</b>	<b>20% \$ 53,553</b>
		<b>Mobilization</b>	<b>5% \$ 13,388</b>
		<b>Prep ROW</b>	<b>5% \$ 13,388</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 349,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 349,000
Engineering/Survey/Testing:		16%	\$ 55,840
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 405,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: W FINLEY BLVD (3)  
 Limits: SILVER LEAF LN to CR 423  
 Impact Fee Class: Minor Collector (4D)  
 Length (lf): 1,610  
 Service Area(s): Service Area 1

Description: **Project No. 38**  
**This project consists of the construction of a new four-lane divided collector. The costing assumes a four-lane divided ultimate section in continuity with the adjacent cross-sections.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Roadway Excavation	5,009	cy	\$ 16.00	\$ 80,142
211	8" Lime-Treated Subgrade	9,660	sy	\$ 20.00	\$ 193,200
311	8" Concrete Pavement	8,587	sy	\$ 100.00	\$ 858,667
411	6' Concrete Sidewalk	19,320	sf	\$ 10.00	\$ 193,200
511	Curb & Gutter	6,440	lf	\$ 40.00	\$ 257,600
611	Topsoil	5,367	sy	\$ 10.00	\$ 53,667
711	Turn Lanes	543	sy	\$ 120.00	\$ 65,132
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,701,607</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 51,048
√ Roadway Drainage	Standard Internal System	30%	\$ 510,482
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 85,080
√ Sewer	Minor Adjustments	5%	\$ 85,080
√ Landscaping and Irrigation		6%	\$ 102,096
√ Illumination	Standard Illumination System	6%	\$ 102,096
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 935,884</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,637,491</b>
<b>Construction Contingency:</b> 20%	\$ 527,498
<b>Mobilization:</b> 5%	\$ 131,875
<b>Prep ROW:</b> 1%	\$ 26,375
<b>Construction Cost TOTAL:</b>	<b>\$ 3,324,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,324,000
Engineering/Survey/Testing:		16%	\$ 531,840
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 664,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,521,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 39
Name:	W FINLEY BLVD (4)	<b>This project consists of widening the existing facility to a three-lane undivided collector.</b>	
Limits:	CR 423 to S POWELL PKWY		
Impact Fee Class:	Minor Collector		
Length (lf):	775		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	1,808	cy	\$ 16.00	\$ 28,933
204	8" Lime-Treated Subgrade	3,531	sy	\$ 20.00	\$ 70,611
304	8" Concrete Pavement	3,272	sy	\$ 100.00	\$ 327,222
404	6' Concrete Sidewalk	9,300	sf	\$ 10.00	\$ 93,000
504	Curb & Gutter	1,550	lf	\$ 40.00	\$ 62,000
604	Topsoil	861	sy	\$ 10.00	\$ 8,611
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 590,378</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 29,519
✓ Pavement Markings/Markers		3%	\$ 17,711
✓ Roadway Drainage	Standard Internal System	30%	\$ 177,113
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 29,519
✓ Sewer	Minor Adjustments	5%	\$ 29,519
✓ Landscaping and Irrigation		6%	\$ 35,423
✓ Illumination	Standard Illumination System	6%	\$ 35,423
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 354,227</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$</b>	<b>944,604</b>
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 188,921</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 47,230</b>
<b>Prep ROW</b>		<b>5%</b>	<b>\$ 47,230</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,228,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,228,000
Engineering/Survey/Testing:		16%	\$ 196,480
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 122,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,547,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 40
Name:	W FOSTER CROSSING RD (1)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	
Limits:	3,740' W OF S FERGUSON PKWY to 1,780' W OF S FERGUSON PKWY		
Impact Fee Class:	Major Collector		
Length (lf):	1,960		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	5,662	cy	\$ 16.00	\$ 90,596
203	8" Lime-Treated Subgrade	11,107	sy	\$ 20.00	\$ 222,133
303	8" Concrete Pavement	10,453	sy	\$ 100.00	\$ 1,045,333
403	6" Concrete Sidewalk	23,520	sf	\$ 10.00	\$ 235,200
503	Curb & Gutter	3,920	lf	\$ 40.00	\$ 156,800
603	Topsoil	4,356	sy	\$ 10.00	\$ 43,556
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,793,618</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 89,681
√ Pavement Markings/Markers		3%	\$ 53,809
√ Roadway Drainage	Standard Internal System	30%	\$ 538,085
√ Special Drainage Structures	Bridge Crossing	-	\$ 1,000,000
√ Water	Minor Adjustments	5%	\$ 89,681
√ Sewer	Minor Adjustments	5%	\$ 89,681
√ Landscaping and Irrigation		6%	\$ 107,617
√ Illumination	Standard Illumination System	6%	\$ 107,617
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 2,076,171</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 3,869,788</b>
		<b>Construction Contingency:</b> 20%	\$ 773,958
		<b>Mobilization</b> 5%	\$ 193,489
		<b>Prep ROW</b> 5%	\$ 193,489
<b>Construction Cost TOTAL:</b>			<b>\$ 5,031,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,031,000
Engineering/Survey/Testing:		16%	\$ 804,960
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 503,100
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 6,339,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 41
Name:	W FOSTER CROSSING RD (2)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	
Limits:	1,780' W OF S FERGUSON PKWY to S FERGUSON PKWY		
Impact Fee Class:	Major Collector		
Length (lf):	1,780		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	5,142	cy	\$ 16.00	\$ 82,276
203	8" Lime-Treated Subgrade	10,087	sy	\$ 20.00	\$ 201,733
303	8" Concrete Pavement	9,493	sy	\$ 100.00	\$ 949,333
403	6' Concrete Sidewalk	21,360	sf	\$ 10.00	\$ 213,600
503	Curb & Gutter	3,560	lf	\$ 40.00	\$ 142,400
603	Topsoil	3,956	sy	\$ 10.00	\$ 39,556
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,628,898</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 81,445
✓ Pavement Markings/Markers		3%	\$ 48,867
✓ Roadway Drainage	Standard Internal System	30%	\$ 488,669
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 81,445
✓ Sewer	Minor Adjustments	5%	\$ 81,445
✓ Landscaping and Irrigation		6%	\$ 97,734
✓ Illumination	Standard Illumination System	6%	\$ 97,734
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 977,339</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 2,606,236</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 521,247
<b>Mobilization</b>			<b>5%</b> \$ 130,312
<b>Prep ROW</b>			<b>5%</b> \$ 130,312
<b>Construction Cost TOTAL:</b>			<b>\$ 3,389,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,389,000
Engineering/Survey/Testing:		16%	\$ 542,240
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 338,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,270,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W FOSTER CROSSING RD (3)	This project consists of the construction of the additional two lanes of the four-lane undivided collector.	42
Limits:	1,095' E OF S FERGUSON PKWY to ASPEN DR		
Impact Fee Class:	Major Collector (1/2)		
Length (lf):	2,015		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
113	Unclassified Roadway Excavation	2,911	cy	\$ 16.00	\$ 46,569
213	8" Lime-Treated Subgrade	5,709	sy	\$ 20.00	\$ 114,183
313	8" Concrete Pavement	5,373	sy	\$ 100.00	\$ 537,333
413	6' Concrete Sidewalk	24,180	sf	\$ 10.00	\$ 241,800
513	Curb & Gutter	2,015	lf	\$ 40.00	\$ 80,600
613	Topsoil	2,239	sy	\$ 10.00	\$ 22,389
713	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,042,874</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	52,144
√ Pavement Markings/Markers		3%	\$	31,286
Roadway Drainage	None Anticipated	0%	\$	-
Special Drainage Structures	None Anticipated	-	\$	-
Water	None Anticipated	0%	\$	-
Sewer	None Anticipated	0%	\$	-
√ Landscaping and Irrigation		6%	\$	62,572
Illumination	None Anticipated	0%	\$	-
Other:		\$0	\$	-
		<b>Allowance Subtotal:</b>	<b>\$</b>	<b>146,002</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$</b>	<b>1,188,877</b>
		<b>Construction Contingency:</b>	<b>20%</b>	<b>\$ 237,775</b>
		<b>Mobilization</b>	<b>5%</b>	<b>\$ 59,444</b>
		<b>Prep ROW</b>	<b>5%</b>	<b>\$ 59,444</b>
		<b>Construction Cost TOTAL:</b>	<b>\$</b>	<b>1,546,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,546,000
Engineering/Survey/Testing:		16%	\$ 247,360
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,793,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	W FOSTER CROSSING RD (4)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	<b>43</b>
Limits:	ASPEN DR to HIGHLAND RD		
Impact Fee Class:	Major Collector		
Length (lf):	1,010		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	2,918	cy	\$ 16.00	\$ 46,684
203	8" Lime-Treated Subgrade	5,723	sy	\$ 20.00	\$ 114,467
303	8" Concrete Pavement	5,387	sy	\$ 100.00	\$ 538,667
403	6" Concrete Sidewalk	12,120	sf	\$ 10.00	\$ 121,200
503	Curb & Gutter	2,020	lf	\$ 40.00	\$ 80,800
603	Topsoil	2,244	sy	\$ 10.00	\$ 22,444
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 924,262</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 46,213
√ Pavement Markings/Markers		3%	\$ 27,728
√ Roadway Drainage	Standard Internal System	30%	\$ 277,279
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 46,213
√ Sewer	Minor Adjustments	5%	\$ 46,213
√ Landscaping and Irrigation		6%	\$ 55,456
√ Illumination	Standard Illumination System	6%	\$ 55,456
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 554,557</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,478,820</b>
		<b>Construction Contingency:</b>	<b>20% \$ 295,764</b>
		<b>Mobilization</b>	<b>5% \$ 73,941</b>
		<b>Prep ROW</b>	<b>5% \$ 73,941</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,923,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,923,000
Engineering/Survey/Testing:		16%	\$ 307,680
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 192,300
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 2,423,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: W FOSTER CROSSING RD (5)  
 Limits: 295' W OF S POWELL PKWY to S POWELL PKWY  
 Impact Fee Class: Major Collector  
 Length (lf): 295  
 Service Area(s): Service Area 1

Description: Project No. **44**

**This project consists of widening the existing facility to a four-lane undivided collector.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	852	cy	\$ 16.00	\$ 13,636
203	8" Lime-Treated Subgrade	1,672	sy	\$ 20.00	\$ 33,433
303	8" Concrete Pavement	1,573	sy	\$ 100.00	\$ 157,333
403	6" Concrete Sidewalk	3,540	sf	\$ 10.00	\$ 35,400
503	Curb & Gutter	590	lf	\$ 40.00	\$ 23,600
603	Topsoil	656	sy	\$ 10.00	\$ 6,556
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 269,958</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 13,498
√ Pavement Markings/Markers		3%	\$ 8,099
√ Roadway Drainage	Standard Internal System	30%	\$ 80,987
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 13,498
√ Sewer	Minor Adjustments	5%	\$ 13,498
√ Landscaping and Irrigation		6%	\$ 16,197
√ Illumination	Standard Illumination System	6%	\$ 16,197
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 161,975</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 431,932</b>
<b>Construction Contingency:</b> 20%	\$ 86,386
<b>Mobilization:</b> 5%	\$ 21,597
<b>Prep ROW:</b> 5%	\$ 21,597
<b>Construction Cost TOTAL:</b>	<b>\$ 562,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 562,000
Engineering/Survey/Testing:		16%	\$ 89,920
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 56,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 708,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: CR 368 (1)  
 Limits: CR 371 to 155' S OF CR 371  
 Impact Fee Class: Minor Arterial  
 Length (lf): 155  
 Service Area(s): Service Area 1

Description: Project No. **45**

**This project consists of the construction of a new four-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	482	cy	\$ 16.00	\$ 7,716
202	8" Lime-Treated Subgrade	930	sy	\$ 20.00	\$ 18,600
302	8" Concrete Pavement	827	sy	\$ 100.00	\$ 82,667
402	6' Concrete Sidewalk	1,860	sf	\$ 10.00	\$ 18,600
502	Curb & Gutter	620	lf	\$ 40.00	\$ 24,800
602	Topsoil	517	sy	\$ 10.00	\$ 5,167
702	Turn Lanes	52	sy	\$ 120.00	\$ 6,270
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 163,819</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 4,915
✓ Roadway Drainage	Standard Internal System	30%	\$ 49,146
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 8,191
✓ Sewer	Minor Adjustments	5%	\$ 8,191
✓ Landscaping and Irrigation		6%	\$ 9,829
✓ Illumination	Standard Illumination System	6%	\$ 9,829
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 90,101</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 253,920</b>
<b>Construction Contingency:</b> 20%	\$ 50,784
<b>Mobilization:</b> 5%	\$ 12,696
<b>Prep ROW:</b> 1%	\$ 2,539
<b>Construction Cost TOTAL:</b>	<b>\$ 320,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 320,000
Engineering/Survey/Testing:		16%	\$ 51,200
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 64,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 435,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 46
Name:	CR 368 (2)	<b>This project consists of the construction of a new four-lane divided arterial.</b>	
Limits:	2,865' N OF FAIRWAY LANE to FAIRWAY LANE		
Impact Fee Class:	Minor Arterial		
Length (lf):	2,865		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	8,913	cy	\$ 16.00	\$ 142,613
202	8" Lime-Treated Subgrade	17,190	sy	\$ 20.00	\$ 343,800
302	8" Concrete Pavement	15,280	sy	\$ 100.00	\$ 1,528,000
402	6' Concrete Sidewalk	34,380	sf	\$ 10.00	\$ 343,800
502	Curb & Gutter	11,460	lf	\$ 40.00	\$ 458,400
602	Topsoil	9,550	sy	\$ 10.00	\$ 95,500
702	Turn Lanes	966	sy	\$ 120.00	\$ 115,902
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,028,016</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 90,840
√ Roadway Drainage	Standard Internal System	30%	\$ 908,405
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 151,401
√ Sewer	Minor Adjustments	5%	\$ 151,401
√ Landscaping and Irrigation		6%	\$ 181,681
√ Illumination	Standard Illumination System	6%	\$ 181,681
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,665,409</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,693,424</b>
<b>Construction Contingency:</b>			<b>20% \$ 938,685</b>
<b>Mobilization</b>			<b>5% \$ 234,671</b>
<b>Prep ROW</b>			<b>1% \$ 46,934</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 5,914,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,914,000
Engineering/Survey/Testing:		16%	\$ 946,240
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,182,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 8,043,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 368 (3)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	<b>47</b>
Limits:	FAIRWAY LANE to 625' S OF FAIRWAY LANE		
Impact Fee Class:	Minor Arterial		
Length (lf):	625		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	1,944	cy	\$ 16.00	\$ 31,111
202	8" Lime-Treated Subgrade	3,750	sy	\$ 20.00	\$ 75,000
302	8" Concrete Pavement	3,333	sy	\$ 100.00	\$ 333,333
402	6' Concrete Sidewalk	7,500	sf	\$ 10.00	\$ 75,000
502	Curb & Gutter	2,500	lf	\$ 40.00	\$ 100,000
602	Topsoil	2,083	sy	\$ 10.00	\$ 20,833
702	Turn Lanes	211	sy	\$ 120.00	\$ 25,284
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 660,562</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 33,028
√ Pavement Markings/Markers		3%	\$ 19,817
√ Roadway Drainage	Standard Internal System	30%	\$ 198,169
√ Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 33,028
√ Sewer	Minor Adjustments	5%	\$ 33,028
√ Landscaping and Irrigation		6%	\$ 39,634
√ Illumination	Standard Illumination System	6%	\$ 39,634
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 396,337</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,056,899</b>
		<b>Construction Contingency:</b> 20%	\$ 211,380
		<b>Mobilization</b> 5%	\$ 52,845
		<b>Prep ROW</b> 5%	\$ 52,845
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,374,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,374,000
Engineering/Survey/Testing:		16%	\$ 219,840
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 137,400
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,731,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 48
Name:	CR 368 (4)	This project consists of widening the existing facility to a four-lane divided arterial.	
Limits:	625' S OF FAIRWAY LANE to 1,150' N OF CR 370		
Impact Fee Class:	Minor Arterial		
Length (lf):	830		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	2,582	cy	\$ 16.00	\$ 41,316
202	8" Lime-Treated Subgrade	4,980	sy	\$ 20.00	\$ 99,600
302	8" Concrete Pavement	4,427	sy	\$ 100.00	\$ 442,667
402	6' Concrete Sidewalk	9,960	sf	\$ 10.00	\$ 99,600
502	Curb & Gutter	3,320	lf	\$ 40.00	\$ 132,800
602	Topsoil	2,767	sy	\$ 10.00	\$ 27,667
702	Turn Lanes	280	sy	\$ 120.00	\$ 33,577
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 877,226</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 43,861
√ Pavement Markings/Markers		3%	\$ 26,317
√ Roadway Drainage	Standard Internal System	30%	\$ 263,168
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 43,861
√ Sewer	Minor Adjustments	5%	\$ 43,861
√ Landscaping and Irrigation		6%	\$ 52,634
√ Illumination	Standard Illumination System	6%	\$ 52,634
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 526,336</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,403,562</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 280,712
		<b>Mobilization</b>	<b>5%</b> \$ 70,178
		<b>Prep ROW</b>	<b>5%</b> \$ 70,178
<b>Construction Cost TOTAL:</b>			<b>\$ 1,825,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,825,000
Engineering/Survey/Testing:		16%	\$ 292,000
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 182,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,300,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 368 (5)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	<b>49</b>
Limits:	1,150' N OF CR 370 to 740' S OF CR 370		
Impact Fee Class:	Minor Arterial		
Length (lf):	1,890		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	5,880	cy	\$ 16.00	\$ 94,080
202	8" Lime-Treated Subgrade	11,340	sy	\$ 20.00	\$ 226,800
302	8" Concrete Pavement	10,080	sy	\$ 100.00	\$ 1,008,000
402	6' Concrete Sidewalk	22,680	sf	\$ 10.00	\$ 226,800
502	Curb & Gutter	7,560	lf	\$ 40.00	\$ 302,400
602	Topsoil	6,300	sy	\$ 10.00	\$ 63,000
702	Turn Lanes	637	sy	\$ 120.00	\$ 76,459
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,997,539</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 99,877
√ Pavement Markings/Markers		3%	\$ 59,926
√ Roadway Drainage	Standard Internal System	30%	\$ 599,262
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 99,877
√ Sewer	Minor Adjustments	5%	\$ 99,877
√ Landscaping and Irrigation		6%	\$ 119,852
√ Illumination	Standard Illumination System	6%	\$ 119,852
Other:		\$0	-
<b>Allowance Subtotal:</b>			<b>\$ 1,448,523</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 3,446,063</b>
		<b>Construction Contingency:</b>	<b>20% \$ 689,213</b>
		<b>Mobilization</b>	<b>5% \$ 172,303</b>
		<b>Prep ROW</b>	<b>5% \$ 172,303</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 4,480,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,480,000
Engineering/Survey/Testing:		16%	\$ 716,800
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 448,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,645,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>50</b>
Name:	CR 368 (6)	This project consists of widening the existing facility to a four-lane divided arterial.	
Limits:	740' S OF CR 370 to 1,855' S OF CR 370		
Impact Fee Class:	Minor Arterial		
Length (lf):	1,115		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	3,469	cy	\$ 16.00	\$ 55,502
202	8" Lime-Treated Subgrade	6,690	sy	\$ 20.00	\$ 133,800
302	8" Concrete Pavement	5,947	sy	\$ 100.00	\$ 594,667
402	6' Concrete Sidewalk	13,380	sf	\$ 10.00	\$ 133,800
502	Curb & Gutter	4,460	lf	\$ 40.00	\$ 178,400
602	Topsoil	3,717	sy	\$ 10.00	\$ 37,167
702	Turn Lanes	376	sy	\$ 120.00	\$ 45,107
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,178,442</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 58,922
√ Pavement Markings/Markers		3%	\$ 35,353
√ Roadway Drainage	Standard Internal System	30%	\$ 353,533
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 58,922
√ Sewer	Minor Adjustments	5%	\$ 58,922
√ Landscaping and Irrigation		6%	\$ 70,707
√ Illumination	Standard Illumination System	6%	\$ 70,707
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 707,065</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,885,508</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 377,102
		<b>Mobilization</b>	<b>5%</b> \$ 94,275
		<b>Prep ROW</b>	<b>5%</b> \$ 94,275
<b>Construction Cost TOTAL:</b>			<b>\$ 2,452,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,452,000
Engineering/Survey/Testing:		16%	\$ 392,320
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 245,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,090,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>51</b>
Name:	CR 368 (7)	<b>This project consists of the construction of a new four-lane divided arterial.</b>	
Limits:	1,855' S OF CR 370 to 4,020' N OF W WHITE ST		
Impact Fee Class:	Minor Arterial		
Length (lf):	1,060		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	3,298	cy	\$ 16.00	\$ 52,764
202	8" Lime-Treated Subgrade	6,360	sy	\$ 20.00	\$ 127,200
302	8" Concrete Pavement	5,653	sy	\$ 100.00	\$ 565,333
402	6' Concrete Sidewalk	12,720	sf	\$ 10.00	\$ 127,200
502	Curb & Gutter	4,240	lf	\$ 40.00	\$ 169,600
602	Topsoil	3,533	sy	\$ 10.00	\$ 35,333
702	Turn Lanes	357	sy	\$ 120.00	\$ 42,882
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,120,313</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 33,609
√ Roadway Drainage	Standard Internal System	30%	\$ 336,094
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 56,016
√ Sewer	Minor Adjustments	5%	\$ 56,016
√ Landscaping and Irrigation		6%	\$ 67,219
√ Illumination	Standard Illumination System	6%	\$ 67,219
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 616,172</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,736,485</b>
		<b>Construction Contingency:</b> 20%	\$ 347,297
		<b>Mobilization:</b> 5%	\$ 86,824
		<b>Prep ROW:</b> 1%	\$ 17,365
		<b>Construction Cost TOTAL:</b>	<b>\$ 2,188,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,188,000
Engineering/Survey/Testing:		16%	\$ 350,080
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 437,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 2,976,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: CR 368 (8)  
 Limits: 4,020' N OF W WHITE ST to 880' N OF W WHITE ST  
 Impact Fee Class: Minor Arterial (1/2)  
 Length (lf): 3,140  
 Service Area(s): Service Area 1

Description: Project No. **52**  
**This project consists of the construction of the additional two lanes of the ultimate four-lane divided arterial.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Roadway Excavation	4,884	cy	\$ 16.00	\$ 78,151
209	8" Lime-Treated Subgrade	9,420	sy	\$ 20.00	\$ 188,400
309	8" Concrete Pavement	8,373	sy	\$ 100.00	\$ 837,333
409	6' Concrete Sidewalk	18,840	sf	\$ 10.00	\$ 188,400
509	Curb & Gutter	6,280	lf	\$ 40.00	\$ 251,200
609	Topsoil	7,676	sy	\$ 10.00	\$ 76,756
709	Turn Lanes	959	sy	\$ 120.00	\$ 115,133
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,735,373</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 86,769
√ Pavement Markings/Markers		3%	\$ 52,061
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 104,122
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 242,952</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,978,326</b>
<b>Construction Contingency:</b>	<b>20% \$ 395,665</b>
<b>Mobilization</b>	<b>5% \$ 98,916</b>
<b>Prep ROW</b>	<b>5% \$ 98,916</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 2,572,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,572,000
Engineering/Survey/Testing:		16%	\$ 411,520
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,984,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 53</b>
Name:	CR 286 (1)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	
Limits:	W WHITE ST to 2,800' S OF W WHITE ST		
Impact Fee Class:	Minor Arterial		
Length (lf):	2,800		
Service Area(s):	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	8,711	cy	\$ 16.00	\$ 139,378
202	8" Lime-Treated Subgrade	16,800	sy	\$ 20.00	\$ 336,000
302	8" Concrete Pavement	14,933	sy	\$ 100.00	\$ 1,493,333
402	6" Concrete Sidewalk	33,600	sf	\$ 10.00	\$ 336,000
502	Curb & Gutter	11,200	lf	\$ 40.00	\$ 448,000
602	Topsoil	9,333	sy	\$ 10.00	\$ 93,333
702	Turn Lanes	944	sy	\$ 120.00	\$ 113,273
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,959,317</b>

<b>Major Construction Component Allowances**:</b>				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	147,966
√ Pavement Markings/Markers		3%	\$	88,780
√ Roadway Drainage	Standard Internal System	30%	\$	887,795
Special Drainage Structures	None Anticipated	-	\$	-
√ Water	Minor Adjustments	5%	\$	147,966
√ Sewer	Minor Adjustments	5%	\$	147,966
√ Landscaping and Irrigation		6%	\$	177,559
√ Illumination	Standard Illumination System	6%	\$	177,559
Other:		\$0	\$	-
			<b>Allowance Subtotal:</b>	<b>\$ 1,775,590</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>				
			<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,734,907</b>
			<b>Construction Contingency:</b>	<b>20% \$ 946,981</b>
			<b>Mobilization</b>	<b>5% \$ 236,745</b>
			<b>Prep ROW</b>	<b>5% \$ 236,745</b>
			<b>Construction Cost TOTAL:</b>	<b>\$ 6,156,000</b>

<b>Impact Fee Project Cost Summary</b>				
Item Description	Notes:	Allowance	Item Cost	
Construction:		-	\$	6,156,000
Engineering/Survey/Testing:		16%	\$	984,960
ROW/Easement Acquisition:	Existing Alignment	10%	\$	615,600
			<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 7,757,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	54
Name:	CR 286 (2)	<b>This project consists of the construction of a new four-lane divided arterial.</b>		
Limits:	2,800' S OF W WHITE ST to 3,800' S OF W WHITE ST			
Impact Fee Class:	Minor Arterial			
Length (lf):	1,000			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	3,111	cy	\$ 16.00	\$ 49,778
202	8" Lime-Treated Subgrade	6,000	sy	\$ 20.00	\$ 120,000
302	8" Concrete Pavement	5,333	sy	\$ 100.00	\$ 533,333
402	6' Concrete Sidewalk	12,000	sf	\$ 10.00	\$ 120,000
502	Curb & Gutter	4,000	lf	\$ 40.00	\$ 160,000
602	Topsoil	3,333	sy	\$ 10.00	\$ 33,333
702	Turn Lanes	337	sy	\$ 120.00	\$ 40,455
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,056,899</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 31,707
√ Roadway Drainage	Standard Internal System	30%	\$ 317,070
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 52,845
√ Sewer	Minor Adjustments	5%	\$ 52,845
√ Landscaping and Irrigation		6%	\$ 63,414
√ Illumination	Standard Illumination System	6%	\$ 63,414
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 581,294</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,638,193</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 327,639</b>
		<b>Mobilization</b> 5%	<b>\$ 81,910</b>
		<b>Prep ROW</b> 1%	<b>\$ 16,382</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 2,065,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,065,000
Engineering/Survey/Testing:		16%	\$ 330,400
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 413,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,808,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	55
Name:	CR 286 (3)	<b>This project consists of the construction of a new four-lane divided arterial.</b>		
Limits:	890' N OF CR 284 to 560' S OF CR 284			
Impact Fee Class:	Minor Arterial			
Length (lf):	1,455			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	4,527	cy	\$ 16.00	\$ 72,427
202	8" Lime-Treated Subgrade	8,730	sy	\$ 20.00	\$ 174,600
302	8" Concrete Pavement	7,760	sy	\$ 100.00	\$ 776,000
402	6' Concrete Sidewalk	17,460	sf	\$ 10.00	\$ 174,600
502	Curb & Gutter	5,820	lf	\$ 40.00	\$ 232,800
602	Topsoil	4,850	sy	\$ 10.00	\$ 48,500
702	Turn Lanes	491	sy	\$ 120.00	\$ 58,861
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,537,788</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 46,134
√ Roadway Drainage	Standard Internal System	30%	\$ 461,336
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 76,889
√ Sewer	Minor Adjustments	5%	\$ 76,889
√ Landscaping and Irrigation		6%	\$ 92,267
√ Illumination	Standard Illumination System	6%	\$ 92,267
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 845,783</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,383,571</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 476,714</b>
		<b>Mobilization</b> 5%	<b>\$ 119,179</b>
		<b>Prep ROW</b> 1%	<b>\$ 23,836</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 3,004,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,004,000
Engineering/Survey/Testing:		16%	\$ 480,640
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 600,800
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 4,085,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	56
Name:	CR 374 (1)	<b>This project consists of the construction of a new four-lane undivided collector.</b>		
Limits:	900' N OF CR 371 to W ROSAMOND PKWY			
Impact Fee Class:	Major Collector			
Length (lf):	8,050			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	23,256	cy	\$ 16.00	\$ 372,089
203	8" Lime-Treated Subgrade	45,617	sy	\$ 20.00	\$ 912,333
303	8" Concrete Pavement	42,933	sy	\$ 100.00	\$ 4,293,333
403	6' Concrete Sidewalk	96,600	sf	\$ 10.00	\$ 966,000
503	Curb & Gutter	16,100	lf	\$ 40.00	\$ 644,000
603	Topsoil	17,889	sy	\$ 10.00	\$ 178,889
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 7,366,644</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 220,999
✓ Roadway Drainage	Standard Internal System	30%	\$ 2,209,993
✓ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
✓ Water	Minor Adjustments	5%	\$ 368,332
✓ Sewer	Minor Adjustments	5%	\$ 368,332
✓ Landscaping and Irrigation		6%	\$ 441,999
✓ Illumination	Standard Illumination System	6%	\$ 441,999
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 4,301,654</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 11,668,299</b>
		<b>Construction Contingency:</b>	<b>20% \$ 2,333,660</b>
		<b>Mobilization</b>	<b>5% \$ 583,415</b>
		<b>Prep ROW</b>	<b>1% \$ 116,683</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 14,703,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 14,703,000
Engineering/Survey/Testing:		16%	\$ 2,352,480
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 2,940,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 19,996,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 374 (2)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	<b>57</b>
Limits:	W ROSAMOND PKWY to 240' S OF W ROSAMOND PKWY		
Impact Fee Class:	Major Collector		
Length (lf):	240		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	693	cy	\$ 16.00	\$ 11,093
203	8" Lime-Treated Subgrade	1,360	sy	\$ 20.00	\$ 27,200
303	8" Concrete Pavement	1,280	sy	\$ 100.00	\$ 128,000
403	6' Concrete Sidewalk	2,880	sf	\$ 10.00	\$ 28,800
503	Curb & Gutter	480	lf	\$ 40.00	\$ 19,200
603	Topsoil	533	sy	\$ 10.00	\$ 5,333
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 219,627</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
✓ Traffic Control	Construction Phase Traffic Control	5%	\$	10,981
✓ Pavement Markings/Markers		3%	\$	6,589
✓ Roadway Drainage	Standard Internal System	30%	\$	65,888
Special Drainage Structures	None Anticipated	-	\$	-
✓ Water	Minor Adjustments	5%	\$	10,981
✓ Sewer	Minor Adjustments	5%	\$	10,981
✓ Landscaping and Irrigation		6%	\$	13,178
✓ Illumination	Standard Illumination System	6%	\$	13,178
Other:		\$0	\$	-
			<b>Allowance Subtotal:</b>	<b>\$ 131,776</b>
			<b>Paving and Allowance Subtotal:</b>	<b>\$ 351,403</b>
			<b>Construction Contingency:</b>	<b>20% \$ 70,281</b>
			<b>Mobilization</b>	<b>5% \$ 17,570</b>
			<b>Prep ROW</b>	<b>5% \$ 17,570</b>
			<b>Construction Cost TOTAL:</b>	<b>\$ 457,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 457,000
Engineering/Survey/Testing:		16%	\$ 73,120
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 45,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 576,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

**Project Information:**

Name: CR 374 (3)  
 Limits: 240' S OF W ROSAMOND PKWY to 525' N OF ROLLINS RD  
 Impact Fee Class: Major Collector  
 Length (lf): 430  
 Service Area(s): Service Area 1

Description: Project No. **58**

**This project consists of widening the existing facility to a four-lane undivided collector.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	1,242	cy	\$ 16.00	\$ 19,876
203	8" Lime-Treated Subgrade	2,437	sy	\$ 20.00	\$ 48,733
303	8" Concrete Pavement	2,293	sy	\$ 100.00	\$ 229,333
403	6' Concrete Sidewalk	5,160	sf	\$ 10.00	\$ 51,600
503	Curb & Gutter	860	lf	\$ 40.00	\$ 34,400
603	Topsoil	956	sy	\$ 10.00	\$ 9,556
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 393,498</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 19,675
√ Pavement Markings/Markers		3%	\$ 11,805
√ Roadway Drainage	Standard Internal System	30%	\$ 118,049
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 19,675
√ Sewer	Minor Adjustments	5%	\$ 19,675
√ Landscaping and Irrigation		6%	\$ 23,610
√ Illumination	Standard Illumination System	6%	\$ 23,610
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 236,099</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 629,596</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 125,919
<b>Mobilization</b>			<b>5%</b> \$ 31,480
<b>Prep ROW</b>			<b>5%</b> \$ 31,480
<b>Construction Cost TOTAL:</b>			<b>\$ 819,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 819,000
Engineering/Survey/Testing:		16%	\$ 131,040
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 81,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,032,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 374 (4)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	<b>59</b>
Limits:	525' N OF ROLLINS RD to ROLLINS RD		
Impact Fee Class:	Major Collector		
Length (lf):	525		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	1,517	cy	\$ 16.00	\$ 24,267
203	8" Lime-Treated Subgrade	2,975	sy	\$ 20.00	\$ 59,500
303	8" Concrete Pavement	2,800	sy	\$ 100.00	\$ 280,000
403	6' Concrete Sidewalk	6,300	sf	\$ 10.00	\$ 63,000
503	Curb & Gutter	1,050	lf	\$ 40.00	\$ 42,000
603	Topsoil	1,167	sy	\$ 10.00	\$ 11,667
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 480,433</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	Construction Phase Traffic Control	5%	\$ 24,022
✓ Pavement Markings/Markers		3%	\$ 14,413
✓ Roadway Drainage	Standard Internal System	30%	\$ 144,130
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 24,022
✓ Sewer	Minor Adjustments	5%	\$ 24,022
✓ Landscaping and Irrigation		6%	\$ 28,826
✓ Illumination	Standard Illumination System	6%	\$ 28,826
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 288,260</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 768,693</b>
		<b>Construction Contingency:</b>	<b>20%</b> \$ 153,739
		<b>Mobilization</b>	<b>5%</b> \$ 38,435
		<b>Prep ROW</b>	<b>5%</b> \$ 38,435
<b>Construction Cost TOTAL:</b>			<b>\$ 1,000,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,000,000
Engineering/Survey/Testing:		16%	\$ 160,000
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 100,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,260,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 374 (5)	This project consists of the construction of a new four-lane undivided collector.	60
Limits:	ROLLINS RD to HACKBERRY DR		
Impact Fee Class:	Major Collector		
Length (lf):	2,015		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	5,821	cy	\$ 16.00	\$ 93,138
203	8" Lime-Treated Subgrade	11,418	sy	\$ 20.00	\$ 228,367
303	8" Concrete Pavement	10,747	sy	\$ 100.00	\$ 1,074,667
403	6' Concrete Sidewalk	24,180	sf	\$ 10.00	\$ 241,800
503	Curb & Gutter	4,030	lf	\$ 40.00	\$ 161,200
603	Topsoil	4,478	sy	\$ 10.00	\$ 44,778
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,843,949</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 55,318
√ Roadway Drainage	Standard Internal System	30%	\$ 553,185
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 92,197
√ Sewer	Minor Adjustments	5%	\$ 92,197
√ Landscaping and Irrigation		6%	\$ 110,637
√ Illumination	Standard Illumination System	6%	\$ 110,637
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,014,172</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 2,858,121</b>
		<b>Construction Contingency:</b> 20%	\$ 571,624
		<b>Mobilization</b> 5%	\$ 142,906
		<b>Prep ROW</b> 1%	\$ 28,581
<b>Construction Cost TOTAL:</b>			<b>\$ 3,602,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,602,000
Engineering/Survey/Testing:		16%	\$ 576,320
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 720,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,899,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	61
Name:	N FERGUSON PKWY (1)	<b>This project consists of the construction of a new six-lane divided arterial.</b>		
Limits:	CR 371 to ROLLINS RD			
Impact Fee Class:	Major Arterial			
Length (lf):	5,865			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	26,067	cy	\$ 16.00	\$ 417,067
201	8" Lime-Treated Subgrade	50,830	sy	\$ 20.00	\$ 1,016,600
301	8" Concrete Pavement	46,920	sy	\$ 100.00	\$ 4,692,000
401	6' Concrete Sidewalk	70,380	sf	\$ 10.00	\$ 703,800
501	Curb & Gutter	23,460	lf	\$ 40.00	\$ 938,400
601	Topsoil	23,460	sy	\$ 10.00	\$ 234,600
701	Turn Lanes	2,022	sy	\$ 120.00	\$ 242,598
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 8,245,064</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 247,352
√ Roadway Drainage	Standard Internal System	30%	\$ 2,473,519
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 412,253
√ Sewer	Minor Adjustments	5%	\$ 412,253
√ Landscaping and Irrigation		6%	\$ 494,704
√ Illumination	Standard Illumination System	6%	\$ 494,704
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 4,784,785</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$</b>	<b>13,029,850</b>
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 2,605,970</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 651,492</b>
<b>Prep ROW</b>		<b>1%</b>	<b>\$ 130,298</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 16,418,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 16,418,000
Engineering/Survey/Testing:		16%	\$ 2,626,880
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 3,283,600
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 22,328,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>62</b>
Name:	N FERGUSON PKWY (2)	<b>This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.</b>	
Limits:	ROLLINS RD to HACKBERRY DR		
Impact Fee Class:	Major Arterial (2/3)		
Length (lf):	2,760		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	8,280	cy	\$ 16.00	\$ 132,480
208	8" Lime-Treated Subgrade	16,100	sy	\$ 20.00	\$ 322,000
308	8" Concrete Pavement	14,720	sy	\$ 100.00	\$ 1,472,000
408	6' Concrete Sidewalk	16,560	sf	\$ 10.00	\$ 165,600
508	Curb & Gutter	8,280	lf	\$ 40.00	\$ 331,200
608	Topsoil	7,973	sy	\$ 10.00	\$ 79,733
708	Turn Lanes	864	sy	\$ 120.00	\$ 103,709
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,606,722</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 130,336
√ Pavement Markings/Markers		3%	\$ 78,202
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 156,403
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 364,941</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 2,971,664</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 594,333
<b>Mobilization</b>			<b>5%</b> \$ 148,583
<b>Prep ROW</b>			<b>5%</b> \$ 148,583
<b>Construction Cost TOTAL:</b>			<b>\$ 3,864,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,864,000
Engineering/Survey/Testing:		16%	\$ 618,240
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,482,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/28/2022

Project Information:		Description:	Project No.	63
Name:	N FERGUSON PKWY (3)	<b>This project consists of the construction of the additional two lanes of the ultimate six-lane divided arterial.</b>		
Limits:	HACKBERRY DR to W WHITE ST			
Impact Fee Class:	Major Arterial (1/3)			
Length (lf):	2,650			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	4,122	cy	\$ 16.00	\$ 65,956
207	8" Lime-Treated Subgrade	7,950	sy	\$ 20.00	\$ 159,000
307	8" Concrete Pavement	7,067	sy	\$ 100.00	\$ 706,667
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	5,300	lf	\$ 40.00	\$ 212,000
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	586	sy	\$ 120.00	\$ 70,265
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,213,887</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 60,694
√ Pavement Markings/Markers		3%	\$ 36,417
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 72,833
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 169,944</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,383,832</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 276,766</b>
		<b>Mobilization:</b> 5%	<b>\$ 69,192</b>
		<b>Prep ROW:</b> 5%	<b>\$ 69,192</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,799,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,799,000
Engineering/Survey/Testing:		16%	\$ 287,840
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 2,087,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 64</b>
Name:	S FERGUSON PKWY (1)	<b>This project consists of the construction of the additional two lanes of the ultimate six-lane divided arterial.</b>	
Limits:	W WHITE ST to 2,440' S OF W WHITE ST		
Impact Fee Class:	Major Arterial (1/3)		
Length (lf):	2,440		
Service Area(s):	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	3,796	cy	\$ 16.00	\$ 60,729
207	8" Lime-Treated Subgrade	7,320	sy	\$ 20.00	\$ 146,400
307	8" Concrete Pavement	6,507	sy	\$ 100.00	\$ 650,667
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	4,880	lf	\$ 40.00	\$ 195,200
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	539	sy	\$ 120.00	\$ 64,697
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,117,693</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 55,885
√ Pavement Markings/Markers		3%	\$ 33,531
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 67,062
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 156,477</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,274,169</b>
		<b>Construction Contingency:</b>	<b>20% \$ 254,834</b>
		<b>Mobilization</b>	<b>5% \$ 63,708</b>
		<b>Prep ROW</b>	<b>5% \$ 63,708</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,657,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,657,000
Engineering/Survey/Testing:		16%	\$ 265,120
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,922,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	65
Name:	S FERGUSON PKWY (2)	<b>This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.</b>		
Limits:	2,440' S OF W WHITE ST to 190' N OF TAYLOR BLVD			
Impact Fee Class:	Major Arterial (2/3)			
Length (lf):	1,360			
Service Area(s):	Service Area 1			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	4,080	cy	\$ 16.00	\$ 65,280
208	8" Lime-Treated Subgrade	7,933	sy	\$ 20.00	\$ 158,667
308	8" Concrete Pavement	7,253	sy	\$ 100.00	\$ 725,333
408	6' Concrete Sidewalk	8,160	sf	\$ 10.00	\$ 81,600
508	Curb & Gutter	4,080	lf	\$ 40.00	\$ 163,200
608	Topsoil	3,929	sy	\$ 10.00	\$ 39,289
708	Turn Lanes	426	sy	\$ 120.00	\$ 51,103
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,284,472</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 64,224
√ Pavement Markings/Markers		3%	\$ 38,534
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 77,068
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 179,826</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,464,298</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 292,860</b>
		<b>Mobilization:</b> 5%	<b>\$ 73,215</b>
		<b>Prep ROW:</b> 5%	<b>\$ 73,215</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,904,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,904,000
Engineering/Survey/Testing:		16%	\$ 304,640
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 2,209,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>66</b>
Name:	S FERGUSON PKWY (3)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
Limits:	W FINLEY BLVD to 1,245' S OF W FINLEY BLVD		
Impact Fee Class:	Major Arterial		
Length (lf):	1,245		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	5,533	cy	\$ 16.00	\$ 88,533
201	8" Lime-Treated Subgrade	10,790	sy	\$ 20.00	\$ 215,800
301	8" Concrete Pavement	9,960	sy	\$ 100.00	\$ 996,000
401	6' Concrete Sidewalk	14,940	sf	\$ 10.00	\$ 149,400
501	Curb & Gutter	4,980	lf	\$ 40.00	\$ 199,200
601	Topsoil	4,980	sy	\$ 10.00	\$ 49,800
701	Turn Lanes	429	sy	\$ 120.00	\$ 51,498
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,750,231</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 52,507
√ Roadway Drainage	Standard Internal System	30%	\$ 525,069
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 87,512
√ Sewer	Minor Adjustments	5%	\$ 87,512
√ Landscaping and Irrigation		6%	\$ 105,014
√ Illumination	Standard Illumination System	6%	\$ 105,014
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 962,627</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,712,858</b>
		<b>Construction Contingency:</b>	<b>20% \$ 542,572</b>
		<b>Mobilization</b>	<b>5% \$ 135,643</b>
		<b>Prep ROW</b>	<b>1% \$ 27,129</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 3,419,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,419,000
Engineering/Survey/Testing:		16%	\$ 547,040
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 683,800
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 4,650,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	S FERGUSON PKWY (4)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	<b>67</b>
<b>Limits:</b>	1,245' S OF FINLEY BLVD to 425' N OF W FOSTER CROSSING RD		
<b>Impact Fee Class:</b>	Major Arterial		
<b>Length (lf):</b>	1,025		
<b>Service Area(s):</b>	Service Area 1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	4,556	cy	\$ 16.00	\$ 72,889
201	8" Lime-Treated Subgrade	8,883	sy	\$ 20.00	\$ 177,667
301	8" Concrete Pavement	8,200	sy	\$ 100.00	\$ 820,000
401	6' Concrete Sidewalk	12,300	sf	\$ 10.00	\$ 123,000
501	Curb & Gutter	4,100	lf	\$ 40.00	\$ 164,000
601	Topsoil	4,100	sy	\$ 10.00	\$ 41,000
701	Turn Lanes	353	sy	\$ 120.00	\$ 42,398
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,440,953</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 43,229
✓ Roadway Drainage	Standard Internal System	30%	\$ 432,286
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 72,048
✓ Sewer	Minor Adjustments	5%	\$ 72,048
✓ Landscaping and Irrigation		6%	\$ 86,457
✓ Illumination	Standard Illumination System	6%	\$ 86,457
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 792,524</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,233,478</b>
		<b>Construction Contingency:</b> 20%	\$ 446,696
		<b>Mobilization:</b> 5%	\$ 111,674
		<b>Prep ROW:</b> 1%	\$ 22,335
		<b>Construction Cost TOTAL:</b>	<b>\$ 2,815,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,815,000
Engineering/Survey/Testing:		16%	\$ 450,400
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 563,000
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 3,828,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>68</b>
Name:	S FERGUSON PKWY (5)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
Limits:	425' N OF W FOSTER CROSSING RD to W FOSTER CROSSING RD		
Impact Fee Class:	Major Arterial		
Length (lf):	425		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	1,889	cy	\$ 16.00	\$ 30,222
201	8" Lime-Treated Subgrade	3,683	sy	\$ 20.00	\$ 73,667
301	8" Concrete Pavement	3,400	sy	\$ 100.00	\$ 340,000
401	6' Concrete Sidewalk	5,100	sf	\$ 10.00	\$ 51,000
501	Curb & Gutter	1,700	lf	\$ 40.00	\$ 68,000
601	Topsoil	1,700	sy	\$ 10.00	\$ 17,000
701	Turn Lanes	146	sy	\$ 120.00	\$ 17,580
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 597,468</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 17,924
√ Roadway Drainage	Standard Internal System	30%	\$ 179,241
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 29,873
√ Sewer	Minor Adjustments	5%	\$ 29,873
√ Landscaping and Irrigation		6%	\$ 35,848
√ Illumination	Standard Illumination System	6%	\$ 35,848
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 328,608</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 926,076</b>
		<b>Construction Contingency:</b>	<b>20% \$ 185,215</b>
		<b>Mobilization</b>	<b>5% \$ 46,304</b>
		<b>Prep ROW</b>	<b>1% \$ 9,261</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,167,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,167,000
Engineering/Survey/Testing:		16%	\$ 186,720
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 233,400
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,587,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/28/2022

**Project Information:**

Description: Project No. **69**

Name: W CROSSING BLVD (1)  
 Limits: 2,660' N OF CR 371 to 1,970' N OF W ROSAMOND PKWY  
 Impact Fee Class: Major Collector  
 Length (lf): 4,725  
 Service Area(s): Service Area 1

**This project consists of the construction of a new four-lane undivided collector.**

**Roadway Construction Cost Projection**

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	13,650	cy	\$ 16.00	\$ 218,400
203	8" Lime-Treated Subgrade	26,775	sy	\$ 20.00	\$ 535,500
303	8" Concrete Pavement	25,200	sy	\$ 100.00	\$ 2,520,000
403	6' Concrete Sidewalk	56,700	sf	\$ 10.00	\$ 567,000
503	Curb & Gutter	9,450	lf	\$ 40.00	\$ 378,000
603	Topsoil	10,500	sy	\$ 10.00	\$ 105,000
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 4,323,900</b>

**Major Construction Component Allowances\*\*:**

Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 129,717
✓ Roadway Drainage	Standard Internal System	30%	\$ 1,297,170
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 216,195
✓ Sewer	Minor Adjustments	5%	\$ 216,195
✓ Landscaping and Irrigation		6%	\$ 259,434
✓ Illumination	Standard Illumination System	6%	\$ 259,434
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 2,378,145</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 6,702,045</b>
<b>Construction Contingency:</b> 20%	\$ 1,340,409
<b>Mobilization:</b> 5%	\$ 335,102
<b>Prep ROW:</b> 1%	\$ 67,020
<b>Construction Cost TOTAL:</b>	<b>\$ 8,445,000</b>

**Impact Fee Project Cost Summary**

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,445,000
Engineering/Survey/Testing:		16%	\$ 1,351,200
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,689,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 11,485,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>70</b>
Name:	W CROSSING BLVD (2)	<b>This project consists of the construction of the additional two lanes of the four-lane collector. The costing assumes a four-lane divided ultimate section in continuity with the adjacent cross-sections.</b>	
Limits:	1,970' N OF W ROSAMOND PKWY to 1,530' N OF W ROSAMOND PKWY		
Impact Fee Class:	Major Collector (4D) (1/2)		
Length (lf):	440		
Service Area(s):	Service Area 1		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Roadway Excavation	684	cy	\$ 16.00	\$ 10,951
210	8" Lime-Treated Subgrade	1,320	sy	\$ 20.00	\$ 26,400
310	8" Concrete Pavement	1,173	sy	\$ 100.00	\$ 117,333
410	6' Concrete Sidewalk	2,640	sf	\$ 10.00	\$ 26,400
510	Curb & Gutter	880	lf	\$ 40.00	\$ 35,200
610	Topsoil	1,076	sy	\$ 10.00	\$ 10,756
710	Turn Lanes	134	sy	\$ 120.00	\$ 16,133
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 243,173</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 12,159
√ Pavement Markings/Markers		3%	\$ 7,295
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 14,590
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 34,044</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 277,218</b>
		<b>Construction Contingency:</b>	<b>20% \$ 55,444</b>
		<b>Mobilization</b>	<b>5% \$ 13,861</b>
		<b>Prep ROW</b>	<b>5% \$ 13,861</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 361,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 361,000
Engineering/Survey/Testing:		16%	\$ 57,760
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 419,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 1106 (1)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	<b>1</b>
Limits:	N POWELL PKWY to 1,080' E OF N POWELL PKWY		
Impact Fee Class:	Minor Arterial		
Length (lf):	1,080		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	3,360	cy	\$ 16.00	\$ 53,760
202	8" Lime-Treated Subgrade	6,480	sy	\$ 20.00	\$ 129,600
302	8" Concrete Pavement	5,760	sy	\$ 100.00	\$ 576,000
402	6' Concrete Sidewalk	12,960	sf	\$ 10.00	\$ 129,600
502	Curb & Gutter	4,320	lf	\$ 40.00	\$ 172,800
602	Topsoil	3,600	sy	\$ 10.00	\$ 36,000
702	Turn Lanes	364	sy	\$ 120.00	\$ 43,691
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,141,451</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 57,073
√ Pavement Markings/Markers		3%	\$ 34,244
√ Roadway Drainage	Standard Internal System	30%	\$ 342,435
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 57,073
√ Sewer	Minor Adjustments	5%	\$ 57,073
√ Landscaping and Irrigation		6%	\$ 68,487
√ Illumination	Standard Illumination System	6%	\$ 68,487
√ Other:	Railroad Crossing	\$500,000	\$ 500,000
<b>Allowance Subtotal:</b>			<b>\$ 1,184,871</b>

<b>Paving and Allowance Subtotal:</b>		<b>\$ 2,326,321</b>
<b>Construction Contingency:</b>	20%	\$ 465,264
<b>Mobilization</b>	5%	\$ 116,316
<b>Prep ROW</b>	5%	\$ 116,316
<b>Construction Cost TOTAL:</b>		<b>\$ 3,025,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,025,000
Engineering/Survey/Testing:		16%	\$ 484,000
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 302,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,812,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 1106 (2)	This project consists of the construction of the additional two lanes of the ultimate four-lane divided arterial.	2
Limits:	1,080' E OF N POWELL PKWY to 3,505' E OF N POWELL PKWY		
Impact Fee Class:	Minor Arterial (1/2)		
Length (lf):	2,425		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
109	Unclassified Roadway Excavation	3,772	cy	\$ 60,356
209	8" Lime-Treated Subgrade	7,275	sy	\$ 145,500
309	8" Concrete Pavement	6,467	sy	\$ 646,667
409	6' Concrete Sidewalk	14,550	sf	\$ 145,500
509	Curb & Gutter	4,850	lf	\$ 194,000
609	Topsoil	5,928	sy	\$ 59,278
709	Turn Lanes	741	sy	\$ 88,917
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 1,340,217</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 67,011
√ Pavement Markings/Markers		3%	\$ 40,207
Roadway Drainage	None Anticipated	0%	-
√ Special Drainage Structures	Major Stream Crossing	-	\$ 500,000
Water	None Anticipated	0%	-
Sewer	None Anticipated	0%	-
√ Landscaping and Irrigation		6%	\$ 80,413
Illumination	None Anticipated	0%	-
Other:		\$0	-
		<b>Allowance Subtotal:</b>	<b>\$ 687,630</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,027,847</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 405,569</b>
		<b>Mobilization:</b> 5%	<b>\$ 101,392</b>
		<b>Prep ROW:</b> 5%	<b>\$ 101,392</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 2,637,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,637,000
Engineering/Survey/Testing:		16%	\$ 421,920
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	-
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 3,059,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 376 (1)	<b>This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.</b>	<b>3</b>
Limits:	N POWELL PKWY to 1,675' E OF N POWELL PKWY		
Impact Fee Class:	Major Arterial (2/3)		
Length (lf):	1,675		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	5,025	cy	\$ 16.00	\$ 80,400
208	8" Lime-Treated Subgrade	9,771	sy	\$ 20.00	\$ 195,417
308	8" Concrete Pavement	8,933	sy	\$ 100.00	\$ 893,333
408	6' Concrete Sidewalk	10,050	sf	\$ 10.00	\$ 100,500
508	Curb & Gutter	5,025	lf	\$ 40.00	\$ 201,000
608	Topsoil	4,839	sy	\$ 10.00	\$ 48,389
708	Turn Lanes	524	sy	\$ 120.00	\$ 62,939
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,581,978</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 79,099
√ Pavement Markings/Markers		3%	\$ 47,459
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 94,919
Illumination	None Anticipated	0%	\$ -
√ Other:	Railroad Crossing	\$500,000	\$ 500,000
		<b>Allowance Subtotal:</b>	<b>\$ 721,477</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 2,303,455</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 460,691
<b>Mobilization</b>			<b>5%</b> \$ 115,173
<b>Prep ROW</b>			<b>5%</b> \$ 115,173
<b>Construction Cost TOTAL:</b>			<b>\$ 2,995,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,995,000
Engineering/Survey/Testing:		16%	\$ 479,200
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,474,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	CR 376 (2)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	<b>4</b>
<b>Limits:</b>	1,675' E OF N POWELL PKWY to CR 427		
<b>Impact Fee Class:</b>	Major Arterial		
<b>Length (lf):</b>	1,515		
<b>Service Area(s):</b>	Service Area 2		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	6,733	cy	\$ 16.00	\$ 107,733
201	8" Lime-Treated Subgrade	13,130	sy	\$ 20.00	\$ 262,600
301	8" Concrete Pavement	12,120	sy	\$ 100.00	\$ 1,212,000
401	6' Concrete Sidewalk	18,180	sf	\$ 10.00	\$ 181,800
501	Curb & Gutter	6,060	lf	\$ 40.00	\$ 242,400
601	Topsoil	6,060	sy	\$ 10.00	\$ 60,600
701	Turn Lanes	522	sy	\$ 120.00	\$ 62,666
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,129,799</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
✓ Traffic Control	None Anticipated	0%	\$ -
✓ Pavement Markings/Markers		3%	\$ 63,894
✓ Roadway Drainage	Standard Internal System	30%	\$ 638,940
Special Drainage Structures	None Anticipated	-	\$ -
✓ Water	Minor Adjustments	5%	\$ 106,490
✓ Sewer	Minor Adjustments	5%	\$ 106,490
✓ Landscaping and Irrigation		6%	\$ 127,788
✓ Illumination	Standard Illumination System	6%	\$ 127,788
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,171,390</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 3,301,189</b>
		<b>Construction Contingency:</b>	<b>20% \$ 660,238</b>
		<b>Mobilization</b>	<b>5% \$ 165,059</b>
		<b>Prep ROW</b>	<b>1% \$ 33,012</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 4,160,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 4,160,000
<b>Engineering/Survey/Testing:</b>		16%	\$ 665,600
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	20%	\$ 832,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,658,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 376 (3)	<b>This project consists of widening the existing facility to a six-lane divided arterial.</b>	<b>5</b>
Limits:	CR 427 to 575' E OF CR 427		
Impact Fee Class:	Major Arterial		
Length (lf):	575		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	2,556	cy	\$ 16.00	\$ 40,889
201	8" Lime-Treated Subgrade	4,983	sy	\$ 20.00	\$ 99,667
301	8" Concrete Pavement	4,600	sy	\$ 100.00	\$ 460,000
401	6' Concrete Sidewalk	6,900	sf	\$ 10.00	\$ 69,000
501	Curb & Gutter	2,300	lf	\$ 40.00	\$ 92,000
601	Topsoil	2,300	sy	\$ 10.00	\$ 23,000
701	Turn Lanes	198	sy	\$ 120.00	\$ 23,784
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 808,340</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 40,417
√ Pavement Markings/Markers		3%	\$ 24,250
√ Roadway Drainage	Standard Internal System	30%	\$ 242,502
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 40,417
√ Sewer	Minor Adjustments	5%	\$ 40,417
√ Landscaping and Irrigation		6%	\$ 48,500
√ Illumination	Standard Illumination System	6%	\$ 48,500
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 485,004</b>
**Allowances based on % of Paving Construction Cost Subtotal			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,293,343</b>
		<b>Construction Contingency:</b> 20%	\$ 258,669
		<b>Mobilization:</b> 5%	\$ 64,667
		<b>Prep ROW:</b> 5%	\$ 64,667
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,682,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,682,000
Engineering/Survey/Testing:		16%	\$ 269,120
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 168,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,119,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>6</b>
Name:	E ROSAMOND PKWY (1)	<b>This project consists of widening the existing facility to a six-lane divided arterial.</b>	
Limits:	N POWELL PKWY to 295' E OF N POWELL PKWY		
Impact Fee Class:	Major Arterial		
Length (lf):	295		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	1,311	cy	\$ 20,978
201	8" Lime-Treated Subgrade	2,557	sy	\$ 51,133
301	8" Concrete Pavement	2,360	sy	\$ 236,000
401	6' Concrete Sidewalk	3,540	sf	\$ 35,400
501	Curb & Gutter	1,180	lf	\$ 47,200
601	Topsoil	1,180	sy	\$ 11,800
701	Turn Lanes	102	sy	\$ 12,202
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 414,713</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 20,736
√ Pavement Markings/Markers		3%	\$ 12,441
√ Roadway Drainage	Standard Internal System	30%	\$ 124,414
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 20,736
√ Sewer	Minor Adjustments	5%	\$ 20,736
√ Landscaping and Irrigation		6%	\$ 24,883
√ Illumination	Standard Illumination System	6%	\$ 24,883
√ Other:	Railroad Crossing	\$500,000	\$ 500,000
<b>Allowance Subtotal:</b>			<b>\$ 748,828</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,163,541</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 232,708</b>
		<b>Mobilization:</b> 5%	<b>\$ 58,177</b>
		<b>Prep ROW:</b> 5%	<b>\$ 58,177</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,513,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,513,000
Engineering/Survey/Testing:		16%	\$ 242,080
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 151,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,906,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	E ROSAMOND PKWY (2)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	<b>7</b>
Limits:	820' E OF N POWELL PKWY to 2,735' E OF N POWELL PKWY		
Impact Fee Class:	Major Arterial		
Length (lf):	1,915		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	8,511	cy	\$ 136,178
201	8" Lime-Treated Subgrade	16,597	sy	\$ 331,933
301	8" Concrete Pavement	15,320	sy	\$ 1,532,000
401	6' Concrete Sidewalk	22,980	sf	\$ 229,800
501	Curb & Gutter	7,660	lf	\$ 306,400
601	Topsoil	7,660	sy	\$ 76,600
701	Turn Lanes	660	sy	\$ 79,211
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 2,692,122</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 80,764
√ Roadway Drainage	Standard Internal System	30%	\$ 807,637
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 134,606
√ Sewer	Minor Adjustments	5%	\$ 134,606
√ Landscaping and Irrigation		6%	\$ 161,527
√ Illumination	Standard Illumination System	6%	\$ 161,527
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 1,480,667</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,172,790</b>
		<b>Construction Contingency:</b> 20%	\$ 834,558
		<b>Mobilization</b> 5%	\$ 208,639
		<b>Prep ROW</b> 1%	\$ 41,728
		<b>Construction Cost TOTAL:</b>	<b>\$ 5,258,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,258,000
Engineering/Survey/Testing:		16%	\$ 841,280
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,051,600
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 7,151,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	HOUSTON ST (1)	<b>This project consists of widening the existing facility to a six-lane divided TxDOT arterial.</b>	<b>8</b>
Limits:	CR 425 to 5,850' E OF CR 425		
Impact Fee Class:	Major Arterial		
Length (lf):	5,850		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	26,000	cy	\$ 416,000
201	8" Lime-Treated Subgrade	50,700	sy	\$ 1,014,000
301	8" Concrete Pavement	46,800	sy	\$ 4,680,000
401	6' Concrete Sidewalk	70,200	sf	\$ 702,000
501	Curb & Gutter	23,400	lf	\$ 936,000
601	Topsoil	23,400	sy	\$ 234,000
701	Turn Lanes	2,016	sy	\$ 241,977
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 8,223,977</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 411,199
√ Pavement Markings/Markers		3%	\$ 246,719
√ Roadway Drainage	Standard Internal System	30%	\$ 2,467,193
√ Special Drainage Structures	Minor Stream Crossing (3)	-	\$ 750,000
√ Water	Minor Adjustments	5%	\$ 411,199
√ Sewer	Minor Adjustments	5%	\$ 411,199
√ Landscaping and Irrigation		6%	\$ 493,439
√ Illumination	Standard Illumination System	6%	\$ 493,439
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 5,684,386</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 13,908,364</b>
		<b>Construction Contingency:</b>	<b>20% \$ 2,781,673</b>
		<b>Mobilization</b>	<b>5% \$ 695,418</b>
		<b>Prep ROW</b>	<b>5% \$ 695,418</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 18,081,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 18,081,000
Engineering/Survey/Testing:		16%	\$ 2,892,960
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 4,195,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 9
Name:	HOUSTON ST (2)	This project consists of widening the existing facility to a six-lane divided TxDOT arterial.	
Limits:	1,970' W OF CR 477 to 2,475' E OF CR 477		
Impact Fee Class:	Major Arterial		
Length (lf):	4,445		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	19,756	cy	\$ 316,089
201	8" Lime-Treated Subgrade	38,523	sy	\$ 770,467
301	8" Concrete Pavement	35,560	sy	\$ 3,556,000
401	6' Concrete Sidewalk	53,340	sf	\$ 533,400
501	Curb & Gutter	17,780	lf	\$ 711,200
601	Topsoil	17,780	sy	\$ 177,800
701	Turn Lanes	1,532	sy	\$ 183,861
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 6,248,817</b>
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 312,441	
√ Pavement Markings/Markers		3%	\$ 187,465	
√ Roadway Drainage	Standard Internal System	30%	\$ 1,874,645	
√ Special Drainage Structures	Bridge Crossing	-	\$ 1,000,000	
√ Water	Minor Adjustments	5%	\$ 312,441	
√ Sewer	Minor Adjustments	5%	\$ 312,441	
√ Landscaping and Irrigation		6%	\$ 374,929	
√ Illumination	Standard Illumination System	6%	\$ 374,929	
Other:		\$0	\$ -	
<b>Allowance Subtotal:</b>				<b>\$ 4,749,290</b>
<b>Paving and Allowance Subtotal:</b>				<b>\$ 10,998,107</b>
<b>Construction Contingency:</b>				<b>20% \$ 2,199,621</b>
<b>Mobilization</b>				<b>5% \$ 549,905</b>
<b>Prep ROW</b>				<b>5% \$ 549,905</b>
<b>Construction Cost TOTAL:</b>				<b>\$ 14,298,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 14,298,000
Engineering/Survey/Testing:		16%	\$ 2,287,680
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 3,317,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No. 10</b>
<b>Name:</b>	HACKBERRY LN (2)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>	
<b>Limits:</b>	N POWELL PKWY to N RIGGINS ST		
<b>Impact Fee Class:</b>	Minor Arterial		
<b>Length (lf):</b>	640		
<b>Service Area(s):</b>	Service Area 2		

<b>Roadway Construction Cost Projection</b>				
No.	Item Description	Quantity	Unit	Item Cost
102	Unclassified Roadway Excavation	1,991	cy	\$ 16.00 \$ 31,858
202	8" Lime-Treated Subgrade	3,840	sy	\$ 20.00 \$ 76,800
302	8" Concrete Pavement	3,413	sy	\$ 100.00 \$ 341,333
402	6' Concrete Sidewalk	7,680	sf	\$ 10.00 \$ 76,800
502	Curb & Gutter	2,560	lf	\$ 40.00 \$ 102,400
602	Topsoil	2,133	sy	\$ 10.00 \$ 21,333
702	Turn Lanes	216	sy	\$ 120.00 \$ 25,891
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 676,415</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 33,821
√ Pavement Markings/Markers		3%	\$ 20,292
√ Roadway Drainage	Standard Internal System	30%	\$ 202,925
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 33,821
√ Sewer	Minor Adjustments	5%	\$ 33,821
√ Landscaping and Irrigation		6%	\$ 40,585
√ Illumination	Standard Illumination System	6%	\$ 40,585
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 405,849</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$ 1,082,265</b>	
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 216,453</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 54,113</b>
<b>Prep ROW</b>		<b>5%</b>	<b>\$ 54,113</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,407,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	<b>\$ 1,407,000</b>
<b>Engineering/Survey/Testing:</b>		16%	\$ 225,120
<b>ROW/Easement Acquisition:</b>	Existing Alignment	10%	\$ 140,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,773,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/28/2022

Project Information:		Description:	Project No. <b>11</b>
Name:	HACKBERRY LN (3)	<b>This project consists of the construction of a new four-lane divided arterial.</b>	
Limits:	N RIGGINS ST to N SHERLEY AVE		
Impact Fee Class:	Minor Arterial		
Length (lf):	245		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	762	cy	\$ 16.00	\$ 12,196
202	8" Lime-Treated Subgrade	1,470	sy	\$ 20.00	\$ 29,400
302	8" Concrete Pavement	1,307	sy	\$ 100.00	\$ 130,667
402	6' Concrete Sidewalk	2,940	sf	\$ 10.00	\$ 29,400
502	Curb & Gutter	980	lf	\$ 40.00	\$ 39,200
602	Topsoil	817	sy	\$ 10.00	\$ 8,167
702	Turn Lanes	83	sy	\$ 120.00	\$ 9,911
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 258,940</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Traffic Control	None Anticipated	0%	\$ -		
√ Pavement Markings/Markers		3%	\$ 7,768		
√ Roadway Drainage	Standard Internal System	30%	\$ 77,682		
Special Drainage Structures	None Anticipated	-	\$ -		
√ Water	Minor Adjustments	5%	\$ 12,947		
√ Sewer	Minor Adjustments	5%	\$ 12,947		
√ Landscaping and Irrigation		6%	\$ 15,536		
√ Illumination	Standard Illumination System	6%	\$ 15,536		
√ Other:	Railroad Crossing	\$500,000	\$ 500,000		
<b>Allowance Subtotal:</b>					<b>\$ 642,417</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 901,357</b>
<b>Construction Contingency:</b>					<b>20%</b> \$ 180,271
<b>Mobilization</b>					<b>5%</b> \$ 45,068
<b>Prep ROW</b>					<b>1%</b> \$ 9,014
<b>Construction Cost TOTAL:</b>					<b>\$ 1,136,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,136,000
Engineering/Survey/Testing:		16%	\$ 181,760
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 227,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,545,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	HACKBERRY LN (4)	This project consists of widening the existing facility to a four-lane divided TxDOT arterial.	12
Limits:	N SHERLEY AVE to 140' E OF N SHERLEY AVE		
Impact Fee Class:	Minor Arterial		
Length (lf):	140		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	436	cy	\$ 16.00	\$ 6,969
202	8" Lime-Treated Subgrade	840	sy	\$ 20.00	\$ 16,800
302	8" Concrete Pavement	747	sy	\$ 100.00	\$ 74,667
402	6' Concrete Sidewalk	1,680	sf	\$ 10.00	\$ 16,800
502	Curb & Gutter	560	lf	\$ 40.00	\$ 22,400
602	Topsoil	467	sy	\$ 10.00	\$ 4,667
702	Turn Lanes	47	sy	\$ 120.00	\$ 5,664
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 147,966</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	7,398
√ Pavement Markings/Markers		3%	\$	4,439
√ Roadway Drainage	Standard Internal System	30%	\$	44,390
Special Drainage Structures	None Anticipated	-	\$	-
√ Water	Minor Adjustments	5%	\$	7,398
√ Sewer	Minor Adjustments	5%	\$	7,398
√ Landscaping and Irrigation		6%	\$	8,878
√ Illumination	Standard Illumination System	6%	\$	8,878
Other:		\$0	\$	-
<b>Allowance Subtotal:</b>			<b>\$</b>	<b>88,780</b>
**Allowances based on % of Paving Construction Cost Subtotal				
		<b>Paving and Allowance Subtotal:</b>		<b>\$ 236,745</b>
		<b>Construction Contingency:</b>	20%	\$ 47,349
		<b>Mobilization</b>	5%	\$ 11,837
		<b>Prep ROW</b>	5%	\$ 11,837
		<b>Construction Cost TOTAL:</b>		<b>\$ 308,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 308,000
Engineering/Survey/Testing:		16%	\$ 49,280
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 71,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	HACKBERRY LN (5)	<b>This project consists of the construction of a new four-lane divided arterial.</b>	<b>13</b>
Limits:	140' E OF N SHERLEY AVE to 2,215' E OF N SHERLEY AVE		
Impact Fee Class:	Minor Arterial		
Length (lf):	2,075		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	6,456	cy	\$ 16.00	\$ 103,289
202	8" Lime-Treated Subgrade	12,450	sy	\$ 20.00	\$ 249,000
302	8" Concrete Pavement	11,067	sy	\$ 100.00	\$ 1,106,667
402	6' Concrete Sidewalk	24,900	sf	\$ 10.00	\$ 249,000
502	Curb & Gutter	8,300	lf	\$ 40.00	\$ 332,000
602	Topsoil	6,917	sy	\$ 10.00	\$ 69,167
702	Turn Lanes	700	sy	\$ 120.00	\$ 83,943
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,193,065</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 65,792
√ Roadway Drainage	Standard Internal System	30%	\$ 657,920
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 109,653
√ Sewer	Minor Adjustments	5%	\$ 109,653
√ Landscaping and Irrigation		6%	\$ 131,584
√ Illumination	Standard Illumination System	6%	\$ 131,584
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,206,186</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 3,399,251</b>
<b>Construction Contingency:</b>			<b>20% \$ 679,850</b>
<b>Mobilization</b>			<b>5% \$ 169,963</b>
<b>Prep ROW</b>			<b>1% \$ 33,993</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 4,284,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,284,000
Engineering/Survey/Testing:		16%	\$ 685,440
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 856,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,826,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	W 2ND ST (2)	<b>This project consists of widening the existing facility to a two-lane undivided Downtown street.</b>	<b>14</b>
<b>Limits:</b>	N POWELL PKWY to N RIGGINS ST		
<b>Impact Fee Class:</b>	Downtown Type B		
<b>Length (lf):</b>	625		
<b>Service Area(s):</b>	Service Area 2		

<b>Roadway Construction Cost Projection</b>				
No.	Item Description	Quantity	Unit	Item Cost
105	Unclassified Roadway Excavation	1,181	cy	\$ 16.00 \$ 18,889
205	8" Lime-Treated Subgrade	2,292	sy	\$ 20.00 \$ 45,833
305	8" Concrete Pavement	2,083	sy	\$ 100.00 \$ 208,333
405	6' Concrete Sidewalk	7,500	sf	\$ 10.00 \$ 75,000
505	Curb & Gutter	1,250	lf	\$ 40.00 \$ 50,000
605	Topsoil	556	sy	\$ 10.00 \$ 5,556
705	Turn Lanes	0	sy	\$ 120.00 \$ -
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 403,611</b>

<b>Major Construction Component Allowances**:</b>			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 20,181
√ Pavement Markings/Markers		3%	\$ 12,108
√ Roadway Drainage	Standard Internal System	30%	\$ 121,083
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 20,181
√ Sewer	Minor Adjustments	5%	\$ 20,181
√ Landscaping and Irrigation		6%	\$ 24,217
√ Illumination	Standard Illumination System	6%	\$ 24,217
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 242,167</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>		<b>\$ 645,778</b>	
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 129,156</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 32,289</b>
<b>Prep ROW</b>		<b>5%</b>	<b>\$ 32,289</b>
<b>Construction Cost TOTAL:</b>		<b>\$ 840,000</b>	

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 840,000
<b>Engineering/Survey/Testing:</b>		16%	\$ 134,400
<b>ROW/Easement Acquisition:</b>	Existing Alignment	10%	\$ 84,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,058,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 15
Name:	W 3RD ST (2)	This project consists of widening the existing facility to a two-lane undivided Downtown street.	
Limits:	N POWELL PKWY to N RIGGINS ST		
Impact Fee Class:	Downtown Type B		
Length (lf):	630		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,190	cy	\$ 16.00	\$ 19,040
205	8" Lime-Treated Subgrade	2,310	sy	\$ 20.00	\$ 46,200
305	8" Concrete Pavement	2,100	sy	\$ 100.00	\$ 210,000
405	6' Concrete Sidewalk	7,560	sf	\$ 10.00	\$ 75,600
505	Curb & Gutter	1,260	lf	\$ 40.00	\$ 50,400
605	Topsoil	560	sy	\$ 10.00	\$ 5,600
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 406,840</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 20,342
√ Pavement Markings/Markers		3%	\$ 12,205
√ Roadway Drainage	Standard Internal System	30%	\$ 122,052
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 20,342
√ Sewer	Minor Adjustments	5%	\$ 20,342
√ Landscaping and Irrigation		6%	\$ 24,410
√ Illumination	Standard Illumination System	6%	\$ 24,410
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 244,104</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 650,944</b>
<b>Construction Contingency:</b> 20%	\$ 130,189
<b>Mobilization:</b> 5%	\$ 32,547
<b>Prep ROW:</b> 5%	\$ 32,547
<b>Construction Cost TOTAL:</b>	<b>\$ 847,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 847,000
Engineering/Survey/Testing:		16%	\$ 135,520
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 84,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,067,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	16
Name:	W 5TH ST (3)	This project consists of widening the existing facility to a two-lane undivided Downtown street.		
Limits:	S POWELL PKWY to S RIGGINS ST			
Impact Fee Class:	Downtown Type B			
Length (lf):	645			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,218	cy	\$ 16.00	\$ 19,493
205	8" Lime-Treated Subgrade	2,365	sy	\$ 20.00	\$ 47,300
305	8" Concrete Pavement	2,150	sy	\$ 100.00	\$ 215,000
405	6' Concrete Sidewalk	7,740	sf	\$ 10.00	\$ 77,400
505	Curb & Gutter	1,290	lf	\$ 40.00	\$ 51,600
605	Topsoil	573	sy	\$ 10.00	\$ 5,733
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 416,527</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 20,826
√ Pavement Markings/Markers		3%	\$ 12,496
√ Roadway Drainage	Standard Internal System	30%	\$ 124,958
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 20,826
√ Sewer	Minor Adjustments	5%	\$ 20,826
√ Landscaping and Irrigation		6%	\$ 24,992
√ Illumination	Standard Illumination System	6%	\$ 24,992
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 249,916</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 666,443</b>
		<b>Construction Contingency:</b> 20%	\$ 133,289
		<b>Mobilization:</b> 5%	\$ 33,322
		<b>Prep ROW:</b> 5%	\$ 33,322
		<b>Construction Cost TOTAL:</b>	<b>\$ 867,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 867,000
Engineering/Survey/Testing:		16%	\$ 138,720
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 86,700
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,092,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 17
Name:	W 7TH ST	This project consists of widening the existing facility to a two-lane undivided Downtown street.	
Limits:	S POWELL PKWY to S RIGGINS ST		
Impact Fee Class:	Downtown Type B		
Length (lf):	725		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Roadway Excavation	1,369	cy	\$ 16.00	\$ 21,911
205	8" Lime-Treated Subgrade	2,658	sy	\$ 20.00	\$ 53,167
305	8" Concrete Pavement	2,417	sy	\$ 100.00	\$ 241,667
405	6' Concrete Sidewalk	8,700	sf	\$ 10.00	\$ 87,000
505	Curb & Gutter	1,450	lf	\$ 40.00	\$ 58,000
605	Topsoil	644	sy	\$ 10.00	\$ 6,444
705	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 468,189</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 23,409
√ Pavement Markings/Markers		3%	\$ 14,046
√ Roadway Drainage	Standard Internal System	30%	\$ 140,457
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 23,409
√ Sewer	Minor Adjustments	5%	\$ 23,409
√ Landscaping and Irrigation		6%	\$ 28,091
√ Illumination	Standard Illumination System	6%	\$ 28,091
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 280,913</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 749,102</b>
		<b>Construction Contingency:</b> 20%	\$ 149,820
		<b>Mobilization</b> 5%	\$ 37,455
		<b>Prep ROW</b> 5%	\$ 37,455
<b>Construction Cost TOTAL:</b>			<b>\$ 974,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 974,000
Engineering/Survey/Testing:		16%	\$ 155,840
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 97,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,227,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>18</b>
Name:	W 8TH ST	<b>This project consists of widening the existing facility to a two-lane undivided Downtown street.</b>	
Limits:	S INTERURBAN ST to S RIGGINS ST		
Impact Fee Class:	Downtown Type B		
Length (lf):	385		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
105	Unclassified Roadway Excavation	727	cy	\$ 16.00 \$ 11,636
205	8" Lime-Treated Subgrade	1,412	sy	\$ 20.00 \$ 28,233
305	8" Concrete Pavement	1,283	sy	\$ 100.00 \$ 128,333
405	6' Concrete Sidewalk	4,620	sf	\$ 10.00 \$ 46,200
505	Curb & Gutter	770	lf	\$ 40.00 \$ 30,800
605	Topsoil	342	sy	\$ 10.00 \$ 3,422
705	Turn Lanes	0	sy	\$ 120.00 \$ -
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 248,624</b>
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	12,431
√ Pavement Markings/Markers		3%	\$	7,459
√ Roadway Drainage	Standard Internal System	30%	\$	74,587
Special Drainage Structures	None Anticipated	-	\$	-
√ Water	Minor Adjustments	5%	\$	12,431
√ Sewer	Minor Adjustments	5%	\$	12,431
√ Landscaping and Irrigation		6%	\$	14,917
√ Illumination	Standard Illumination System	6%	\$	14,917
Other:		\$0	\$	-
<b>Allowance Subtotal:</b>				<b>\$ 149,175</b>
<b>Paving and Allowance Subtotal:</b>				<b>\$ 397,799</b>
<b>Construction Contingency:</b>				<b>20% \$ 79,560</b>
<b>Mobilization:</b>				<b>5% \$ 19,890</b>
<b>Prep ROW:</b>				<b>5% \$ 19,890</b>
<b>Construction Cost TOTAL:</b>				<b>\$ 518,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 518,000
Engineering/Survey/Testing:		16%	\$ 82,880
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 51,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 653,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 19
Name:	W WHITE ST (4)	This project consists of widening the existing facility to a six-lane divided TxDOT arterial.	
Limits:	S POWELL PKWY to S INTERURBAN ST		
Impact Fee Class:	Major Arterial		
Length (lf):	355		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	1,578	cy	\$ 16.00	\$ 25,244
201	8" Lime-Treated Subgrade	3,077	sy	\$ 20.00	\$ 61,533
301	8" Concrete Pavement	2,840	sy	\$ 100.00	\$ 284,000
401	6' Concrete Sidewalk	4,260	sf	\$ 10.00	\$ 42,600
501	Curb & Gutter	1,420	lf	\$ 40.00	\$ 56,800
601	Topsoil	1,420	sy	\$ 10.00	\$ 14,200
701	Turn Lanes	122	sy	\$ 120.00	\$ 14,684
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 499,062</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 24,953
√ Pavement Markings/Markers		3%	\$ 14,972
√ Roadway Drainage	Standard Internal System	30%	\$ 149,719
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 24,953
√ Sewer	Minor Adjustments	5%	\$ 24,953
√ Landscaping and Irrigation		6%	\$ 29,944
√ Illumination	Standard Illumination System	6%	\$ 29,944
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 299,437</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 798,499</b>
<b>Construction Contingency:</b>			<b>20% \$ 159,700</b>
<b>Mobilization</b>			<b>5% \$ 39,925</b>
<b>Prep ROW</b>			<b>5% \$ 39,925</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,039,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,039,000
Engineering/Survey/Testing:		16%	\$ 166,240
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 241,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	E WHITE ST (1)	<b>This project consists of widening the existing facility to a six-lane divided TxDOT arterial.</b>	<b>20</b>
Limits:	S INTERURBAN ST to 1,640' E OF HOUSTON TO E WHITE CONNECTOR		
Impact Fee Class:	Major Arterial		
Length (lf):	8,040		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	35,733	cy	\$ 16.00	\$ 571,733
201	8" Lime-Treated Subgrade	69,680	sy	\$ 20.00	\$ 1,393,600
301	8" Concrete Pavement	64,320	sy	\$ 100.00	\$ 6,432,000
401	6' Concrete Sidewalk	96,480	sf	\$ 10.00	\$ 964,800
501	Curb & Gutter	32,160	lf	\$ 40.00	\$ 1,286,400
601	Topsoil	32,160	sy	\$ 10.00	\$ 321,600
701	Turn Lanes	2,771	sy	\$ 120.00	\$ 332,564
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 11,302,697</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 565,135
√ Pavement Markings/Markers		3%	\$ 339,081
√ Roadway Drainage	Standard Internal System	30%	\$ 3,390,809
√ Special Drainage Structures	Major Stream Crossing (2)	-	\$ 1,000,000
√ Water	Minor Adjustments	5%	\$ 565,135
√ Sewer	Minor Adjustments	5%	\$ 565,135
√ Landscaping and Irrigation		6%	\$ 678,162
√ Illumination	Standard Illumination System	6%	\$ 678,162
√ Other:	Railroad Crossing	\$500,000	\$ 500,000
<b>Allowance Subtotal:</b>			<b>\$ 8,281,618</b>
**Allowances based on % of Paving Construction Cost Subtotal			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 19,584,315</b>
		<b>Construction Contingency:</b> 20%	\$ 3,916,863
		<b>Mobilization:</b> 5%	\$ 979,216
		<b>Prep ROW:</b> 5%	\$ 979,216
		<b>Construction Cost TOTAL:</b>	<b>\$ 25,460,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 25,460,000
Engineering/Survey/Testing:		16%	\$ 4,073,600
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 5,907,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 419 (1)	<b>This project consists of widening the existing facility to a four-lane divided TxDOT arterial.</b>	<b>21</b>
Limits:	595' S OF E WHITE ST to 745' N OF E FINLEY BLVD		
Impact Fee Class:	Minor Arterial		
Length (lf):	2,430		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	7,560	cy	\$ 16.00	\$ 120,960
202	8" Lime-Treated Subgrade	14,580	sy	\$ 20.00	\$ 291,600
302	8" Concrete Pavement	12,960	sy	\$ 100.00	\$ 1,296,000
402	6' Concrete Sidewalk	29,160	sf	\$ 10.00	\$ 291,600
502	Curb & Gutter	9,720	lf	\$ 40.00	\$ 388,800
602	Topsoil	8,100	sy	\$ 10.00	\$ 81,000
702	Turn Lanes	819	sy	\$ 120.00	\$ 98,305
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,568,265</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 128,413
√ Pavement Markings/Markers		3%	\$ 77,048
√ Roadway Drainage	Standard Internal System	30%	\$ 770,479
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 128,413
√ Sewer	Minor Adjustments	5%	\$ 128,413
√ Landscaping and Irrigation		6%	\$ 154,096
√ Illumination	Standard Illumination System	6%	\$ 154,096
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 1,540,959</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,109,223</b>
		<b>Construction Contingency:</b> 20%	\$ 821,845
		<b>Mobilization</b> 5%	\$ 205,461
		<b>Prep ROW</b> 5%	\$ 205,461
<b>Construction Cost TOTAL:</b>			<b>\$ 5,342,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,342,000
Engineering/Survey/Testing:		16%	\$ 854,720
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 1,239,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	E FINLEY BLVD (1)	This project consists of widening the existing facility to a four-lane undivided TxDOT collector.	22
Limits:	930' E OF CR 419 to E WHITE ST		
Impact Fee Class:	Major Collector		
Length (lf):	5,520		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	15,947	cy	\$ 16.00	\$ 255,147
203	8" Lime-Treated Subgrade	31,280	sy	\$ 20.00	\$ 625,600
303	8" Concrete Pavement	29,440	sy	\$ 100.00	\$ 2,944,000
403	6' Concrete Sidewalk	66,240	sf	\$ 10.00	\$ 662,400
503	Curb & Gutter	11,040	lf	\$ 40.00	\$ 441,600
603	Topsoil	12,267	sy	\$ 10.00	\$ 122,667
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 5,051,413</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 252,571
√ Pavement Markings/Markers		3%	\$ 151,542
√ Roadway Drainage	Standard Internal System	30%	\$ 1,515,424
√ Special Drainage Structures	Major Stream Crossing (2)	-	\$ 1,000,000
√ Water	Minor Adjustments	5%	\$ 252,571
√ Sewer	Minor Adjustments	5%	\$ 252,571
√ Landscaping and Irrigation		6%	\$ 303,085
√ Illumination	Standard Illumination System	6%	\$ 303,085
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 4,030,848</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 9,082,261</b>
		<b>Construction Contingency:</b>	<b>20% \$ 1,816,452</b>
		<b>Mobilization:</b>	<b>5% \$ 454,113</b>
		<b>Prep ROW:</b>	<b>5% \$ 454,113</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 11,807,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 11,807,000
Engineering/Survey/Testing:		16%	\$ 1,889,120
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 2,739,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 23
Name:	E WHITE ST (2)	<b>This project consists of widening the existing facility to a six-lane divided TxDOT arterial.</b>	
Limits:	E FINLEY BLVD to SAM RAYBURN MEMORIAL HWY		
Impact Fee Class:	Major Arterial		
Length (lf):	5,730		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	25,467	cy	\$ 16.00	\$ 407,467
201	8" Lime-Treated Subgrade	49,660	sy	\$ 20.00	\$ 993,200
301	8" Concrete Pavement	45,840	sy	\$ 100.00	\$ 4,584,000
401	6' Concrete Sidewalk	68,760	sf	\$ 10.00	\$ 687,600
501	Curb & Gutter	22,920	lf	\$ 40.00	\$ 916,800
601	Topsoil	22,920	sy	\$ 10.00	\$ 229,200
701	Turn Lanes	1,975	sy	\$ 120.00	\$ 237,014
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 8,055,280</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 402,764
√ Pavement Markings/Markers		3%	\$ 241,658
√ Roadway Drainage	Standard Internal System	30%	\$ 2,416,584
√ Special Drainage Structures	Minor Stream Crossing (2), Major Stream Crossing	-	\$ 1,000,000
√ Water	Minor Adjustments	5%	\$ 402,764
√ Sewer	Minor Adjustments	5%	\$ 402,764
√ Landscaping and Irrigation		6%	\$ 483,317
√ Illumination	Standard Illumination System	6%	\$ 483,317
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 5,833,168</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 13,888,448</b>
		<b>Construction Contingency:</b> 20%	\$ 2,777,690
		<b>Mobilization</b> 5%	\$ 694,422
		<b>Prep ROW</b> 5%	\$ 694,422
		<b>Construction Cost TOTAL:</b>	<b>\$ 18,055,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 18,055,000
Engineering/Survey/Testing:		16%	\$ 2,888,800
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 4,189,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 24
Name:	E FINLEY BLVD (2)	This project consists of the construction of the additional two lanes of the four-lane collector. The costing assumes a four-lane divided ultimate section in continuity with the adjacent cross-sections.	
Limits:	345' E OF S POWELL PKWY to SHARP ST		
Impact Fee Class:	Major Collector (4D) (1/2)		
Length (lf):	855		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Roadway Excavation	1,330	cy	\$ 16.00	\$ 21,280
210	8" Lime-Treated Subgrade	2,565	sy	\$ 20.00	\$ 51,300
310	8" Concrete Pavement	2,280	sy	\$ 100.00	\$ 228,000
410	6' Concrete Sidewalk	5,130	sf	\$ 10.00	\$ 51,300
510	Curb & Gutter	1,710	lf	\$ 40.00	\$ 68,400
610	Topsoil	2,090	sy	\$ 10.00	\$ 20,900
710	Turn Lanes	261	sy	\$ 120.00	\$ 31,350
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 472,530</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	23,627
√ Pavement Markings/Markers		3%	\$	14,176
Roadway Drainage	None Anticipated	0%	\$	-
Special Drainage Structures	None Anticipated	-	\$	-
Water	None Anticipated	0%	\$	-
Sewer	None Anticipated	0%	\$	-
√ Landscaping and Irrigation		6%	\$	28,352
Illumination	None Anticipated	0%	\$	-
Other:		\$0	\$	-
			<b>Allowance Subtotal:</b>	<b>\$ 66,154</b>
			<b>Paving and Allowance Subtotal:</b>	<b>\$ 538,684</b>
			<b>Construction Contingency:</b>	<b>20% \$ 107,737</b>
			<b>Mobilization</b>	<b>5% \$ 26,934</b>
			<b>Prep ROW</b>	<b>5% \$ 26,934</b>
			<b>Construction Cost TOTAL:</b>	<b>\$ 701,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 701,000
Engineering/Survey/Testing:		16%	\$ 112,160
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 813,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	E FINLEY BLVD (3)	<b>This project consists of the construction of a new four-lane undivided collector.</b>	<b>25</b>
Limits:	LEONARD AVE to 3,410' E OF LEONARD AVE		
Impact Fee Class:	Major Collector		
Length (lf):	3,410		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	9,851	cy	\$ 16.00	\$ 157,618
203	8" Lime-Treated Subgrade	19,323	sy	\$ 20.00	\$ 386,467
303	8" Concrete Pavement	18,187	sy	\$ 100.00	\$ 1,818,667
403	6' Concrete Sidewalk	40,920	sf	\$ 10.00	\$ 409,200
503	Curb & Gutter	6,820	lf	\$ 40.00	\$ 272,800
603	Topsoil	7,578	sy	\$ 10.00	\$ 75,778
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,120,529</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 93,616
√ Roadway Drainage	Standard Internal System	30%	\$ 936,159
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 156,026
√ Sewer	Minor Adjustments	5%	\$ 156,026
√ Landscaping and Irrigation		6%	\$ 187,232
√ Illumination	Standard Illumination System	6%	\$ 187,232
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 1,716,291</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,836,820</b>
		<b>Construction Contingency:</b>	<b>20% \$ 967,364</b>
		<b>Mobilization</b>	<b>5% \$ 241,841</b>
		<b>Prep ROW</b>	<b>1% \$ 48,368</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 6,095,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,095,000
Engineering/Survey/Testing:		16%	\$ 975,200
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,219,000
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 8,289,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 26
Name:	E FOSTER CROSSING RD (1)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	
Limits:	S POWELL PKWY to 260' E OF S POWELL PKWY		
Impact Fee Class:	Major Collector		
Length (lf):	260		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	751	cy	\$ 16.00	\$ 12,018
203	8" Lime-Treated Subgrade	1,473	sy	\$ 20.00	\$ 29,467
303	8" Concrete Pavement	1,387	sy	\$ 100.00	\$ 138,667
403	6' Concrete Sidewalk	3,120	sf	\$ 10.00	\$ 31,200
503	Curb & Gutter	520	lf	\$ 40.00	\$ 20,800
603	Topsoil	578	sy	\$ 10.00	\$ 5,778
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 237,929</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 11,896
√ Pavement Markings/Markers		3%	\$ 7,138
√ Roadway Drainage	Standard Internal System	30%	\$ 71,379
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 11,896
√ Sewer	Minor Adjustments	5%	\$ 11,896
√ Landscaping and Irrigation		6%	\$ 14,276
√ Illumination	Standard Illumination System	6%	\$ 14,276
√ Other:	Railroad Crossing	\$500,000	\$ 500,000
		<b>Allowance Subtotal:</b>	<b>\$ 642,757</b>
**Allowances based on % of Paving Construction Cost Subtotal			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 880,686</b>
		<b>Construction Contingency:</b> 20%	\$ 176,137
		<b>Mobilization:</b> 5%	\$ 44,034
		<b>Prep ROW:</b> 5%	\$ 44,034
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,145,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,145,000
Engineering/Survey/Testing:		16%	\$ 183,200
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 114,500
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 1,443,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. 27
Name:	E FOSTER CROSSING RD (2)	<b>This project consists of widening the existing facility to a four-lane undivided collector.</b>	
Limits:	260' E OF S POWELL PKWY to LEONARD AVE		
Impact Fee Class:	Major Collector		
Length (lf):	4,030		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	11,642	cy	\$ 16.00	\$ 186,276
203	8" Lime-Treated Subgrade	22,837	sy	\$ 20.00	\$ 456,733
303	8" Concrete Pavement	21,493	sy	\$ 100.00	\$ 2,149,333
403	6' Concrete Sidewalk	48,360	sf	\$ 10.00	\$ 483,600
503	Curb & Gutter	8,060	lf	\$ 40.00	\$ 322,400
603	Topsoil	8,956	sy	\$ 10.00	\$ 89,556
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,687,898</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 184,395
√ Pavement Markings/Markers		3%	\$ 110,637
√ Roadway Drainage	Standard Internal System	30%	\$ 1,106,369
√ Special Drainage Structures	Major Stream Crossing	-	\$ 500,000
√ Water	Minor Adjustments	5%	\$ 184,395
√ Sewer	Minor Adjustments	5%	\$ 184,395
√ Landscaping and Irrigation		6%	\$ 221,274
√ Illumination	Standard Illumination System	6%	\$ 221,274
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 2,712,739</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 6,400,636</b>
<b>Construction Contingency:</b>			<b>20%</b> \$ 1,280,127
<b>Mobilization</b>			<b>5%</b> \$ 320,032
<b>Prep ROW</b>			<b>5%</b> \$ 320,032
<b>Construction Cost TOTAL:</b>			<b>\$ 8,321,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,321,000
Engineering/Survey/Testing:		16%	\$ 1,331,360
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 832,100
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 10,484,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	28
Name:	E FOSTER CROSSING RD (3)	<b>This project consists of the construction of a new four-lane undivided collector.</b>		
Limits:	LEONARD AVE to 2,135' E OF LEONARD AVE			
Impact Fee Class:	Major Collector			
Length (lf):	2,135			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	6,168	cy	\$ 16.00	\$ 98,684
203	8" Lime-Treated Subgrade	12,098	sy	\$ 20.00	\$ 241,967
303	8" Concrete Pavement	11,387	sy	\$ 100.00	\$ 1,138,667
403	6' Concrete Sidewalk	25,620	sf	\$ 10.00	\$ 256,200
503	Curb & Gutter	4,270	lf	\$ 40.00	\$ 170,800
603	Topsoil	4,744	sy	\$ 10.00	\$ 47,444
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,953,762</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 58,613
√ Roadway Drainage	Standard Internal System	30%	\$ 586,129
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 97,688
√ Sewer	Minor Adjustments	5%	\$ 97,688
√ Landscaping and Irrigation		6%	\$ 117,226
√ Illumination	Standard Illumination System	6%	\$ 117,226
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 1,074,569</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 3,028,331</b>
		<b>Construction Contingency:</b> 20%	\$ 605,666
		<b>Mobilization:</b> 5%	\$ 151,417
		<b>Prep ROW:</b> 1%	\$ 30,283
		<b>Construction Cost TOTAL:</b>	<b>\$ 3,816,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,816,000
Engineering/Survey/Testing:		16%	\$ 610,560
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 763,200
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 5,190,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>29</b>
Name:	E FOSTER CROSSING RD (4)	<b>This project consists of the construction of a new four-lane undivided collector.</b>	
Limits:	375' W OF OUTER LOOP to CR 419		
Impact Fee Class:	Major Collector		
Length (lf):	3,660		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Roadway Excavation	10,573	cy	\$ 16.00	\$ 169,173
203	8" Lime-Treated Subgrade	20,740	sy	\$ 20.00	\$ 414,800
303	8" Concrete Pavement	19,520	sy	\$ 100.00	\$ 1,952,000
403	6' Concrete Sidewalk	43,920	sf	\$ 10.00	\$ 439,200
503	Curb & Gutter	7,320	lf	\$ 40.00	\$ 292,800
603	Topsoil	8,133	sy	\$ 10.00	\$ 81,333
703	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 3,349,307</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 100,479
√ Roadway Drainage	Standard Internal System	30%	\$ 1,004,792
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 167,465
√ Sewer	Minor Adjustments	5%	\$ 167,465
√ Landscaping and Irrigation		6%	\$ 200,958
√ Illumination	Standard Illumination System	6%	\$ 200,958
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,842,119</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 5,191,425</b>
<b>Construction Contingency:</b>			<b>20% \$ 1,038,285</b>
<b>Mobilization</b>			<b>5% \$ 259,571</b>
<b>Prep ROW</b>			<b>1% \$ 51,914</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 6,542,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,542,000
Engineering/Survey/Testing:		16%	\$ 1,046,720
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,308,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 8,897,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	30
Name:	CR 417	<b>This project consists of widening the existing facility to a six-lane divided arterial.</b>		
Limits:	CR 418 to CR 419			
Impact Fee Class:	Major Arterial			
Length (lf):	3,455			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	15,356	cy	\$ 16.00	\$ 245,689
201	8" Lime-Treated Subgrade	29,943	sy	\$ 20.00	\$ 598,867
301	8" Concrete Pavement	27,640	sy	\$ 100.00	\$ 2,764,000
401	6' Concrete Sidewalk	41,460	sf	\$ 10.00	\$ 414,600
501	Curb & Gutter	13,820	lf	\$ 40.00	\$ 552,800
601	Topsoil	13,820	sy	\$ 10.00	\$ 138,200
701	Turn Lanes	1,191	sy	\$ 120.00	\$ 142,911
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 4,857,067</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 242,853
√ Pavement Markings/Markers		3%	\$ 145,712
√ Roadway Drainage	Standard Internal System	30%	\$ 1,457,120
√ Special Drainage Structures	Minor Stream Crossing	-	\$ 250,000
√ Water	Minor Adjustments	5%	\$ 242,853
√ Sewer	Minor Adjustments	5%	\$ 242,853
√ Landscaping and Irrigation		6%	\$ 291,424
√ Illumination	Standard Illumination System	6%	\$ 291,424
Other:		\$0	\$ -
		<b>Allowance Subtotal:</b>	<b>\$ 3,164,240</b>
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 8,021,307</b>
		<b>Construction Contingency:</b> 20%	\$ 1,604,261
		<b>Mobilization</b> 5%	\$ 401,065
		<b>Prep ROW</b> 5%	\$ 401,065
		<b>Construction Cost TOTAL:</b>	<b>\$ 10,428,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,428,000
Engineering/Survey/Testing:		16%	\$ 1,668,480
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 1,042,800
		<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 13,139,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	E FOSTER CROSSING TO OUTER LOOP CONNECTION	<b>This project consists of the construction of a new three-lane undivided collector.</b>	<b>31</b>
Limits:	E FOSTER CROSSING RD to OUTER LOOP		
Impact Fee Class:	Minor Collector		
Length (lf):	1,885		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	4,398	cy	\$ 16.00	\$ 70,373
204	8" Lime-Treated Subgrade	8,587	sy	\$ 20.00	\$ 171,744
304	8" Concrete Pavement	7,959	sy	\$ 100.00	\$ 795,889
404	6' Concrete Sidewalk	22,620	sf	\$ 10.00	\$ 226,200
504	Curb & Gutter	3,770	lf	\$ 40.00	\$ 150,800
604	Topsoil	2,094	sy	\$ 10.00	\$ 20,944
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,435,951</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 43,079
√ Roadway Drainage	Standard Internal System	30%	\$ 430,785
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 71,798
√ Sewer	Minor Adjustments	5%	\$ 71,798
√ Landscaping and Irrigation		6%	\$ 86,157
√ Illumination	Standard Illumination System	6%	\$ 86,157
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 789,773</b>

\*\*Allowances based on % of Paving Construction Cost Subtotal

<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,225,724</b>
<b>Construction Contingency:</b>	<b>20% \$ 445,145</b>
<b>Mobilization</b>	<b>5% \$ 111,286</b>
<b>Prep ROW</b>	<b>1% \$ 22,257</b>
<b>Construction Cost TOTAL:</b>	<b>\$ 2,805,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,805,000
Engineering/Survey/Testing:		16%	\$ 448,800
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 561,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,815,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	S VAIL ST	<b>This project consists of the construction of a new three-lane undivided collector.</b>	<b>32</b>
Limits:	E FOSTER CROSSING RD to OUTER LOOP		
Impact Fee Class:	Minor Collector		
Length (lf):	1,780		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	4,153	cy	\$ 16.00	\$ 66,453
204	8" Lime-Treated Subgrade	8,109	sy	\$ 20.00	\$ 162,178
304	8" Concrete Pavement	7,516	sy	\$ 100.00	\$ 751,556
404	6' Concrete Sidewalk	21,360	sf	\$ 10.00	\$ 213,600
504	Curb & Gutter	3,560	lf	\$ 40.00	\$ 142,400
604	Topsoil	1,978	sy	\$ 10.00	\$ 19,778
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,355,964</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 40,679
√ Roadway Drainage	Standard Internal System	30%	\$ 406,789
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 67,798
√ Sewer	Minor Adjustments	5%	\$ 67,798
√ Landscaping and Irrigation		6%	\$ 81,358
√ Illumination	Standard Illumination System	6%	\$ 81,358
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 745,780</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 2,101,745</b>
		<b>Construction Contingency:</b> 20%	\$ 420,349
		<b>Mobilization:</b> 5%	\$ 105,087
		<b>Prep ROW:</b> 1%	\$ 21,017
<b>Construction Cost TOTAL:</b>			<b>\$ 2,649,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,649,000
Engineering/Survey/Testing:		16%	\$ 423,840
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 529,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,603,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>33</b>
Name:	CR 427	<b>This project consists of widening the existing facility to a three-lane undivided collector.</b>	
Limits:	880' N OF CR 376 to CR 376		
Impact Fee Class:	Minor Collector		
Length (lf):	880		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Roadway Excavation	2,053	cy	\$ 16.00	\$ 32,853
204	8" Lime-Treated Subgrade	4,009	sy	\$ 20.00	\$ 80,178
304	8" Concrete Pavement	3,716	sy	\$ 100.00	\$ 371,556
404	6' Concrete Sidewalk	10,560	sf	\$ 10.00	\$ 105,600
504	Curb & Gutter	1,760	lf	\$ 40.00	\$ 70,400
604	Topsoil	978	sy	\$ 10.00	\$ 9,778
704	Turn Lanes	0	sy	\$ 120.00	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 670,364</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 33,518
√ Pavement Markings/Markers		3%	\$ 20,111
√ Roadway Drainage	Standard Internal System	30%	\$ 201,109
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 33,518
√ Sewer	Minor Adjustments	5%	\$ 33,518
√ Landscaping and Irrigation		6%	\$ 40,222
√ Illumination	Standard Illumination System	6%	\$ 40,222
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 402,219</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,072,583</b>
<b>Construction Contingency:</b>			<b>20% \$ 214,517</b>
<b>Mobilization</b>			<b>5% \$ 53,629</b>
<b>Prep ROW</b>			<b>5% \$ 53,629</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,395,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,395,000
Engineering/Survey/Testing:		16%	\$ 223,200
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 139,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,758,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 425	<b>This project consists of widening the existing facility to a six-lane divided arterial.</b>	<b>34</b>
Limits:	1,540' N OF E ROSAMOND PKWY to E ROSAMOND PKWY		
Impact Fee Class:	Major Arterial		
Length (lf):	1,540		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	6,844	cy	\$ 16.00	\$ 109,511
201	8" Lime-Treated Subgrade	13,347	sy	\$ 20.00	\$ 266,933
301	8" Concrete Pavement	12,320	sy	\$ 100.00	\$ 1,232,000
401	6' Concrete Sidewalk	18,480	sf	\$ 10.00	\$ 184,800
501	Curb & Gutter	6,160	lf	\$ 40.00	\$ 246,400
601	Topsoil	6,160	sy	\$ 10.00	\$ 61,600
701	Turn Lanes	531	sy	\$ 120.00	\$ 63,700
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,164,944</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance		Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$	108,247
√ Pavement Markings/Markers		3%	\$	64,948
√ Roadway Drainage	Standard Internal System	30%	\$	649,483
√ Special Drainage Structures	Minor Stream Crossing	-	\$	250,000
√ Water	Minor Adjustments	5%	\$	108,247
√ Sewer	Minor Adjustments	5%	\$	108,247
√ Landscaping and Irrigation		6%	\$	129,897
√ Illumination	Standard Illumination System	6%	\$	129,897
Other:		\$0	\$	-
<b>Allowance Subtotal:</b>				<b>\$ 1,548,967</b>
**Allowances based on % of Paving Construction Cost Subtotal				
<b>Paving and Allowance Subtotal:</b>				<b>\$ 3,713,911</b>
<b>Construction Contingency:</b>				<b>20% \$ 742,782</b>
<b>Mobilization:</b>				<b>5% \$ 185,696</b>
<b>Prep ROW:</b>				<b>5% \$ 185,696</b>
<b>Construction Cost TOTAL:</b>				<b>\$ 4,829,000</b>

Impact Fee Project Cost Summary				
Item Description	Notes:	Allowance		Item Cost
Construction:		-	\$	4,829,000
Engineering/Survey/Testing:		16%	\$	772,640
ROW/Easement Acquisition:	Existing Alignment	10%	\$	482,900
<b>Impact Fee Project Cost TOTAL:</b>				<b>\$ 6,085,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	HOUSTON ST (3)	<b>This project consists of widening the existing facility to a six-lane divided TxDOT arterial.</b>	<b>35</b>
Limits:	E ROSAMOND PKWY to LEONARD AVE		
Impact Fee Class:	Major Arterial		
Length (lf):	1,410		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	6,267	cy	\$ 100,267
201	8" Lime-Treated Subgrade	12,220	sy	\$ 244,400
301	8" Concrete Pavement	11,280	sy	\$ 1,128,000
401	6' Concrete Sidewalk	16,920	sf	\$ 169,200
501	Curb & Gutter	5,640	lf	\$ 225,600
601	Topsoil	5,640	sy	\$ 56,400
701	Turn Lanes	486	sy	\$ 58,323
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 1,982,189</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 99,109
√ Pavement Markings/Markers		3%	\$ 59,466
√ Roadway Drainage	Standard Internal System	30%	\$ 594,657
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 99,109
√ Sewer	Minor Adjustments	5%	\$ 99,109
√ Landscaping and Irrigation		6%	\$ 118,931
√ Illumination	Standard Illumination System	6%	\$ 118,931
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,189,314</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>			<b>\$ 3,171,503</b>
<b>Construction Contingency:</b>			<b>20% \$ 634,301</b>
<b>Mobilization</b>			<b>5% \$ 158,575</b>
<b>Prep ROW</b>			<b>5% \$ 158,575</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 4,123,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,123,000
Engineering/Survey/Testing:		16%	\$ 659,680
ROW/Easement Acquisition:	TxDOT Roadway	0%	\$ -
<b>Impact Fee Project Cost TOTAL (20% City Contribution)</b>			<b>\$ 957,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	36
Name:	LEONARD AVE (1)	<b>This project consists of the construction of a new six-lane divided arterial.</b>		
Limits:	HOUSTON ST to 485' S OF HOUSTON ST			
Impact Fee Class:	Major Arterial			
Length (lf):	485			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	2,156	cy	\$ 34,489
201	8" Lime-Treated Subgrade	4,203	sy	\$ 84,067
301	8" Concrete Pavement	3,880	sy	\$ 388,000
401	6' Concrete Sidewalk	5,820	sf	\$ 58,200
501	Curb & Gutter	1,940	lf	\$ 77,600
601	Topsoil	1,940	sy	\$ 19,400
701	Turn Lanes	167	sy	\$ 20,061
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 681,817</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 20,455
√ Roadway Drainage	Standard Internal System	30%	\$ 204,545
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 34,091
√ Sewer	Minor Adjustments	5%	\$ 34,091
√ Landscaping and Irrigation		6%	\$ 40,909
√ Illumination	Standard Illumination System	6%	\$ 40,909
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 374,999</b>
**Allowances based on % of Paving Construction Cost Subtotal			
<b>Paving and Allowance Subtotal:</b>		<b>\$</b>	<b>1,056,816</b>
<b>Construction Contingency:</b>		<b>20%</b>	<b>\$ 211,363</b>
<b>Mobilization</b>		<b>5%</b>	<b>\$ 52,841</b>
<b>Prep ROW</b>		<b>1%</b>	<b>\$ 10,568</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 1,332,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,332,000
Engineering/Survey/Testing:		16%	\$ 213,120
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 266,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,812,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No. <b>37</b>
Name:	LEONARD AVE (2)	<b>This project consists of the construction of a new six-lane divided arterial.</b>	
Limits:	1,565' N OF E WHITE ST to 930' N OF E WHITE ST		
Impact Fee Class:	Major Arterial		
Length (lf):	635		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	2,822	cy	\$ 16.00	\$ 45,156
201	8" Lime-Treated Subgrade	5,503	sy	\$ 20.00	\$ 110,067
301	8" Concrete Pavement	5,080	sy	\$ 100.00	\$ 508,000
401	6' Concrete Sidewalk	7,620	sf	\$ 10.00	\$ 76,200
501	Curb & Gutter	2,540	lf	\$ 40.00	\$ 101,600
601	Topsoil	2,540	sy	\$ 10.00	\$ 25,400
701	Turn Lanes	219	sy	\$ 120.00	\$ 26,266
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 892,688</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 26,781
√ Roadway Drainage	Standard Internal System	30%	\$ 267,806
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 44,634
√ Sewer	Minor Adjustments	5%	\$ 44,634
√ Landscaping and Irrigation		6%	\$ 53,561
√ Illumination	Standard Illumination System	6%	\$ 53,561
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 490,978</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 1,383,667</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 276,733</b>
		<b>Mobilization</b> 5%	<b>\$ 69,183</b>
		<b>Prep ROW</b> 1%	<b>\$ 13,837</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 1,744,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,744,000
Engineering/Survey/Testing:		16%	\$ 279,040
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 348,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,372,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	38
Name:	LEONARD AVE (3)	<b>This project consists of the construction of a new six-lane divided arterial.</b>		
Limits:	E WHITE ST to E FINLEY BLVD			
Impact Fee Class:	Major Arterial			
Length (lf):	3,735			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
101	Unclassified Roadway Excavation	16,600	cy	\$ 265,600
201	8" Lime-Treated Subgrade	32,370	sy	\$ 647,400
301	8" Concrete Pavement	29,880	sy	\$ 2,988,000
401	6' Concrete Sidewalk	44,820	sf	\$ 448,200
501	Curb & Gutter	14,940	lf	\$ 597,600
601	Topsoil	14,940	sy	\$ 149,400
701	Turn Lanes	1,287	sy	\$ 154,493
<b>Paving Construction Cost Subtotal:</b>				<b>\$ 5,250,693</b>
Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	None Anticipated	0%	\$ -	
√ Pavement Markings/Markers		3%	\$ 157,521	
√ Roadway Drainage	Standard Internal System	30%	\$ 1,575,208	
Special Drainage Structures	None Anticipated	-	\$ -	
√ Water	Minor Adjustments	5%	\$ 262,535	
√ Sewer	Minor Adjustments	5%	\$ 262,535	
√ Landscaping and Irrigation		6%	\$ 315,042	
√ Illumination	Standard Illumination System	6%	\$ 315,042	
Other:		\$0	\$ -	
<b>Allowance Subtotal:</b>				<b>\$ 2,887,881</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>				
<b>Paving and Allowance Subtotal:</b>				<b>\$ 8,138,574</b>
<b>Construction Contingency:</b>				<b>20% \$ 1,627,715</b>
<b>Mobilization:</b>				<b>5% \$ 406,929</b>
<b>Prep ROW:</b>				<b>1% \$ 81,386</b>
<b>Construction Cost TOTAL:</b>				<b>\$ 10,255,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,255,000
Engineering/Survey/Testing:		16%	\$ 1,640,800
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 2,051,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 13,947,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	LEONARD AVE (4)	<b>This project consists of the construction of the additional two lanes of the ultimate six-lane divided arterial.</b>	<b>39</b>
Limits:	E FINLEY BLVD to 3,415' S OF E FINLEY BLVD		
Impact Fee Class:	Major Arterial (1/3)		
Length (lf):	3,415		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Roadway Excavation	5,312	cy	\$ 16.00	\$ 84,996
207	8" Lime-Treated Subgrade	10,245	sy	\$ 20.00	\$ 204,900
307	8" Concrete Pavement	9,107	sy	\$ 100.00	\$ 910,667
407	6' Concrete Sidewalk	0	sf	\$ 10.00	\$ -
507	Curb & Gutter	6,830	lf	\$ 40.00	\$ 273,200
607	Topsoil	0	sy	\$ 10.00	\$ -
707	Turn Lanes	755	sy	\$ 120.00	\$ 90,549
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,564,311</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 78,216
√ Pavement Markings/Markers		3%	\$ 46,929
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 93,859
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 219,004</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 1,783,315</b>
		Construction Contingency: 20%	\$ 356,663
		Mobilization 5%	\$ 89,166
		Prep ROW 5%	\$ 89,166
<b>Construction Cost TOTAL:</b>			<b>\$ 2,319,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,319,000
Engineering/Survey/Testing:		16%	\$ 371,040
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,690,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	LEONARD AVE (5)	This project consists of the construction of the additional four lanes of the ultimate six-lane divided arterial.	40
Limits:	3,415' S OF E FINLEY BLVD to 1,135' N OF E FOSTER CROSSING RD		
Impact Fee Class:	Major Arterial (2/3)		
Length (lf):	675		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Roadway Excavation	2,025	cy	\$ 16.00	\$ 32,400
208	8" Lime-Treated Subgrade	3,938	sy	\$ 20.00	\$ 78,750
308	8" Concrete Pavement	3,600	sy	\$ 100.00	\$ 360,000
408	6' Concrete Sidewalk	4,050	sf	\$ 10.00	\$ 40,500
508	Curb & Gutter	2,025	lf	\$ 40.00	\$ 81,000
608	Topsoil	1,950	sy	\$ 10.00	\$ 19,500
708	Turn Lanes	211	sy	\$ 120.00	\$ 25,364
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 637,514</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 31,876
√ Pavement Markings/Markers		3%	\$ 19,125
Roadway Drainage	None Anticipated	0%	\$ -
Special Drainage Structures	None Anticipated	-	\$ -
Water	None Anticipated	0%	\$ -
Sewer	None Anticipated	0%	\$ -
√ Landscaping and Irrigation		6%	\$ 38,251
Illumination	None Anticipated	0%	\$ -
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 89,252</b>
**Allowances based on % of Paving Construction Cost Subtotal			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 726,766</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 145,353</b>
		<b>Mobilization</b> 5%	<b>\$ 36,338</b>
		<b>Prep ROW</b> 5%	<b>\$ 36,338</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 945,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 945,000
Engineering/Survey/Testing:		16%	\$ 151,200
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,096,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	LEONARD AVE (6)	<b>This project consists of widening the existing facility to a six-lane divided arterial.</b>	<b>41</b>
Limits:	1,135' N OF E FOSTER CROSSING RD to E FOSTER CROSSING RD		
Impact Fee Class:	Major Arterial		
Length (lf):	1,135		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	5,044	cy	\$ 16.00	\$ 80,711
201	8" Lime-Treated Subgrade	9,837	sy	\$ 20.00	\$ 196,733
301	8" Concrete Pavement	9,080	sy	\$ 100.00	\$ 908,000
401	6' Concrete Sidewalk	13,620	sf	\$ 10.00	\$ 136,200
501	Curb & Gutter	4,540	lf	\$ 40.00	\$ 181,600
601	Topsoil	4,540	sy	\$ 10.00	\$ 45,400
701	Turn Lanes	391	sy	\$ 120.00	\$ 46,948
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,595,592</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 79,780
√ Pavement Markings/Markers		3%	\$ 47,868
√ Roadway Drainage	Standard Internal System	30%	\$ 478,678
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 79,780
√ Sewer	Minor Adjustments	5%	\$ 79,780
√ Landscaping and Irrigation		6%	\$ 95,736
√ Illumination	Standard Illumination System	6%	\$ 95,736
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 957,355</b>

<b>Paving and Allowance Subtotal:</b>		<b>\$ 2,552,947</b>
<b>Construction Contingency:</b>	20%	\$ 510,589
<b>Mobilization</b>	5%	\$ 127,647
<b>Prep ROW</b>	5%	\$ 127,647
<b>Construction Cost TOTAL:</b>		<b>\$ 3,319,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,319,000
Engineering/Survey/Testing:		16%	\$ 531,040
ROW/Easement Acquisition:	Existing Alignment	10%	\$ 331,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,182,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	LEONARD AVE (7)	This project consists of the construction of a new six-lane divided arterial.	42
Limits:	E FOSTER CROSSING RD to OUTER LOOP		
Impact Fee Class:	Major Arterial		
Length (lf):	1,990		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Roadway Excavation	8,844	cy	\$ 16.00	\$ 141,511
201	8" Lime-Treated Subgrade	17,247	sy	\$ 20.00	\$ 344,933
301	8" Concrete Pavement	15,920	sy	\$ 100.00	\$ 1,592,000
401	6' Concrete Sidewalk	23,880	sf	\$ 10.00	\$ 238,800
501	Curb & Gutter	7,960	lf	\$ 40.00	\$ 318,400
601	Topsoil	7,960	sy	\$ 10.00	\$ 79,600
701	Turn Lanes	686	sy	\$ 120.00	\$ 82,314
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,797,558</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 83,927
√ Roadway Drainage	Standard Internal System	30%	\$ 839,267
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 139,878
√ Sewer	Minor Adjustments	5%	\$ 139,878
√ Landscaping and Irrigation		6%	\$ 167,853
√ Illumination	Standard Illumination System	6%	\$ 167,853
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 1,538,657</b>
<b>Paving and Allowance Subtotal:</b>			<b>\$ 4,336,215</b>
<b>Construction Contingency:</b>			<b>20% \$ 867,243</b>
<b>Mobilization</b>			<b>5% \$ 216,811</b>
<b>Prep ROW</b>			<b>1% \$ 43,362</b>
<b>Construction Cost TOTAL:</b>			<b>\$ 5,464,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,464,000
Engineering/Survey/Testing:		16%	\$ 874,240
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 1,092,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 7,431,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.
Name:	CR 419 (2)	This project consists of the construction of a new four-lane divided arterial.	43
Limits:	3,965' S OF E FINLEY BLVD to 5,485' S OF E FINLEY BLVD		
Impact Fee Class:	Minor Arterial		
Length (lf):	1,520		
Service Area(s):	Service Area 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	4,729	cy	\$ 16.00	\$ 75,662
202	8" Lime-Treated Subgrade	9,120	sy	\$ 20.00	\$ 182,400
302	8" Concrete Pavement	8,107	sy	\$ 100.00	\$ 810,667
402	6' Concrete Sidewalk	18,240	sf	\$ 10.00	\$ 182,400
502	Curb & Gutter	6,080	lf	\$ 40.00	\$ 243,200
602	Topsoil	5,067	sy	\$ 10.00	\$ 50,667
702	Turn Lanes	512	sy	\$ 120.00	\$ 61,491
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,606,486</b>

Major Construction Component Allowances**:			
Item Description	Notes	Allowance	Item Cost
Traffic Control	None Anticipated	0%	\$ -
√ Pavement Markings/Markers		3%	\$ 48,195
√ Roadway Drainage	Standard Internal System	30%	\$ 481,946
Special Drainage Structures	None Anticipated	-	\$ -
√ Water	Minor Adjustments	5%	\$ 80,324
√ Sewer	Minor Adjustments	5%	\$ 80,324
√ Landscaping and Irrigation		6%	\$ 96,389
√ Illumination	Standard Illumination System	6%	\$ 96,389
Other:		\$0	\$ -
<b>Allowance Subtotal:</b>			<b>\$ 883,568</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>			
		<b>Paving and Allowance Subtotal:</b>	<b>\$ 2,490,054</b>
		<b>Construction Contingency:</b> 20%	<b>\$ 498,011</b>
		<b>Mobilization:</b> 5%	<b>\$ 124,503</b>
		<b>Prep ROW:</b> 1%	<b>\$ 24,901</b>
		<b>Construction Cost TOTAL:</b>	<b>\$ 3,138,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,138,000
Engineering/Survey/Testing:		16%	\$ 502,080
ROW/Easement Acquisition:	New Roadway Alignment	20%	\$ 627,600
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,268,000</b>

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**City of Anna**  
**2022 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/28/2022

Project Information:		Description:	Project No.	44
Name:	CR 419 (3)	<b>This project consists of widening the existing facility to a four-lane divided arterial.</b>		
Limits:	1,030' N OF E FOSTER CROSSING RD to CR 417			
Impact Fee Class:	Minor Arterial			
Length (lf):	2,535			
Service Area(s):	Service Area 2			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Roadway Excavation	7,887	cy	\$ 16.00	\$ 126,187
202	8" Lime-Treated Subgrade	15,210	sy	\$ 20.00	\$ 304,200
302	8" Concrete Pavement	13,520	sy	\$ 100.00	\$ 1,352,000
402	6' Concrete Sidewalk	30,420	sf	\$ 10.00	\$ 304,200
502	Curb & Gutter	10,140	lf	\$ 40.00	\$ 405,600
602	Topsoil	8,450	sy	\$ 10.00	\$ 84,500
702	Turn Lanes	855	sy	\$ 120.00	\$ 102,552
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,679,239</b>

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	133,962
√ Pavement Markings/Markers		3%	\$	80,377
√ Roadway Drainage	Standard Internal System	30%	\$	803,772
√ Special Drainage Structures	Minor Stream Crossing (2)	-	\$	500,000
√ Water	Minor Adjustments	5%	\$	133,962
√ Sewer	Minor Adjustments	5%	\$	133,962
√ Landscaping and Irrigation		6%	\$	160,754
√ Illumination	Standard Illumination System	6%	\$	160,754
Other:		\$0	\$	-
			<b>Allowance Subtotal:</b>	<b>\$ 2,107,543</b>
**Allowances based on % of Paving Construction Cost Subtotal				
			<b>Paving and Allowance Subtotal:</b>	<b>\$ 4,786,782</b>
			<b>Construction Contingency:</b>	<b>20% \$ 957,356</b>
			<b>Mobilization</b>	<b>5% \$ 239,339</b>
			<b>Prep ROW</b>	<b>5% \$ 239,339</b>
			<b>Construction Cost TOTAL:</b>	<b>\$ 6,223,000</b>

Impact Fee Project Cost Summary				
Item Description	Notes:	Allowance	Item Cost	
Construction:		-	\$	6,223,000
Engineering/Survey/Testing:		16%	\$	995,680
ROW/Easement Acquisition:	Existing Alignment	10%	\$	622,300
			<b>Impact Fee Project Cost TOTAL:</b>	<b>\$ 7,841,000</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Anna.

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**City of Anna - 2022 Roadway Impact Fee Study**  
**Capital Improvements Plan Plan Units of Supply**

**Service Area 1**

6/23/2022

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME*	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LM	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1	CR 373	595' W OF N POWELL PKWY to N POWELL PKWY	0.11	4	Minor Arterial	92	50%	725	160	5	154	\$ 1,649,000	\$ 824,500
2	CR 371 (1)	245' W OF CR 368 to CENTRAL EXPRESSWAY SB	0.36	6	Major Arterial	New	100%	775	1,674	0	1,674	\$ 7,132,000	\$ 7,132,000
3	CR 371 (2)	CENTRAL EXPRESSWAY SB to 910' E OF CENTRAL EXPRESSWAY NB	0.30	6	Major Arterial	298	100%	775	1,395	89	1,306	\$ 7,680,000	\$ 7,980,000
4	CR 371 (3)	910' E OF CENTRAL EXPRESSWAY NB to 1,075' E OF CR 374	0.24	6	Major Arterial	New	100%	775	1,116	0	1,116	\$ 4,799,000	\$ 4,799,000
5	CR 371 (4)	595' W OF BRYANT FARM RD to BRYANT FARM RD	0.11	6	Major Arterial	New	100%	775	512	0	512	\$ 2,222,000	\$ 2,222,000
6	CR 371 (5)	BRYANT FARM RD to N POWELL PKWY	0.71	6	Major Arterial	124	100%	775	3,302	88	3,213	\$ 14,208,000	\$ 14,208,000
7	CR 370 (1)	5,795' W OF CR 368 to CR 368	1.10	6	Major Arterial	New	100%	775	5,115	0	5,115	\$ 21,639,000	\$ 21,639,000
8	CR 370 (2)	CR 368 to CENTRAL EXPRESSWAY SB	0.18	6	Major Arterial	119	100%	775	837	21	816	\$ 3,675,000	\$ 3,675,000
9	W ROSAMOND PKWY (1)	CENTRAL EXPRESSWAY NB to CR 374	0.22	6	Major Arterial	6	100%	775	1,023	1	1,022	\$ 4,201,000	\$ 4,201,000
10	W ROSAMOND PKWY (2)	CR 374 to 1,170' W OF W CROSSING BLVD	0.86	6	Major Arterial	New	100%	775	3,999	0	3,999	\$ 17,734,000	\$ 17,734,000
11	W ROSAMOND PKWY (3)	1,170' W OF W CROSSING BLVD to LANGDON DR	0.53	4	Major Arterial (2/3)	N/A	100%	775	1,843	0	1,843	\$ 5,317,000	\$ 5,317,000
12	W ROSAMOND PKWY (4)	LANGDON DR to 740' E OF LANGDON DR	0.14	2	Major Arterial (1/3)	N/A	100%	775	217	0	217	\$ 1,337,000	\$ 1,337,000
13	W ROSAMOND PKWY (5)	740' E OF LANGDON DR to N POWELL PKWY	0.24	4	Major Arterial (2/3)	N/A	100%	775	713	0	713	\$ 1,933,000	\$ 1,933,000
14	ROLLINS RD (1)	CR 374 to 615' W OF W CROSSING BLVD	1.01	3	Minor Collector	6	100%	525	1,591	6	1,585	\$ 11,510,000	\$ 11,510,000
15	ROLLINS RD (2)	615' W OF W CROSSING BLVD to W CROSSING BLVD	0.12	3	Minor Collector	New	100%	525	189	0	189	\$ 1,244,000	\$ 1,244,000
16	HACKBERRY DR (1)	CR 374 to 1,365' W OF N FERGUSON PKWY	0.54	4	Minor Arterial	New	100%	725	1,568	0	1,568	\$ 3,488,000	\$ 3,488,000
17	HACKBERRY DR (2)	1,365' W OF N FERGUSON PKWY to N FERGUSON PKWY	0.28	2	Minor Arterial (1/2)	N/A	100%	725	377	0	377	\$ 1,298,000	\$ 1,298,000
18	HACKBERRY LN (1)	840' W OF N JAMES ST to N POWELL PKWY	0.18	4	Minor Arterial	200	100%	725	522	36	486	\$ 2,688,000	\$ 2,688,000
19	W 2ND ST (1)	340' W OF N JAMES DR to N POWELL PKWY	0.13	2	Downtown Type B	50	100%	425	111	7	104	\$ 1,128,000	\$ 1,128,000
20	W 3RD ST (1)	HARPER DR to N POWELL PKWY	0.11	2	Downtown Type B	50	100%	425	94	6	88	\$ 990,000	\$ 990,000
21	HARPER DR	W 3RD ST to N JAMES DR	0.11	2	Downtown Type B	50	100%	425	94	6	88	\$ 956,000	\$ 956,000
22	W 5TH ST (1)	215' W OF S JAMES DR to S JAMES DR	0.04	2	Downtown Type B	New	100%	425	34	0	34	\$ 370,000	\$ 370,000
23	W 5TH ST (2)	S JAMES DR to S POWELL PKWY	0.06	2	Downtown Type B	50	100%	425	51	3	48	\$ 517,000	\$ 517,000
24	FM 455 (1)	1,330' W OF FM 3356 to 140' W OF CR 289	1.28	6	Major Arterial	186	100%	775	5,952	238	5,714	\$ 5,347,000	\$ 5,347,000
25	FM 455 (2)	80' S OF FM 290 to 180' N OF COWAN RD	0.83	6	Major Arterial	302	100%	775	3,860	251	3,609	\$ 3,437,000	\$ 3,437,000
26	FM 455 (3)	180' E OF COWAN RD to W WHITE ST	1.21	6	Major Arterial	302	100%	775	5,027	365	5,261	\$ 5,020,000	\$ 5,020,000
27	W WHITE ST (1)	FM 455 to CR 286	0.51	6	Major Arterial	302	100%	775	2,372	154	2,217	\$ 1,983,000	\$ 1,983,000
28	W WHITE ST (2)	CR 286 to CENTRAL EXPRESSWAY SB	0.27	2	Major Arterial (1/3)	N/A	100%	775	419	0	419	\$ 225,000	\$ 225,000
29	W WHITE ST (3)	CENTRAL EXPRESSWAY NB to S POWELL PKWY	1.88	2	Major Arterial (1/3)	N/A	100%	775	3,069	0	3,069	\$ 1,643,000	\$ 1,643,000
30	CR 284 (1)	2,860' W OF CR 288 to 415' E OF CR 288	0.62	4	Major Collector	New	100%	650	1,012	0	1,012	\$ 7,991,000	\$ 7,991,000
31	CR 284 (2)	1,905' W OF CENTRAL EXPRESSWAY SB to 810' W OF CENTRAL EXPRESSWAY S	0.25	4	Major Collector	3	50%	650	323	1	324	\$ 3,515,000	\$ 3,515,000
32	CR 284 (3)	810' W OF CENTRAL EXPRESSWAY SB to CENTRAL EXPRESSWAY NB	0.18	4	Major Collector	New	100%	650	488	0	488	\$ 4,832,000	\$ 4,832,000
33	TAYLOR BLVD (1)	CENTRAL EXPRESSWAY NB to 3,775' E OF CENTRAL EXPRESSWAY NB	0.71	4	Major Collector	202	50%	650	923	72	851	\$ 11,511,000	\$ 5,765,500
34	TAYLOR BLVD (2)	3,775' E OF CENTRAL EXPRESSWAY NB to 4,600' E OF CENTRAL EXPRESSWAY A	0.16	4	Major Collector	150	100%	650	418	24	392	\$ 1,979,000	\$ 1,979,000
35	TAYLOR BLVD (3)	4,600' E OF CENTRAL EXPRESSWAY NB to 4,825' E OF CENTRAL EXPRESSWAY A	0.04	4	Major Collector	150	50%	650	52	3	49	\$ 541,000	\$ 270,500
36	W FINLEY BLVD (1)	S FERGUSON PKWY to 2,700' E OF S FERGUSON PKWY	0.51	4	Minor Collector (4D)	N/A	50%	725	740	0	740	\$ 7,581,000	\$ 3,790,500
37	W FINLEY BLVD (2)	2,700' E OF S FERGUSON PKWY to SILVER LEAF LN	0.08	2	Minor Collector (4D) (1/2)	N/A	100%	725	116	0	116	\$ 405,000	\$ 405,000
38	W FINLEY BLVD (3)	SILVER LEAF LN to CR 423	0.30	4	Minor Collector (4D)	N/A	100%	725	870	0	870	\$ 4,521,000	\$ 4,521,000
39	W FINLEY BLVD (4)	CR 423 to S POWELL PKWY	0.15	3	Minor Collector	3	100%	525	238	0	238	\$ 1,547,000	\$ 1,547,000
40	W FOSTER CROSSING RD (1)	3,740' W OF S FERGUSON PKWY to 1,780' W OF S FERGUSON PKWY	0.37	4	Major Collector	269	100%	650	962	100	862	\$ 6,339,000	\$ 6,339,000
41	W FOSTER CROSSING RD (2)	1,780' W OF S FERGUSON PKWY to S FERGUSON PKWY	0.34	4	Major Collector	269	50%	650	442	46	396	\$ 4,270,000	\$ 2,135,000
42	W FOSTER CROSSING RD (3)	1,095' E OF S FERGUSON PKWY to ASPEN DR	0.38	2	Major Collector (1/2)	N/A	50%	650	247	0	247	\$ 1,793,000	\$ 896,500
43	W FOSTER CROSSING RD (4)	ASPEN DR to HIGHLAND RD	0.19	4	Major Collector	269	50%	650	247	26	221	\$ 2,423,000	\$ 1,211,500
44	W FOSTER CROSSING RD (5)	296' W OF S POWELL PKWY to S POWELL PKWY	0.08	4	Major Collector	269	100%	650	156	16	140	\$ 708,000	\$ 708,000
45	CR 368 (1)	CR 371 to 195' S OF CR 371	0.03	4	Minor Arterial	New	100%	725	87	0	87	\$ 435,000	\$ 435,000
46	CR 368 (2)	2,865' N OF FAIRWAY LANE to FAIRWAY LANE	0.54	4	Minor Arterial	New	100%	725	1,568	0	1,568	\$ 8,043,000	\$ 8,043,000
47	CR 368 (3)	FAIRWAY LANE to 925' S OF FAIRWAY LANE	0.12	4	Minor Arterial	119	100%	725	348	14	334	\$ 1,731,000	\$ 1,731,000
48	CR 368 (4)	925' S OF FAIRWAY LANE to 1,150' N OF CR 370	0.19	4	Minor Arterial	119	50%	725	332	10	222	\$ 2,300,000	\$ 1,150,000
49	CR 368 (5)	1,150' N OF CR 370 to 740' S OF CR 370	0.36	4	Minor Arterial	119	100%	725	1,044	43	1,001	\$ 5,645,000	\$ 3,645,000
50	CR 368 (6)	740' S OF CR 370 to 1,855' S OF CR 370	0.21	4	Minor Arterial	New	50%	725	305	0	305	\$ 3,090,000	\$ 1,645,000
51	CR 368 (7)	1,855' S OF CR 370 to 4,020' N OF W WHITE ST	0.20	4	Minor Arterial	New	100%	725	580	0	580	\$ 2,978,000	\$ 2,978,000
52	CR 368 (8)	4,020' N OF W WHITE ST to 580' N OF W WHITE ST	0.59	2	Minor Arterial (1/2)	N/A	100%	725	856	0	856	\$ 2,894,000	\$ 2,894,000
53	CR 286 (1)	W WHITE ST to 2,800' S OF W WHITE ST	0.53	4	Minor Arterial	10	100%	725	1,537	5	1,532	\$ 7,757,000	\$ 7,757,000
54	CR 286 (2)	2,800' S OF W WHITE ST to 3,800' S OF W WHITE ST	0.19	4	Minor Arterial	New	100%	725	551	0	551	\$ 2,808,000	\$ 2,808,000
55	CR 286 (3)	3,800' S OF W WHITE ST to 560' S OF CR 284	0.28	4	Minor Arterial	New	100%	725	812	0	812	\$ 4,085,000	\$ 4,085,000
56	CR 374 (1)	900' N OF CR 371 to W ROSAMOND PKWY	1.52	4	Major Collector	New	100%	650	3,952	0	3,952	\$ 19,996,000	\$ 19,996,000
57	CR 374 (2)	W ROSAMOND PKWY to 240' S OF W ROSAMOND PKWY	0.05	4	Major Collector	6	100%	650	130	0	130	\$ 578,000	\$ 578,000
58	CR 374 (3)	240' S OF W ROSAMOND PKWY to 525' N OF ROLLINS RD	0.06	4	Major Collector	6	50%	650	104	0	104	\$ 1,032,000	\$ 516,000
59	CR 374 (4)	525' N OF ROLLINS RD to ROLLINS RD	0.10	4	Major Collector	6	100%	650	260	1	259	\$ 1,260,000	\$ 1,260,000
60	CR 374 (5)	ROLLINS RD to HACKBERRY DR	0.38	4	Major Collector	New	100%	650	988	0	988	\$ 4,899,000	\$ 4,899,000
61	N FERGUSON PKWY (1)	CR 371 to ROLLINS RD	1.11	6	Major Arterial	New	100%	775	5,182	0	5,182	\$ 22,328,000	\$ 22,328,000
62	N FERGUSON PKWY (2)	ROLLINS RD to HACKBERRY DR	0.52	4	Major Arterial (2/3)	N/A	100%	775	1,612	0	1,612	\$ 4,482,000	\$ 4,482,000
63	N FERGUSON PKWY (3)	HACKBERRY DR to W WHITE ST	0.50	2	Major Arterial (1/3)	N/A	100%	775	775	0	775	\$ 2,087,000	\$ 2,087,000
64	S FERGUSON PKWY (1)	W WHITE ST to 2,440' S OF W WHITE ST	0.48	2	Major Arterial (1/3)	N/A	100%	775	713	0	713	\$ 1,922,000	\$ 1,922,000
65	S FERGUSON PKWY (2)	2,440' S OF W WHITE ST to 180' N OF TAYLOR BLVD	0.28	4	Major Arterial (2/3)	N/A	100%	775	806	0	806	\$ 2,209,000	\$ 2,209,000
66	S FERGUSON PKWY (3)	W FINLEY BLVD to 1,945' S OF W FINLEY BLVD	0.24	6	Major Arterial	New	50%	775	558	0	558	\$ 4,650,000	\$ 2,325,000
67	S FERGUSON PKWY (4)	1,245' S OF FINLEY BLVD to 425' N OF W FOSTER CROSSING RD	0.08	4	Major Arterial	New	100%	775	884	0	884	\$ 3,828,000	\$ 3,828,000
68	S FERGUSON PKWY (5)	425' N OF W FOSTER CROSSING RD to W FOSTER CROSSING RD	0.08	4	Major Arterial	New	50%	775	186	0	186	\$ 1,587,000	\$ 793,500
69	W CROSSING BLVD (1)	2,660' N OF CR 371 to 1,970' N OF W ROSAMOND PKWY	0.89	4	Major Collector	New	100%	650	2,314	0	2,314	\$ 11,485,000	\$ 11,485,000
70	W CROSSING BLVD (2)	1,970' N OF W ROSAMOND PKWY to 1,530' N OF W ROSAMOND PKWY	0.08	2	Major Collector (4D) (1/2)	N/A	100%	725	116	0	116	\$ 419,000	\$ 419,000
<b>SUBTOTAL</b>									<b>81,017</b>	<b>1,636</b>	<b>80,281</b>	<b>\$ 325,106,000</b>	<b>\$ 302,133,600</b>

\*Note: If existing data unavailable for widening projects, the following assumptions were made:  
Downtown Streets: 25 vphpt

Roadway Impact Fee Study Cost \$ 28,167  
**TOTAL COST IN SERVICE AREA 1 \$ 302,163,167**

City of Anna - 2022 Roadway Impact Fee Study

Capital Improvements Plan Plan Units of Supply

6/28/2022

Service Area 2

Project ID #	ROADWAY	LIMITS	LENGTH (M)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME*	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1	CR 1106 (1)	N POWELL PKWY to 1,080' E OF N POWELL PKWY	0.30	4	Minor Arterial	152	50%	725	290	15	275	\$ 3,812,000	\$ 1,908,000
2	CR 1106 (2)	1,080' E OF N POWELL PKWY to 3,505' E OF N POWELL PKWY	0.45	2	Minor Arterial (1/2)	N/A	50%	725	334	0	334	\$ 3,059,000	\$ 1,529,500
3	CR 376 (1)	N POWELL PKWY to 1,575' E OF N POWELL PKWY	0.32	4	Major Arterial (2/3)	N/A	100%	775	992	0	992	\$ 3,474,000	\$ 3,474,000
4	CR 376 (2)	1,575' E OF N POWELL PKWY to CR 427	0.29	6	Major Arterial	New	100%	775	1,349	0	1,349	\$ 6,558,000	\$ 6,558,000
5	CR 376 (3)	CR 427 to 575' E OF CR 427	0.11	6	Major Arterial	New	100%	775	512	3	509	\$ 2,119,000	\$ 2,119,000
6	E ROSAMOND PKWY (1)	N POWELL PKWY to 295' E OF N POWELL PKWY	0.08	6	Major Arterial	148	100%	775	279	9	270	\$ 1,908,000	\$ 1,908,000
7	E ROSAMOND PKWY (2)	520' E OF N POWELL PKWY to 2,735' E OF N POWELL PKWY	0.38	6	Major Arterial	New	100%	775	1,674	0	1,674	\$ 7,151,000	\$ 7,151,000
8	HOUSTON ST (1)	CR 425 to 5,850' E OF CR 425	1.11	6	Major Arterial	82	100%	775	5,182	91	5,070	\$ 4,195,000	\$ 4,185,000
9	HOUSTON ST (2)	1,970' W OF CR 477 to 2,475' E OF CR 477	0.84	6	Major Arterial	90	100%	775	3,906	78	3,830	\$ 3,317,000	\$ 3,317,000
10	HACKBERRY LN (2)	N POWELL PKWY to N RIGGINS ST	0.12	4	Minor Arterial	200	100%	725	348	24	324	\$ 1,773,000	\$ 1,773,000
11	HACKBERRY LN (3)	N RIGGINS ST to N SHERLEY AVE	0.05	4	Minor Arterial	New	100%	725	145	0	145	\$ 1,545,000	\$ 1,545,000
12	HACKBERRY LN (4)	N SHERLEY AVE to 140' E OF N SHERLEY AVE	0.03	4	Minor Arterial	112	100%	725	67	3	64	\$ 71,000	\$ 71,000
13	HACKBERRY LN (5)	140' E OF N SHERLEY AVE to 2,215' E OF N SHERLEY AVE	0.39	4	Minor Arterial	New	100%	725	1,131	0	1,131	\$ 5,826,000	\$ 5,826,000
14	W 2ND ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	2	Downtown Type B	50	100%	425	102	6	96	\$ 1,058,000	\$ 1,058,000
15	W 3RD ST (2)	N POWELL PKWY to N RIGGINS ST	0.12	2	Downtown Type B	50	100%	425	102	6	96	\$ 1,067,000	\$ 1,067,000
16	W 5TH ST (3)	S POWELL PKWY to N RIGGINS ST	0.12	2	Downtown Type B	50	100%	425	102	6	96	\$ 1,092,000	\$ 1,092,000
17	W 7TH ST	S POWELL PKWY to S RIGGINS ST	0.14	2	Downtown Type B	14	100%	425	119	2	117	\$ 1,227,000	\$ 1,227,000
18	W 8TH ST	S INTERURBAN ST to S RIGGINS ST	0.07	2	Downtown Type B	50	100%	425	60	4	56	\$ 653,000	\$ 653,000
19	W WHITE ST (4)	S POWELL PKWY to S INTERURBAN ST	0.07	6	Major Arterial	516	100%	775	328	36	289	\$ 241,000	\$ 241,000
20	E WHITE ST (1)	S INTERURBAN ST to 1,540' E OF HOUSTON TO E WHITE CONNECTOR	1.52	6	Major Arterial	550	100%	775	2,068	845	623	\$ 9,907,000	\$ 9,907,000
21	CR 419 (1)	525' S OF E WHITE ST to 745' N OF E FINLEY BLVD	0.46	4	Minor Arterial	250	100%	725	1,334	129	1,205	\$ 1,239,000	\$ 1,239,000
22	E FINLEY BLVD (1)	830' E OF CR 419 to E WHITE ST	1.05	4	Major Collector	290	100%	650	2,730	294	2,436	\$ 2,739,000	\$ 2,739,000
23	E WHITE ST (2)	E FINLEY BLVD to SAM RAYBURN MEMORIAL HWY	1.09	6	Major Arterial	280	100%	775	5,069	305	4,763	\$ 4,189,000	\$ 4,189,000
24	E FINLEY BLVD (2)	345' E OF S POWELL PKWY to SHARP ST	0.16	2	Major Collector (4D) (1/2)	N/A	100%	725	232	0	232	\$ 813,000	\$ 813,000
25	E FINLEY BLVD (3)	LEONARD AVE to 3,410' E OF LEONARD AVE	0.65	4	Major Collector	New	100%	650	1,690	0	1,690	\$ 8,289,000	\$ 8,289,000
26	E FOSTER CROSSING RD (1)	S POWELL PKWY to 260' E OF S POWELL PKWY	0.05	4	Major Collector	24	50%	650	65	1	64	\$ 1,443,000	\$ 721,500
27	E FOSTER CROSSING RD (2)	260' E OF S POWELL PKWY to LEONARD AVE	0.76	4	Major Collector	24	100%	650	1,976	18	1,958	\$ 10,484,000	\$ 10,484,000
28	E FOSTER CROSSING RD (3)	LEONARD AVE to 2,135' E OF LEONARD AVE	0.40	4	Major Collector	New	100%	650	1,040	0	1,040	\$ 5,190,000	\$ 5,190,000
29	E FOSTER CROSSING RD (4)	375' W OF OUTER LOOP to CR 419	0.69	4	Major Collector	New	100%	650	1,794	0	1,794	\$ 8,897,000	\$ 8,897,000
30	CR 417	CR 418 to CR 419	0.65	6	Major Arterial	16	50%	775	1,511	6	1,505	\$ 13,139,000	\$ 6,669,500
31	E FOSTER CROSSING RD TO OUTER LOOP	E FOSTER CROSSING RD to OUTER LOOP	0.38	3	Minor Collector	New	100%	525	507	0	507	\$ 3,815,000	\$ 3,815,000
32	S VAIL ST	E FOSTER CROSSING RD to OUTER LOOP	0.34	3	Minor Collector	New	100%	525	536	0	536	\$ 3,603,000	\$ 3,603,000
33	CR 427	880' N OF CR 376 to CR 376	0.17	3	Minor Collector	24	100%	525	268	4	264	\$ 1,758,000	\$ 1,758,000
34	CR 425	1,540' N OF E ROSAMOND PKWY to E ROSAMOND PKWY	0.29	6	Major Arterial	40	100%	775	1,349	12	1,337	\$ 6,085,000	\$ 6,085,000
35	HOUSTON ST (3)	E ROSAMOND PKWY to LEONARD AVE	0.27	6	Major Arterial	112	100%	775	1,256	30	1,225	\$ 957,000	\$ 957,000
36	LEONARD AVE (1)	HOUSTON ST to 485' S OF HOUSTON ST	0.09	6	Major Arterial	New	100%	775	419	0	419	\$ 1,812,000	\$ 1,812,000
37	LEONARD AVE (2)	1,565' N OF E WHITE ST to 930' N OF E WHITE ST	0.12	6	Major Arterial	New	50%	775	279	0	279	\$ 2,372,000	\$ 1,188,000
38	LEONARD AVE (3)	E WHITE ST to E FINLEY BLVD	0.71	6	Major Arterial	New	100%	775	3,302	0	3,302	\$ 13,947,000	\$ 13,947,000
39	LEONARD AVE (4)	E FINLEY BLVD to 3,415' S OF E FINLEY BLVD	0.65	2	Major Arterial (1/3)	N/A	100%	775	1,008	0	1,008	\$ 2,690,000	\$ 2,690,000
40	LEONARD AVE (5)	3,415' S OF E FINLEY BLVD to 1,135' N OF E FOSTER CROSSING RD	0.13	4	Major Arterial (2/3)	N/A	100%	775	403	0	403	\$ 1,096,000	\$ 1,096,000
41	LEONARD AVE (6)	1,135' N OF E FOSTER CROSSING RD to E FOSTER CROSSING RD	0.21	6	Major Arterial	18	50%	775	489	2	486	\$ 4,182,000	\$ 2,081,000
42	LEONARD AVE (7)	E FOSTER CROSSING RD to OUTER LOOP	0.38	6	Major Arterial	New	100%	775	1,767	0	1,767	\$ 7,431,000	\$ 7,431,000
43	CR 419 (2)	3,065' S OF E FINLEY BLVD to 5,485' S OF E FINLEY BLVD	0.29	4	Minor Arterial	New	100%	725	841	0	841	\$ 4,268,000	\$ 4,268,000
44	CR 419 (3)	1,030' N OF E FOSTER CROSSING RD to CR 417	0.48	4	Minor Arterial	34	50%	725	696	8	688	\$ 7,841,000	\$ 3,920,500
<b>SUBTOTAL</b>											<b>\$ 173,430,000</b>	<b>\$ 155,508,000</b>	

\*Note: If existing data unavailable for widening projects, the following assumptions were made:  
Downtown Streets: 25 vphpl

Roadway Impact Fee Study Cost \$ 28,187  
TOTAL COST IN SERVICE AREA 2 \$ 155,534,167

**Appendix C – Existing Roadway Facilities Inventory**

City of Anna - 2022 Roadway Impact Fee Study  
Existing Roadway Facilities Inventory

6/23/2021

Service Area 1

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXISTING LANES		EXISTING SECTION	PM PEAK HOUR VOL	%M SERVICE AREA	VEH-MI CAPACITY		VEH-MI SUPPLY		VEH-MI DEMAND		EXCESS CAPACITY		DEFICIENCIES					
					NB/EB	SB/WD				PK-HR	PK-HR	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
CR 284	1,805 W OF CENTRAL EXPRESSWAY SB	610 W OF CENTRAL EXPRESSWAY SB	1293	0.24	1	1	2U	3	50%	425	425	52	52	0	0	0	0	0	0	0	0		
CR 286	W WHITE ST	2,800 S OF W WHITE ST	2800	0.53	1	1	2U	5	100%	425	425	225	225	3	3	223	223	0	0	0	0		
CR 368	FAIRWAY LANE	625 S OF FAIRWAY LANE	627	0.12	1	1	2U	69	100%	425	425	50	50	6	6	42	42	0	0	0	0		
CR 368	1,150' N OF CR 370	CR 370	1152	0.22	1	1	2U	69	100%	425	425	93	93	13	13	78	78	0	0	0	0		
CR 368	625 S OF FAIRWAY LANE	CR 370	832	0.16	1	1	2U	69	100%	425	425	33	33	5	5	28	28	0	0	0	0		
CR 368	CR 370	740 S OF CR 370	740	0.14	1	1	2U	0	100%	425	425	60	60	0	0	60	60	0	0	0	0		
CR 368	740 S OF CR 370	1,855 S OF CR 370	1115	0.21	1	1	2U	0	50%	425	425	45	45	0	0	45	45	0	0	0	0		
CR 368	350' N OF W WHITE ST	W WHITE ST	678	0.17	2	2	4D	46	27	100%	725	725	241	241	8	8	234	237	0	0	0	0	
CR 368	4,020' N OF W WHITE ST	350' N OF W WHITE ST	3140	0.59	1	1	2U	7	11	100%	425	425	253	253	4	4	249	249	0	0	0	0	
CR 370	CR 368	CENTRAL EXPRESSWAY SB	971	0.18	1	1	2U	50	89	100%	425	425	78	78	9	9	13	69	65	0	0	0	
CR 370	CENTRAL EXPRESSWAY SB	US 75	298	0.06	1	1	2D	50	69	100%	525	525	30	30	3	3	4	27	25	0	0	0	
CR 370	US 75	CENTRAL EXPRESSWAY NB	230	0.04	1	1	2D	50	69	100%	525	525	23	23	2	2	3	21	20	0	0	0	
CR 371	W CROSSING BLVD	N POWELL PKWY	2902	0.55	1	1	2U	82	82	100%	425	425	234	234	34	34	200	200	0	0	0	0	
CR 371	CENTRAL EXPRESSWAY SB	US 75	352	0.07	1	1	2U	63	83	100%	425	425	31	31	6	6	5	26	20	0	0	0	
CR 371	CENTRAL EXPRESSWAY NB	910' E OF CENTRAL EXPRESSWAY NB	911	0.17	1	1	2U	149	149	100%	425	425	73	73	25	25	26	48	48	0	0	0	
CR 371	US 75	CENTRAL EXPRESSWAY NB	319	0.06	1	1	2U	83	83	100%	425	425	26	26	4	4	22	22	0	0	0	0	
CR 371	US 75	W CROSSING BLVD	615	0.16	1	1	2U	62	62	100%	425	425	68	68	10	10	66	66	0	0	0	0	
CR 371	US 75	N POWELL PKWY	594	0.11	1	1	2U	43	43	100%	425	425	24	24	3	3	21	21	0	0	0	0	
CR 373	525' W OF N POWELL PKWY	N POWELL PKWY	428	0.08	1	1	2U	3	3	50%	425	425	17	17	0	0	17	17	0	0	0	0	
CR 374	525' N OF ROLLINS RD	525' N OF ROLLINS RD	523	0.10	1	1	2U	3	3	100%	425	425	42	42	0	0	42	42	0	0	0	0	
CR 374	W ROSAMOND PKWY	240' S OF W ROSAMOND PKWY	239	0.05	1	1	2U	3	3	100%	425	425	19	19	0	0	19	19	0	0	0	0	
FM 3358	307 N OF FM 455	FM 455	32	0.01	1	1	2U	48	48	100%	425	425	3	3	0	0	2	2	0	0	0	0	
FM 455	807 S OF FM 290	180' N OF COWAN RD	4401	0.83	1	1	2U	151	151	100%	425	425	354	354	126	126	228	228	0	0	0	0	
FM 455	1807 E OF COWAN RD	W WHITE ST	8398	1.21	1	1	2U	151	151	100%	425	425	615	615	183	183	332	332	0	0	0	0	
FM 455	FM 3358	140' W OF CR 289	9440	1.03	1	1	2U	90	90	100%	425	425	438	438	93	93	345	345	0	0	0	0	
FM 455	FM 3358	FM 3358	1530	0.25	1	1	2U	83	83	100%	425	425	107	107	23	23	84	84	0	0	0	0	
HACKBERRY DR	W CROSSING BLVD	640' W OF N JAMES ST	2118	0.40	2	2	4D	40	58	100%	725	725	681	681	18	18	562	567	0	0	0	0	
HACKBERRY DR	CENTRAL EXPRESSWAY NB	CR 374	1128	0.21	2	2	4D	100	100	100%	725	725	310	310	21	21	288	288	0	0	0	0	
HACKBERRY DR	N FERUGSON PKWY	BANHURST DR	1441	0.27	1	1	2U	100	100	100%	425	425	116	116	27	27	69	69	0	0	0	0	
HACKBERRY DR	1,365' W OF N FERUGSON PKWY	N FERUGSON PKWY	1365	0.26	1	1	2U	100	100	100%	425	425	110	110	28	28	84	84	0	0	0	0	
HACKBERRY DR	BANHURST DR	W CROSSING BLVD	710	0.13	2	2	4D	100	100	100%	725	725	185	185	13	13	182	182	0	0	0	0	
HACKBERRY LN	N JAMES ST	N POWELL PKWY	328	0.06	1	1	2U	100	100	100%	425	425	26	26	6	6	20	20	0	0	0	0	
HACKBERRY LN	640' W OF N JAMES ST	N JAMES ST	642	0.12	1	1	2U	45	58	100%	425	425	52	52	8	8	48	48	0	0	0	0	
HARPER DR	W 3RD ST	N JAMES DR	507	0.11	1	1	2U	25	25	100%	425	425	46	46	3	3	43	43	0	0	0	0	
N FERUGSON PKWY	HACKBERRY DR	W WHITE ST	2649	0.50	2	2	4D	100	100	100%	725	725	727	727	20	20	677	677	0	0	0	0	
N JAMES DR	W 3RD ST	W 4TH ST	335	0.06	1	1	2U	25	25	100%	425	425	27	27	2	2	25	25	0	0	0	0	
N JAMES DR	HACKBERRY LN	W 1ST ST	218	0.04	1	1	2U	25	25	100%	425	425	16	16	1	1	17	17	0	0	0	0	
N JAMES DR	W 1ST ST	W 2ND ST	335	0.06	1	1	2U	25	25	100%	425	425	27	27	2	2	25	25	0	0	0	0	
N JAMES DR	W 2ND ST	W 3RD ST	327	0.06	1	1	2U	25	25	100%	425	425	28	28	2	2	25	25	0	0	0	0	
N POWELL PKWY	CR 373	CR 371	5140	0.97	1	1	2U	220	220	60%	425	425	207	207	107	107	100	100	0	0	0	0	
N POWELL PKWY	W ROSAMOND PKWY	HACKBERRY LN	4354	0.82	1	1	2U	621	410	50%	425	425	175	175	256	163	-81	8	81	0	0	0	
N POWELL PKWY	CR 371	W ROSAMOND PKWY	4050	0.77	1	1	2U	538	369	50%	425	425	183	183	208	149	-43	14	43	0	0	0	
N POWELL PKWY	HACKBERRY LN	W 1ST ST	228	0.05	1	1	2U	498	498	50%	425	425	10	10	11	11	-2	-2	2	2	0	0	
N POWELL PKWY	W 1ST ST	W 2ND ST	525	0.09	1	1	2U	498	498	50%	425	425	13	13	16	16	-2	-2	2	2	0	0	
N POWELL PKWY	W 2ND ST	W 3RD ST	531	0.06	1	1	2U	498	498	50%	425	425	13	13	16	16	-2	-2	2	2	0	0	
N POWELL PKWY	W 3RD ST	W 4TH ST	535	0.06	1	1	2U	441	441	50%	425	425	13	13	14	14	-1	-1	1	1	0	0	
N THROCKMORTON BLVD	HACKBERRY DR	S THROCKMORTON BLVD	914	0.17	2	2	4U	100	100	100%	650	650	225	225	17	17	208	208	0	0	0	0	
ROLLINS RD	CR 374	N FERUGSON PKWY	2996	0.57	1	1	2U	3	3	100%	425	425	241	241	2	2	239	239	0	0	0	0	
ROLLINS RD	N FERUGSON PKWY	915' W OF W CROSSING BLVD	2359	0.45	1	1	2U	3	3	100%	425	425	100	100	1	1	189	189	0	0	0	0	
S FERUGSON PKWY	W WHITE ST	2,440' S OF W WHITE ST	2439	0.48	2	2	4D	101	101	100%	725	725	970	970	47	47	623	623	0	0	0	0	
S FERUGSON PKWY	453' N OF TAYLOR BLVD	190' N OF TAYLOR BLVD	273	0.25	1	1	2U	101	101	100%	425	425	22	22	8	8	17	17	0	0	0	0	
S FERUGSON PKWY	593' N OF TAYLOR BLVD	483' N OF TAYLOR BLVD	102	0.22	1	1	2U	101	101	100%	425	425	11	11	3	3	8	8	0	0	0	0	
S FERUGSON PKWY	2,440' S OF W WHITE ST	539' N OF TAYLOR BLVD	955	0.18	1	1	2U	101	101	100%	425	425	77	77	19	19	59	59	0	0	0	0	
S JAMES DR	W 4TH ST	W 5TH ST	303	0.06	1	1	2U	25	25	100%	425	425	24	24	1	1	23	23	0	0	0	0	
S POWELL PKWY	W WHITE ST	W FINLEY BLVD	6024	1.14	1	1	2U	424	424	60%	425	425	242	242	242	242	1	1	23	23	0	0	
S POWELL PKWY	W FINLEY BLVD	W FOSTER CROSSING RD	2806	0.53	1	1	2U	627	526	50%	425	425	113	113	167	140	-54	-27	54	27	0	0	
S POWELL PKWY	W 4TH ST	W 5TH ST	516	0.08	1	1	2U	459	459	50%	425	425	13	13	14	14	-1	-1	1	1	0	0	
S POWELL PKWY	W 5TH ST	W 7TH ST	649	0.12	1	1	2U	459	459	50%	425	425	26	26	28	28	-2	-2	2	2</			

City of Anna - 2022 Roadway Impact Fee Study  
Existing Roadway Facilities Inventory

Service Area 2

6/23/2022

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (m)	EXISTING LANES		EXISTING SECTION		PM PEAK HOUR VOL	% IN SERVICE AREA	VEH/MI CAPACITY		VEH/MI SUPPLY		VEH/MI DEMAND		EXCESS CAPACITY		EXISTING DEFICIENCIES	
					NB/EB	SB/WB	NB/EB	SB/WB			PK/HR	PER LN	TOTAL	TOTAL	TOTAL	TOTAL	VEH/MI	VEH/MI		
																			NB/EB	SB/WB
4TH ST	N SHERLEY AVE	287' E OF N SHERLEY AVE	281	0.05	1	1	2U	25	25	100%	425	425	23	23	1	1	21	21		
4TH ST	N RIGGINS ST	N SHERLEY AVE	163	0.03	1	1	2U	59	59	100%	425	425	15	15	2	2	13	13		
CR 1108	1.082' E OF N POWELL PKWY	3.505' E OF N POWELL PKWY	2425	0.46	1	1	2U	78	78	50%	425	425	58	58	17	17	60	60		
CR 1108	N POWELL PKWY	1.082' E OF N POWELL PKWY	1080	0.20	1	1	2U	78	78	50%	425	425	43	43	8	8	36	36		
CR 378	N POWELL PKWY	1.875' E OF N POWELL PKWY	1874	0.32	1	1	2U	149	149	100%	425	425	135	135	47	47	88	88		
CR 378	CR 427	575' E OF CR 378	573	0.11	1	1	2U	12	12	100%	425	425	46	46	1	1	45	45		
CR 417	CR 418	CR 418	3456	0.65	1	1	2U	9	9	50%	425	425	139	139	3	3	136	136		
CR 419	E FOSTER CROSSING RD	CR 417	1505	0.29	1	1	2U	17	17	50%	425	425	61	61	2	2	58	58		
CR 419	1.030' N OF E FOSTER CROSSING RD	E FOSTER CROSSING RD	1032	0.20	1	1	2U	17	17	50%	425	425	42	42	2	2	40	40		
CR 419	595' S OF E WHITE ST	745' N OF E FINLEY BLVD	2432	0.48	1	1	2U	140	140	100%	425	425	196	196	64	64	131	131		
CR 425	1.540' N OF E ROSAMOND PKWY	E ROSAMOND PKWY	1540	0.29	1	1	2U	20	20	100%	425	425	124	124	9	9	6	6	116	116
CR 427	580' N OF CR 378	CR 378	582	0.17	1	1	2U	12	12	100%	425	425	71	71	2	2	63	63		
CR 478	960' W OF HOUSTON ST	HOUSTON ST	961	0.18	1	1	2U	2	2	100%	425	425	77	77	0	0	77	77		
CR 477	HOUSTON ST	65' S OF HOUSTON ST	63	0.01	1	1	2U	7	7	100%	425	425	5	5	0	0	5	5		
CR 513	SAM RAYBURN MEMORIAL HWY	HOUSTON ST	1405	0.27	1	1	2U	6	6	100%	425	425	113	113	1	1	112	112		
CR 513	HOUSTON ST	100' E OF HOUSTON ST	101	0.02	1	1	2U	30	30	100%	425	425	8	8	1	1	6	6		
CR 513	100' E OF HOUSTON ST	375' E OF HOUSTON ST	274	0.05	1	1	2U	30	30	50%	425	425	11	11	1	1	10	10		
E FINLEY BLVD	SHARP ST	1.865' W OF LEONARD AVE	2008	0.38	1	1	4D	335	268	100%	425	725	278	278	127	102	148	174		
E FINLEY BLVD	100' E OF CR 419	E WHITE ST	6520	1.05	1	1	2U	140	140	100%	425	425	444	444	148	148	298	298		
E FINLEY BLVD	1.865' W OF LEONARD AVE	LEONARD AVE	1866	0.35	2	2	4D	335	268	100%	725	725	512	512	118	95	354	418		
E FINLEY BLVD	N POWELL PKWY	345' E OF S POWELL PKWY	346	0.07	2	2	4D	335	268	100%	725	725	65	65	22	18	73	77		
E FINLEY BLVD	345' E OF S POWELL PKWY	SHARP ST	855	0.16	1	1	2U	335	268	100%	425	425	69	69	54	43	15	25		
E FOSTER CROSSING RD	S VAIL ST	LEONARD AVE	2676	0.51	1	1	2U	12	12	100%	425	425	216	216	6	6	209	209		
E FOSTER CROSSING RD	S POWELL PKWY	260' E OF S POWELL PKWY	262	0.05	1	1	2U	12	12	50%	425	425	11	11	0	0	10	10		
E FOSTER CROSSING RD	260' E OF S POWELL PKWY	E FOSTER CROSSING TO OUTER LOOP	381	0.07	1	1	2U	12	12	100%	425	425	31	31	1	1	30	30		
E FOSTER CROSSING RD	E FOSTER CROSSING TO OUTER LOOP	S VAIL ST	973	0.18	1	1	2U	12	12	100%	425	425	78	78	2	2	76	76		
E ROSAMOND PKWY	N POWELL PKWY	295' E OF N POWELL PKWY	298	0.06	1	1	2U	88	88	100%	425	425	24	24	5	3	19	20		
E WHITE ST	LEONARD AVE	HOUSTON TO E WHITE CONNECTOR	2833	0.54	1	1	2U	140	140	100%	425	425	228	228	75	75	153	153		
E WHITE ST	SHEFFIELD DR	SAM RAYBURN MEMORIAL HWY	3369	0.62	1	1	2U	89	89	100%	425	425	435	435	101	101	333	333		
E WHITE ST	S INTERURBAN ST	S RIGGINS ST	410	0.08	1	1	2U	278	278	100%	425	425	33	33	22	11	13	11		
E WHITE ST	S RIGGINS ST	S SHERLEY AVE	145	0.03	1	1	2U	278	278	100%	425	425	12	12	8	4	4	4		
E WHITE ST	S SHERLEY AVE	S SHERLEY AVE	3007	0.57	1	1	2U	140	140	100%	425	425	242	242	80	80	162	162		
E WHITE ST	HOUSTON TO E WHITE CONNECTOR	1.840' E OF HOUSTON TO E WHITE CONN	1541	0.31	1	1	2U	140	140	100%	425	425	132	132	44	44	89	89		
E WHITE ST	E FINLEY BLVD	SHEFFIELD DR	330	0.06	1	1	2U	140	140	100%	425	425	27	27	9	9	18	18		
HACKBERRY LN	N SHERLEY AVE	140' E OF N SHERLEY AVE	140	0.03	1	1	2U	56	56	100%	425	425	11	11	1	1	10	10		
HACKBERRY LN	N POWELL PKWY	N INTERURBAN ST	316	0.06	1	1	2U	100	100	100%	425	425	25	25	6	6	19	19		
HACKBERRY LN	N INTERURBAN ST	N RIGGINS ST	325	0.06	1	1	2U	100	100	100%	425	425	25	25	6	6	20	20		
HOUSTON ST	CR 478	W FM 545	6541	1.24	1	1	2U	65	65	50%	425	425	68	68	14	14	458	458		
HOUSTON ST	1.870' W OF CR 477	CR 477	1969	0.37	1	1	2U	40	40	100%	425	425	158	158	15	15	144	144		
HOUSTON ST	CR 477	2475' E OF CR 477	2477	0.47	1	1	2U	45	45	100%	425	425	100	100	21	21	178	178		
HOUSTON ST	CR 425	3.850' E OF CR 425	5850	1.11	1	1	2U	41	41	100%	425	425	471	471	45	45	425	425		
HOUSTON ST	E ROSAMOND PKWY	LEONARD AVE	1410	0.27	1	1	2U	56	56	100%	425	425	113	113	15	15	99	99		
HOUSTON ST	OUTER LOOP	CR 478	4758	0.90	1	1	2U	60	60	100%	425	425	333	333	45	45	338	338		
HOUSTON ST	CR 512	OUTER LOOP	2121	0.40	1	1	2U	60	60	100%	425	425	171	171	20	20	151	151		
HOUSTON ST	CR 513	CR 512	4220	0.80	1	1	2U	60	60	100%	425	425	340	340	40	40	300	300		
HOUSTON ST	1.187' N OF CR 513	CR 513	1191	0.23	1	1	2U	32	32	100%	425	425	96	96	7	7	89	89		
LEONARD AVE	E FINLEY BLVD	S VAIL ST	3418	0.65	2	2	4D	9	9	100%	725	725	937	937	6	6	932	932		
LEONARD AVE	3415' S OF E FINLEY BLVD	1,135' N OF E FOSTER CROSSING RD	674	0.13	1	1	2U	9	9	100%	425	425	54	54	1	1	53	53		
LEONARD AVE	1,135' N OF E FOSTER CROSSING RD	E FOSTER CROSSING RD	1137	0.22	1	1	2U	9	9	50%	425	425	46	46	1	1	45	45		
N INTERURBAN ST	W 3RD ST	W 4TH ST	332	0.06	1	1	2U	25	25	100%	425	425	27	27	2	2	25	25		
N INTERURBAN ST	HACKBERRY LN	W 1ST ST	222	0.04	1	1	2U	25	25	100%	425	425	18	18	1	1	17	17		
N INTERURBAN ST	W 1ST ST	W 2ND ST	335	0.06	1	1	2U	25	25	100%	425	425	27	27	2	2	25	25		
N INTERURBAN ST	W 2ND ST	W 3RD ST	323	0.06	1	1	2U	25	25	100%	425	425	26	26	2	2	25	25		
N INTERURBAN ST	CR 371	CR 371	6162	0.87	1	1	2U	220	220	80%	425	425	207	207	107	107	100	100		
N POWELL PKWY	W ROSAMOND PKWY	HACKBERRY LN	4154	0.82	1	1	2U	421	410	50%	425	425	178	178	258	159	41	6		81
N POWELL PKWY	CR 371	W ROSAMOND PKWY	4050	0.77	1	1	2U	538	329	50%	425	425	163	163	208	149	43	14		43
N POWELL PKWY	HACKBERRY LN	W 1ST ST	238	0.05	1	1	2U	498	498	50%	425	425	10	10	11	11	-2	-2		2
N POWELL PKWY	W 1ST ST	W 2ND ST	335	0.06	1	1	2U	498	498	50%	425	425	13	13	16	16	-2	-2		2
N POWELL PKWY	W 2ND ST	W 3RD ST	331	0.06	1	1	2U	498	498	50%	425	425	13	13	16	16	-2	-2		2
N POWELL PKWY	W 3RD ST	W 4TH ST	335	0.06	1	1	2U	441	441	60%	425	425	13	13	14	14	-1	-1		1
N RIGGINS ST	HACKBERRY LN	W 1ST ST	229	0.04	1	1	2U	25	25	100%	425	425	18	18	1	1	17	17		
N RIGGINS ST	W 1ST ST	W 2ND ST	316	0.06	1	1	2U	25	25	100%	425	425	25	25	1	1	24	24		
N RIGGINS ST	W 2ND ST	W 3RD ST	329	0.06	1	1	2U	25	25	100%	425	425	25	25	2	2	25	25		
N RIGGINS ST	W 3RD ST																			