

CAPITAL IMPROVEMENT PLANS

FOR

ENGINEERING AND FINANCIAL UPDATE

OF THE

WATER AND WASTEWATER IMPACT FEES

2017 – 2027



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TNP Project No. CRO 17127

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INTRODUCTION

INTRODUCTION

In 1993, the City of Crowley passed an Ordinance adopting Capital Recovery Fees for Water and Wastewater Improvements associated with and dictated by new development within the service limits of the City. Ordinance No. 93-520 established a fee of \$649.00 for each new water connection and \$201.00 for each new wastewater connection. Those fees were based on a Water and Wastewater Capital Improvements Plan for Impact Fees, prepared by this firm in 1992, for the 10-year period of 1992-2002.

The report was presented to City Council in October 1992 and included sections identifying 1) Land Use Assumptions, Sept. 1991, J.T. Dunkin and Associates, Inc., 2) Capital Improvements Plan for Water System Impact Fees, 3) Capital Improvements Plan for Wastewater Impact Fees, and 4) Financial Analysis of Water and Wastewater Impact Fees.

The adopted fees became effective in January 1994 and have been assessed to new residential and commercial customers. In addition, the City of Fort Worth assesses a 'pass-through' impact fee, which is collected by Crowley and paid to Fort Worth. The current Fort Worth Impact Fee is \$1,365 (Water) and \$810 (Wastewater).

The land use assumptions, capital improvement plans, and impact fees were updated in 2005 and established a fee of \$971 for each new water connection and \$577 for each new wastewater connection based on the Capital Improvements Plans for 2005-2015.

One of the mandates for establishing impact fees is that the City review and update its fee determination periodically. At five year intervals an engineering study is to be performed to examine the extent of change between the assumptions and parameters used for the previous C.I.P. and those in effect at the same time of the update. The new assumptions and parameters are then used to update the C.I.P. for another 10-year period, resulting in a revised fee assessment.

1. The Impact Fee Service Zone has been modified to encompass the current City limits of Crowley. The modified service areas are shown in the updated exhibit maps.
2. The estimated current population of Crowley is 14,885 according to 'esri' Forecasts. Using population estimates for Crowley through 2030 yields a growth factor of 2.53%. We have modified these projections to assume the ultimate population projected for 2030 will be reached by 2027. This yields a population growth factor of 3.50%.
3. The above revisions in population estimates have produced resultant changes in water consumption, estimates of 2027 equivalent service units, and estimates of 2027 pumping and storage requirements. These changes are contained in Table A-2 and A-3.
4. Project descriptions and total costs of 2017-2027 CIP projects reflect the status of the existing distribution and collection systems and the anticipated direction of new development. Unit costs have been updated to reflect current construction and multipliers, or percentage estimates of costs, have been included on certain improvements, which benefit existing customers as well as new customers.

**CAPITAL IMPROVEMENTS PLAN FOR
WATER IMPACT FEES**

CITY OF CROWLEY

**SUMMARY OF 2017-2027 WATER CAPITAL IMPROVEMENT
CONSTRUCTION COSTS**

Line No	Improvement	New Construction Cost	Development Construction Cost
1	Replacement Mains	\$1,355,283	\$ 356,840
2	New Distribution Mains	\$ 6,805,151	\$6,498,668
3	East & West Pumps & North Elevated Tank	<u>\$ 2,194,081</u>	<u>\$ 432,579</u>
	Total Water Improvements To Year 2027	\$10,354,516	\$7,288,087

TABLE A-2
SUMMARY OF WATERWORKS CRITERIA

I. POPULATION:

- A. 2017 Population: 14,885
- B. 2027 Population: 21,000 (Estimated)
- C. Ultimate Population: 21,000 (Estimated)
- D. Projected Rate-of-Growth : 3.50%

II. WATER DEMAND: For New Development

	<u>2017 & 2027</u>	<u>Ultimate</u>
A. Design Average Daily Demand (ADD):	160 gpcd	160 gpcd
B. Design Maximum Daily Demand (MDD):	2.4 x ADD	2.4 x ADD
C. Design Peak Hour Demand:	1.25 x MDD	1.25 x MDD

III. ZONING AND DENSITIES:

- A. Residential: 3.2 Units/Ac. X 3.0 Pers./Unit = 9.6 Pers./Ac.
- B. Multi-Family Res.: 25 Units/Ac. X 2.0 Pers./Unit = 50 Pers./Ac.
- C. Commercial/Retail/Public: 15 Pers./Ac.
- D. Industrial: 15 Pers./Ac.
- E. Park: 3 Pers./Ac.

IV. FIRE FLOWS: Based on minimum requirements of the Uniform Fire Code.
Specific fire flows depend upon type of construction and area of structure.

	<u>Flow (gpm)</u>	<u>Duration (hr)</u>
A. Residential with less than 3,600 SF:	1,500	1
B. All other:	1,500-8,000	2-4

V. TOTAL WATER CONSUMPTION:

Calculated from above criteria:

	<u>2017</u>	<u>2027</u>	<u>Ultimate</u>
A. Average Daily Demand (gpd):	1,875,000	2,646,000	2,646,000
B. Maximum Daily Demand (gpd):	4,500,000	6,350,400	6,350,400
C. Peak Hour Demand (gpd):	5,625,000	7,938,000	7,938,000

VI. SERVICE CONNECTIONS AND EQUIVALENT SERVICE UNITS:

	<u>2017</u>	<u>2027</u>	<u>Ultimate</u>
A. Meters:	<u>(Exist.)</u>	<u>(Est.)</u>	<u>(Est.)</u>
1. 5/8" Meter	5,521	7,785	7,785
2. 1" Meter	97	137	137
3. 1 1/2" Meter	29	41	41
4. 2" Meter	69	97	97
5. 3" Meter	12	17	17
6. 4" Meter	1	1	1
7. 6" Meter	0	1	1
Total Service Units:	5,729	8,079	8,079

TABLE A-2 (Continued)**B. AWWA Meter Equivalencies**

Meter Size	AWWA Equivalency
5/8"	0.67
3/4"	1.00
1"	1.67
1 1/2"	3.33
2"	5.33
3"	11.67
4"	21.00
6"	46.67
8"	80.00
10"	126.67

C. Equivalent Service Units:	2017 (Exist)	2027 (Est.)	Ultimate (Est.)
1. 5/8" Meter	3,700.00	5,216.00	5,216.00
2. 1" Meter	162.00	229.00	229.00
3. 1 1/2" Meter	97.00	137.00	137.00
4. 2" Meter	368.00	517.00	517.00
5. 3" Meter	140.00	198.00	198.00
6. 4" Meter	21.00	21.00	21.00
7. 6" Meter	0	47.00	47.00
Total Service Units:	4,488.00	6,365.00	6,365.00

TABLE A-3
DISTRIBUTION STORAGE AND PUMPING

I. SUMMARY OF EXISTING STORAGE AND PUMPING:

A. Elevated Storage:		1,000,000 gal.
B. Ground Storage:	(E. & W. F/W Supply)	1,300,000 gal.
	(Well Supply)	441,500 gal.
Total Ground Storage:		1,741,500 gal.
C. Service Pumping:	aggregate total	7,600 gpm
	firm yield (i.e. largest pump down)	3,860 gpm
D. Wells:	aggregate total	670 gpm
	firm yield (i.e. largest well down)	570 gpm

II. REQUIRED STORAGE AND PUMPING:

	<u>2017</u>	<u>2027</u>	<u>Ultimate</u>
A. Elevated Storage (gal.):	572,900	807,900	807,900
B. Total Storage (gal.):	1,145,800	1,615,800	1,615,800
C. Service Pumping (gpm):	3,906	5,513	5,513

*When required elevated storage reaches 80% of available elevated storage, additional elevated storage will be required. Therefore, the ultimate elevated storage requirement will be 1,010,000 gallons.

III. PROPOSED FACILITIES:

A. 2017 – 2027 System Capital Improvements (for Impact Fees):

- (1) West Side Pump Station-
 - i. Addition of 1-1,000 gpm Pump
- (2) 0.5MG North Side Elevated Storage Tank-
- (3) East Side (Fort Worth) Pump Station-
 - i. Addition of 1-1,400 gpm Pump
- (4) Distribution Mains - Replacement
 - i. Various mains to replace existing mains as indicated in Exhibit and as required for development. [Only a percentage (multiplier) of construction costs applied to Impact Fees.]
- (5) Distribution Mains - New
 - i. Various mains as indicated in Exhibit and required by development.

B. Ultimate System Capital Improvements:

- (1) East Side (Fort Worth) Pump Station & Addition of 1,400gpm Pump.
- (2) Distribution Mains-New
 - i. Various mains as indicated in Exhibit and required by development.

TABLE A-3 (Continued)

IV. DEFICIT/SURPLUS CAPACITY COMPARISONS:

	<u>Existing</u>	<u>Proposed</u>	<u>Required</u>	(+) Surplus (-) Deficit
A. <u>2017 System (Existing)</u>				
Elev. Storage: (gal)	1,000,000	----	572,900	+ 427,100
Total Storage: (gal)	2,741,500	----	1,145,800	+1,595,700
Service Pumping (gpm):	3,860	1,000(W)	3,906	+ 954
Well Capacity (gpm):	570	----	N/A	N/A
B. <u>2027 System:</u>				
Elev. Storage: (gal)	1,000,000	500,000	733,300	+ 766,700
Total Storage: (gal)	2,741,500	500,000	1,466,600	+1,774,900
Service Pumping (gpm):	4,860	1,600(E)	5,016	+ 1,444
Well Capacity (gpm):	570	0	N/A	N/A
C. <u>Ultimate System:</u>				
Elev. Storage: (gal)	1,500,000	0	1,010,000	+ 490,000
Total Storage: (gal)	3,241,500	0	1,615,800	+1,625,700
Service Pumping (gpm):	6,460	1,600	5,513	+ 2,547
Well Capacity (gpm):	570	0	N/A	N/A

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : **WATER IMPROVEMENTS**

Description: **EAST SIDE PUMP STATION - 1,400 gpm Pump Addition**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	SITE PREPARATION & RESTORATION	1	LS	\$8,000.00	\$8,000.00
2	YARD PIPING, FITTINGS, VALVES & APPURTENANCES	1	LS	\$17,000.00	\$17,000.00
3	PUMP STATION-100hp 1,400gpm PUMP	1	EA	\$65,000.00	\$65,000.00
4	ELECTRICAL SERVICE & MOTOR CONTROLS	1	LS	\$35,000.00	\$35,000.00
5	CONTROLS, INSTRUMENTATION AND SCADA	1	LS	\$20,000.00	\$20,000.00
6	MISCELLANEOUS UTILITY ALLOWANCE	1	LS	\$8,000.00	\$8,000.00
	SUBTOTAL				\$153,000.00
	CONTINGENCY (20%)				\$30,600.00
	SUBTOTAL				\$183,600.00
	ENGINEERING/SURVEY				\$31,212.00
	TOTAL PROJECTED CONSTRUCTION COST				\$214,812.00
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$214,812.00

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'A' (Main Street)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,200	LF	\$60.00	\$72,000.00
3	8" PVC, CLASS 150, WATER LINE	50	LF	\$45.00	\$2,250.00
4	6" PVC, CLASS 150, WATER LINE	120	LF	\$38.00	\$4,560.00
5	DUCTILE IRON FITTINGS	3	TONS	\$6,000.00	\$16,800.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	5	EA	\$1,500.00	\$7,500.00
8	6" GATE VALVE	2	EA	\$1,300.00	\$2,600.00
9	FIRE HYDRANT	2	EA	\$4,000.00	\$8,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	7	EA	\$1,300.00	\$9,100.00
11	CONNECT TO EXIST SYSTEM	7	EA	\$1,200.00	\$8,400.00
12	TEMPORARY HMAC PAVEMENT REPAIR	1,440	LF	\$10.00	\$14,400.00
13	CONCRETE DWY / PVMT REPAIR	20	SF	\$7.25	\$145.00
14	ABANDON EXISTING WATER LINE	1	LS	\$1,000.00	\$1,000.00
15	TRENCH SAFETY	1,370	LF	\$1.00	\$1,370.00
13	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$167,125.00
	CONTINGENCY (15%)				\$25,068.75
	SUBTOTAL				\$192,193.75
	ENGINEERING/SURVEY				\$28,829.06
	TOTAL PROJECTED CONSTRUCTION COST				\$221,022.81
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (33%)				\$72,937.53

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'B' (Water Lane)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,510	LF	\$60.00	\$90,600.00
3	8" PVC, CLASS 150, WATER LINE	40	LF	\$45.00	\$1,800.00
4	6" PVC, CLASS 150, WATER LINE	40	LF	\$38.00	\$1,520.00
5	DUCTILE IRON FITTINGS	1	TONS	\$6,000.00	\$6,600.00
6	12" GATE VALVE	4	EA	\$2,000.00	\$8,000.00
7	8" GATE VALVE	4	EA	\$1,500.00	\$6,000.00
8	6" GATE VALVE	4	EA	\$1,300.00	\$5,200.00
9	FIRE HYDRANT	4	EA	\$4,000.00	\$16,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	16	EA	\$1,300.00	\$20,800.00
11	CONNECT TO EXIST SYSTEM	5	EA	\$1,200.00	\$6,000.00
12	TEMPORARY HMAC PAVEMENT REPAIR	100	LF	\$10.00	\$1,000.00
13	CONCRETE DWY / PVMT REPAIR	1,424	SF	\$7.25	\$10,324.00
14	ABANDON EXISTING WATER LINE	1	LS	\$1,000.00	\$1,000.00
15	TRENCH SAFETY	1,590	LF	\$1.00	\$1,590.00
16	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$189,434.00
	CONTINGENCY (15%)				\$28,415.10
	SUBTOTAL				\$217,849.10
	ENGINEERING/SURVEY				\$32,677.37
	TOTAL PROJECTED CONSTRUCTION COST				\$250,526.47
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (33%)				\$82,673.73

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'C' (Beverly)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,960	LF	\$60.00	\$117,600.00
3	8" PVC, CLASS 150, WATER LINE	120	LF	\$45.00	\$5,400.00
4	6" PVC, CLASS 150, WATER LINE	30	LF	\$38.00	\$1,140.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	4	EA	\$2,000.00	\$8,000.00
7	8" GATE VALVE	4	EA	\$1,500.00	\$6,000.00
8	6" GATE VALVE	3	EA	\$1,300.00	\$3,900.00
9	FIRE HYDRANT	3	EA	\$4,000.00	\$12,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	19	EA	\$1,300.00	\$24,700.00
11	TEMPORARY HMAC PAVEMENT REPAIR	150	LF	\$10.00	\$1,500.00
12	CONCRETE DWY / PVMT REPAIR	500	SF	\$7.25	\$3,625.00
13	ABANDON EXISTING WATER LINE	1	LS	\$1,000.00	\$1,000.00
14	TRENCH SAFETY	2,080	LF	\$1.00	\$2,080.00
15	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
		SUBTOTAL			\$207,145.00
		CONTINGENCY (15%)			\$31,071.75
		SUBTOTAL			\$238,216.75
		ENGINEERING/SURVEY			\$35,732.51
		TOTAL PROJECTED CONSTRUCTION COST			\$273,949.26
		PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (0%)			\$0.00

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'D' (Industrial)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,770	LF	\$60.00	\$166,200.00
3	8" PVC, CLASS 150, WATER LINE	40	LF	\$45.00	\$1,800.00
4	6" PVC, CLASS 150, WATER LINE	50	LF	\$38.00	\$1,900.00
5	DUCTILE IRON FITTINGS	1.5	TONS	\$6,000.00	\$9,000.00
6	12" GATE VALVE	5	EA	\$2,000.00	\$10,000.00
7	8" GATE VALVE	3	EA	\$1,500.00	\$4,500.00
8	6" GATE VALVE	5	EA	\$1,300.00	\$6,500.00
9	FIRE HYDRANT	5	EA	\$4,000.00	\$20,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	18	EA	\$1,300.00	\$23,400.00
11	TEMPORARY HMAC PAVEMENT REPAIR	500	LF	\$10.00	\$5,000.00
12	CONCRETE DWY / PVMT REPAIR	200	SF	\$7.25	\$1,450.00
13	TRENCH SAFETY	2,860	LF	\$1.00	\$2,860.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$265,610.00
	CONTINGENCY (15%)				\$39,841.50
	SUBTOTAL				\$305,451.50
	ENGINEERING/SURVEY				\$45,817.73
	TOTAL PROJECTED CONSTRUCTION COST				\$351,269.23
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$351,269.23

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'E' (Industrial)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,790	LF	\$60.00	\$167,400.00
3	8" PVC, CLASS 150, WATER LINE	100	LF	\$45.00	\$4,500.00
4	6" PVC, CLASS 150, WATER LINE	50	LF	\$38.00	\$1,900.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	5	EA	\$1,500.00	\$7,500.00
8	6" GATE VALVE	5	EA	\$1,300.00	\$6,500.00
9	FIRE HYDRANT	5	EA	\$4,000.00	\$20,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	22	EA	\$1,300.00	\$28,600.00
11	TEMPORARY HMAC PAVEMENT REPAIR	50	LF	\$10.00	\$500.00
12	CONCRETE DWY / PVMT REPAIR	100	SF	\$7.25	\$725.00
13	TRENCH SAFETY	2,880	LF	\$1.00	\$2,880.00
11	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$266,705.00
	CONTINGENCY (15%)				\$40,005.75
	SUBTOTAL				\$306,710.75
	ENGINEERING/SURVEY				\$46,006.61
	TOTAL PROJECTED CONSTRUCTION COST				\$352,717.36
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$352,717.36

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'F' (N of Stevens Middle School)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,850	LF	\$60.00	\$171,000.00
3	8" PVC, CLASS 150, WATER LINE	300	LF	\$45.00	\$13,500.00
4	6" PVC, CLASS 150, WATER LINE	80	LF	\$38.00	\$3,040.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	4	EA	\$2,000.00	\$8,000.00
7	8" GATE VALVE	15	EA	\$1,500.00	\$22,500.00
8	6" GATE VALVE	8	EA	\$1,300.00	\$10,400.00
9	FIRE HYDRANT	8	EA	\$4,000.00	\$32,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	20	EA	\$1,300.00	\$26,000.00
11	TEMPORARY HMAC PAVEMENT REPAIR	40	LF	\$10.00	\$400.00
12	CONCRETE DWY / PVMT REPAIR	600	SF	\$7.25	\$4,350.00
13	TRENCH SAFETY	3,200	LF	\$1.00	\$3,200.00
11	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$314,590.00
	CONTINGENCY (15%)				\$47,188.50
	SUBTOTAL				\$361,778.50
	ENGINEERING/SURVEY				\$54,266.78
	TOTAL PROJECTED CONSTRUCTION COST				\$416,045.28
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$416,045.28

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : **WATER IMPROVEMENTS**

Description: **12" LINE 'G' (Odell Lane)**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,000	LF	\$60.00	\$60,000.00
3	8" PVC, CLASS 150, WATER LINE	60	LF	\$45.00	\$2,700.00
4	6" PVC, CLASS 150, WATER LINE	30	LF	\$38.00	\$1,140.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	6	EA	\$1,500.00	\$9,000.00
8	6" GATE VALVE	3	EA	\$1,300.00	\$3,900.00
9	FIRE HYDRANT	3	EA	\$4,000.00	\$12,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	20	EA	\$1,300.00	\$26,000.00
11	TRENCH SAFETY	1,090	LF	\$1.00	\$1,090.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$142,030.00
	CONTINGENCY (15%)				\$21,304.50
	SUBTOTAL				\$163,334.50
	ENGINEERING/SURVEY				\$24,500.18
	TOTAL PROJECTED CONSTRUCTION COST				\$187,834.68
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$187,834.68

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'H' (Canoe Way)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,665	LF	\$60.00	\$99,900.00
3	22" STEEL CASING IN BORE	300	LF	\$340.00	\$102,000.00
4	8" PVC, CLASS 150, WATER LINE	100	LF	\$45.00	\$4,500.00
5	6" PVC, CLASS 150, WATER LINE	50	LF	\$38.00	\$1,900.00
6	DUCTILE IRON FITTINGS	1.3	TONS	\$6,000.00	\$7,800.00
7	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
8	8" GATE VALVE	8	EA	\$1,500.00	\$12,000.00
9	6" GATE VALVE	5	EA	\$1,300.00	\$6,500.00
10	FIRE HYDRANT	5	EA	\$4,000.00	\$20,000.00
11	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	20	EA	\$1,300.00	\$26,000.00
12	TRENCH SAFETY	1,815	LF	\$1.00	\$1,815.00
13	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$301,415.00
	CONTINGENCY (15%)				\$45,212.25
	SUBTOTAL				\$346,627.25
	ENGINEERING/SURVEY				\$51,994.09
	TOTAL PROJECTED CONSTRUCTION COST				\$398,621.34
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$398,621.34

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'I' (FM 731/Crowley Rd)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	1,950	LF	\$60.00	\$117,000.00
3	8" PVC, CLASS 150, WATER LINE	40	LF	\$45.00	\$1,800.00
4	6" PVC, CLASS 150, WATER LINE	40	LF	\$38.00	\$1,520.00
5	DUCTILE IRON FITTINGS	1.1	TONS	\$6,000.00	\$6,600.00
6	12" GATE VALVE	4	EA	\$2,000.00	\$8,000.00
7	8" GATE VALVE	3	EA	\$1,500.00	\$4,500.00
8	6" GATE VALVE	4	EA	\$1,300.00	\$5,200.00
9	FIRE HYDRANT	4	EA	\$4,000.00	\$16,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	15	EA	\$1,300.00	\$19,500.00
11	TEMPORARY HMAC PAVEMENT REPAIR	20	LF	\$10.00	\$200.00
12	CONCRETE DWY / PVMT REPAIR	1,300	SF	\$7.25	\$9,425.00
13	ABANDON EXISTING WATER LINE	1	LS	\$1,000.00	\$1,000.00
14	TRENCH SAFETY	2,030	LF	\$1.00	\$2,030.00
15	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
		SUBTOTAL			\$205,775.00
		CONTINGENCY (15%)			\$30,866.25
		SUBTOTAL			\$236,641.25
		ENGINEERING/SURVEY			\$35,496.19
		TOTAL PROJECTED CONSTRUCTION COST			\$272,137.44
		PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (33%)			\$89,805.35

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	4,960	LF	\$60.00	\$297,600.00
3	8" PVC, CLASS 150, WATER LINE	360	LF	\$45.00	\$16,200.00
4	6" PVC, CLASS 150, WATER LINE	180	LF	\$38.00	\$6,840.00
5	DUCTILE IRON FITTINGS	1.5	TONS	\$6,000.00	\$9,000.00
6	12" GATE VALVE	15	EA	\$2,000.00	\$30,000.00
7	8" GATE VALVE	30	EA	\$1,500.00	\$45,000.00
8	6" GATE VALVE	15	EA	\$1,300.00	\$19,500.00
9	FIRE HYDRANT	15	EA	\$4,000.00	\$60,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	50	EA	\$1,300.00	\$65,000.00
11	TRENCH SAFETY	5,500	LF	\$1.00	\$5,500.00
12	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$567,640.00
CONTINGENCY (15%)					\$85,146.00
SUBTOTAL					\$652,786.00
ENGINEERING/SURVEY					\$97,917.90
TOTAL PROJECTED CONSTRUCTION COST					\$750,703.90
PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)					\$750,703.90

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'K' (Water Lane)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	3,100	LF	\$60.00	\$186,000.00
3	8" PVC, CLASS 150, WATER LINE	200	LF	\$45.00	\$9,000.00
4	6" PVC, CLASS 150, WATER LINE	100	LF	\$38.00	\$3,800.00
5	DUCTILE IRON FITTINGS	1.6	TONS	\$6,000.00	\$9,600.00
6	12" GATE VALVE	5	EA	\$2,000.00	\$10,000.00
7	8" GATE VALVE	20	EA	\$1,500.00	\$30,000.00
8	6" GATE VALVE	10	EA	\$1,300.00	\$13,000.00
9	FIRE HYDRANT	10	EA	\$4,000.00	\$40,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	20	EA	\$1,300.00	\$26,000.00
11	TEMPORARY HMAC PAVEMENT REPAIR	100	LF	\$10.00	\$1,000.00
12	CONCRETE DWY / PVMT REPAIR	150	SF	\$7.25	\$1,087.50
13	TRENCH SAFETY	3,400	LF	\$1.00	\$3,400.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$345,887.50
	CONTINGENCY (15%)				\$51,883.13
	SUBTOTAL				\$397,770.63
	ENGINEERING/SURVEY				\$59,665.59
	TOTAL PROJECTED CONSTRUCTION COST				\$457,436.22
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (33%)				\$150,953.95

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'L' (Industrial)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,810	LF	\$60.00	\$168,600.00
3	8" PVC, CLASS 150, WATER LINE	100	LF	\$45.00	\$4,500.00
4	6" PVC, CLASS 150, WATER LINE	50	LF	\$38.00	\$1,900.00
5	DUCTILE IRON FITTINGS	1.3	TONS	\$6,000.00	\$7,800.00
6	12" GATE VALVE	6	EA	\$2,000.00	\$12,000.00
7	8" GATE VALVE	8	EA	\$1,500.00	\$12,000.00
8	6" GATE VALVE	5	EA	\$1,300.00	\$6,500.00
9	FIRE HYDRANT	5	EA	\$4,000.00	\$20,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	25	EA	\$1,300.00	\$32,500.00
11	TEMPORARY HMAC PAVEMENT REPAIR	20	LF	\$10.00	\$200.00
12	TRENCH SAFETY	2,960	LF	\$1.00	\$2,960.00
13	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$281,960.00
	CONTINGENCY (15%)				\$42,294.00
	SUBTOTAL				\$324,254.00
	ENGINEERING/SURVEY				\$48,638.10
	TOTAL PROJECTED CONSTRUCTION COST				\$372,892.10
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$372,892.10

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	3,500	LF	\$60.00	\$210,000.00
3	8" PVC, CLASS 150, WATER LINE	280	LF	\$45.00	\$12,600.00
4	6" PVC, CLASS 150, WATER LINE	100	LF	\$38.00	\$3,800.00
5	DUCTILE IRON FITTINGS	1.5	TONS	\$6,000.00	\$9,000.00
6	12" GATE VALVE	5	EA	\$2,000.00	\$10,000.00
7	8" GATE VALVE	25	EA	\$1,500.00	\$37,500.00
8	6" GATE VALVE	10	EA	\$1,300.00	\$13,000.00
9	FIRE HYDRANT	10	EA	\$4,000.00	\$40,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	60	EA	\$1,300.00	\$78,000.00
11	TRENCH SAFETY	3,880	LF	\$1.00	\$3,880.00
12	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$430,780.00
CONTINGENCY (15%)					\$64,617.00
SUBTOTAL					\$495,397.00
ENGINEERING/SURVEY					\$74,309.55
TOTAL PROJECTED CONSTRUCTION COST					\$569,706.55
PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)					\$569,706.55

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	4,700	LF	\$60.00	\$282,000.00
3	8" PVC, CLASS 150, WATER LINE	180	LF	\$45.00	\$8,100.00
4	6" PVC, CLASS 150, WATER LINE	180	LF	\$38.00	\$6,840.00
5	DUCTILE IRON FITTINGS	0	TONS	\$6,000.00	\$0.00
6	12" GATE VALVE	6	EA	\$2,000.00	\$12,000.00
7	8" GATE VALVE	18	EA	\$1,500.00	\$27,000.00
8	6" GATE VALVE	18	EA	\$1,300.00	\$23,400.00
9	FIRE HYDRANT	18	EA	\$4,000.00	\$72,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	12	EA	\$1,300.00	\$15,600.00
11	TRENCH SAFETY	5,060	LF	\$1.00	\$5,060.00
9	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$465,000.00
CONTINGENCY (15%)					\$69,750.00
SUBTOTAL					\$534,750.00
ENGINEERING/SURVEY					\$80,212.50
TOTAL PROJECTED CONSTRUCTION COST					\$614,962.50
PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)					\$614,962.50

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: 12" LINE 'O' (N Crowley Rd)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,130	LF	\$60.00	\$127,800.00
3	8" PVC, CLASS 150, WATER LINE	160	LF	\$45.00	\$7,200.00
4	6" PVC, CLASS 150, WATER LINE	80	LF	\$38.00	\$3,040.00
5	DUCTILE IRON FITTINGS	0	TONS	\$6,000.00	\$0.00
6	12" GATE VALVE	4	EA	\$2,000.00	\$8,000.00
7	8" GATE VALVE	16	EA	\$1,500.00	\$24,000.00
8	6" GATE VALVE	8	EA	\$1,300.00	\$10,400.00
9	FIRE HYDRANT	8	EA	\$4,000.00	\$32,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	20	EA	\$1,300.00	\$26,000.00
11	CONCRETE DWY / PVMT REPAIR	50	SF	\$10.00	\$500.00
12	ABANDON EXISTING WATER LINE	1	LS	\$1,000.00	\$1,000.00
13	TRENCH SAFETY	2,370	LF	\$1.00	\$2,370.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$255,310.00
	CONTINGENCY (15%)				\$38,296.50
	SUBTOTAL				\$293,606.50
	ENGINEERING/SURVEY				\$44,040.98
	TOTAL PROJECTED CONSTRUCTION COST				\$337,647.48
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (33%)				\$111,423.67

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

**CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS**

Project : WATER IMPROVEMENTS

Description: 12" LINE 'P' (Odell Lane)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,192	LF	\$60.00	\$131,520.00
3	8" PVC, CLASS 150, WATER LINE	160	LF	\$45.00	\$7,200.00
4	6" PVC, CLASS 150, WATER LINE	80	LF	\$38.00	\$3,040.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	10	EA	\$1,500.00	\$15,000.00
8	6" GATE VALVE	8	EA	\$1,300.00	\$10,400.00
9	FIRE HYDRANT	8	EA	\$4,000.00	\$32,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	40	EA	\$1,300.00	\$52,000.00
11	TRENCH SAFETY	2,432	LF	\$1.00	\$2,432.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$279,792.00
	CONTINGENCY (15%)				\$41,968.80
	SUBTOTAL				\$321,760.80
	ENGINEERING/SURVEY				\$48,264.12
	TOTAL PROJECTED CONSTRUCTION COST				\$370,024.92
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$370,024.92

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Description: 12" LINE 'Q'

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,392	LF	\$60.00	\$143,520.00
3	8" PVC, CLASS 150, WATER LINE	180	LF	\$45.00	\$8,100.00
4	6" PVC, CLASS 150, WATER LINE	90	LF	\$38.00	\$3,420.00
5	DUCTILE IRON FITTINGS	1.3	TONS	\$6,000.00	\$7,800.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	16	EA	\$1,500.00	\$24,000.00
8	6" GATE VALVE	9	EA	\$1,300.00	\$11,700.00
9	FIRE HYDRANT	9	EA	\$4,000.00	\$36,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	30	EA	\$13,000.00	\$390,000.00
11	TRENCH SAFETY	2,662	LF	\$1.00	\$2,662.00
12	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$646,202.00
	CONTINGENCY (15%)				\$96,930.30
	SUBTOTAL				\$743,132.30
	ENGINEERING/SURVEY				\$111,469.85
	TOTAL PROJECTED CONSTRUCTION COST				\$854,602.15
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$854,602.15

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Description: 12" LINE 'R'

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	4,850	LF	\$60.00	\$291,000.00
3	8" PVC, CLASS 150, WATER LINE	190	LF	\$45.00	\$8,550.00
4	6" PVC, CLASS 150, WATER LINE	180	LF	\$38.00	\$6,840.00
5	DUCTILE IRON FITTINGS	2.0	TONS	\$6,000.00	\$12,000.00
6	12" GATE VALVE	5	EA	\$2,000.00	\$10,000.00
7	8" GATE VALVE	19	EA	\$1,500.00	\$28,500.00
8	6" GATE VALVE	18	EA	\$1,300.00	\$23,400.00
9	FIRE HYDRANT	18	EA	\$4,000.00	\$72,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	30	EA	\$1,300.00	\$39,000.00
11	TRENCH SAFETY	5,220	LF	\$1.00	\$5,220.00
12	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$509,510.00
	CONTINGENCY (15%)				\$76,426.50
	SUBTOTAL				\$585,936.50
	ENGINEERING/SURVEY				\$87,890.48
	TOTAL PROJECTED CONSTRUCTION COST				\$673,826.98
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$673,826.98

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	12" PVC, CLASS 150, WATER LINE	2,850	LF	\$60.00	\$171,000.00
3	8" PVC, CLASS 150, WATER LINE	100	LF	\$45.00	\$4,500.00
4	6" PVC, CLASS 150, WATER LINE	100	LF	\$38.00	\$3,800.00
5	DUCTILE IRON FITTINGS	1.2	TONS	\$6,000.00	\$7,200.00
6	12" GATE VALVE	3	EA	\$2,000.00	\$6,000.00
7	8" GATE VALVE	10	EA	\$1,500.00	\$15,000.00
8	6" GATE VALVE	10	EA	\$1,300.00	\$13,000.00
9	FIRE HYDRANT	10	EA	\$4,000.00	\$40,000.00
10	3/4" SERVICE LINE (BORED FROM MAIN TO METER)	40	EA	\$1,300.00	\$52,000.00
11	TRENCH SAFETY	3,050	LF	\$1.00	\$3,050.00
12	MISCELLANEOUS RESTORATION AND ADJUSTMENTS	1	LS	\$5,000.00	\$5,000.00
	SUBTOTAL				\$328,550.00
	CONTINGENCY (15%)				\$49,282.50
	SUBTOTAL				\$377,832.50
	ENGINEERING/SURVEY				\$56,674.88
	TOTAL PROJECTED CONSTRUCTION COST				\$434,507.38
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$434,507.38

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS 2017-2027 CAPITAL IMPROVEMENT PLAN for WATER AND WASTEWATER IMPROVEMENTS

Project : WATER IMPROVEMENTS

Description: NORTH SIDE ELEVATED TANK

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	SITE PREPARATION & RESTORATION	1	LS	\$5,350.00	\$5,350.00
2	500,000 GAL COMPOSITE ELEV STORAGE TANK	1	LS	\$1,254,484.00	\$1,254,484.00
3	CITY LOGO	1	LS	\$6,420.00	\$6,420.00
4	8" CRISHED ROCK / GRAVEL DRIVE	525	SY	\$4.28	\$2,247.00
5	CONCRETE SPLACH PAD FOR TANK OVERFLOW	80	SY	\$3.21	\$256.80
6	4" CONCRETE WALK	20	SF	\$4.28	\$85.60
7	GRADING / HYDROMULCH SEEDING / DRAINAGE	1	LS	\$2,140.00	\$2,140.00
8	12" PVC / DIP OUTLET PIPE	52	LF	\$21.40	\$1,112.80
9	SEEDED EROSION CONTROL MAT STAKED	1,115	SY	\$1.07	\$1,193.05
10	TRENCH SAFETY SYSTEM	1	LS	\$1,070.00	\$1,070.00
11	INLET/OUTLET CONTROL PIPING, VALVES & FITTINGS	1	LS	\$26,750.00	\$26,750.00
12	TEMPORARY EROSION CONTROL	1	LS	\$2,140.00	\$2,140.00
13	ELECTRICAL POWER, LIGHTING & GROUNDING	1	LS	\$53,500.00	\$53,500.00
14	SCADA MONITORING, CONTROL & INSTRUMENTATION	1	LS	\$24,610.00	\$24,610.00
15	MISCELLANEOUS ADJUSTMENTS	1	LS	\$26,750.00	\$26,750.00
	SUBTOTAL				\$1,408,109.25
	CONTINGENCY (15%)				\$211,216.39
	SUBTOTAL				\$1,619,325.64
	ENGINEERING/SURVEY				\$178,125.82
	TOTAL PROJECTED CONSTRUCTION COST				\$1,797,451.46
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (2%)				\$35,949.03

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

**CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS**

Project : WATER IMPROVEMENTS

Description: WEST SIDE PUMP STATION - 1,000 gpm Pump Addition

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	SITE PREPARATION & RESTORATION	1	LS	\$8,000.00	\$8,000.00
2	YARD PIPING, FITTINGS, VALVES & APPURTENANCES	1	LS	\$12,500.00	\$12,500.00
3	PUMP STATION-50hp 1,000gpm PUMP	1	EA	\$46,000.00	\$46,000.00
4	ELECTRICAL SERVICE & MOTOR CONTROLS	1	LS	\$35,000.00	\$35,000.00
5	CONTROLS, INSTRUMENTATION AND SCADA	1	LS	\$20,000.00	\$20,000.00
6	MISCELLANEOUS UTILITY ALLOWANCE	1	LS	\$8,000.00	\$8,000.00
	SUBTOTAL				\$129,500.00
	CONTINGENCY (20%)				\$25,900.00
	SUBTOTAL				\$155,400.00
	ENGINEERING/SURVEY				\$26,418.00
	TOTAL PROJECTED CONSTRUCTION COST				\$181,818.00
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$181,818.00

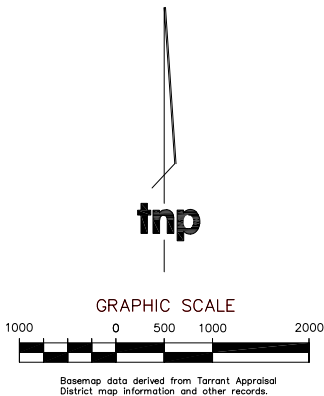


CAPITAL IMPROVEMENTS PLAN
WATER DISTRIBUTION
SYSTEM

IMPACT FEE UPDATE
(2017-2027 C.I.P.)

LEGEND

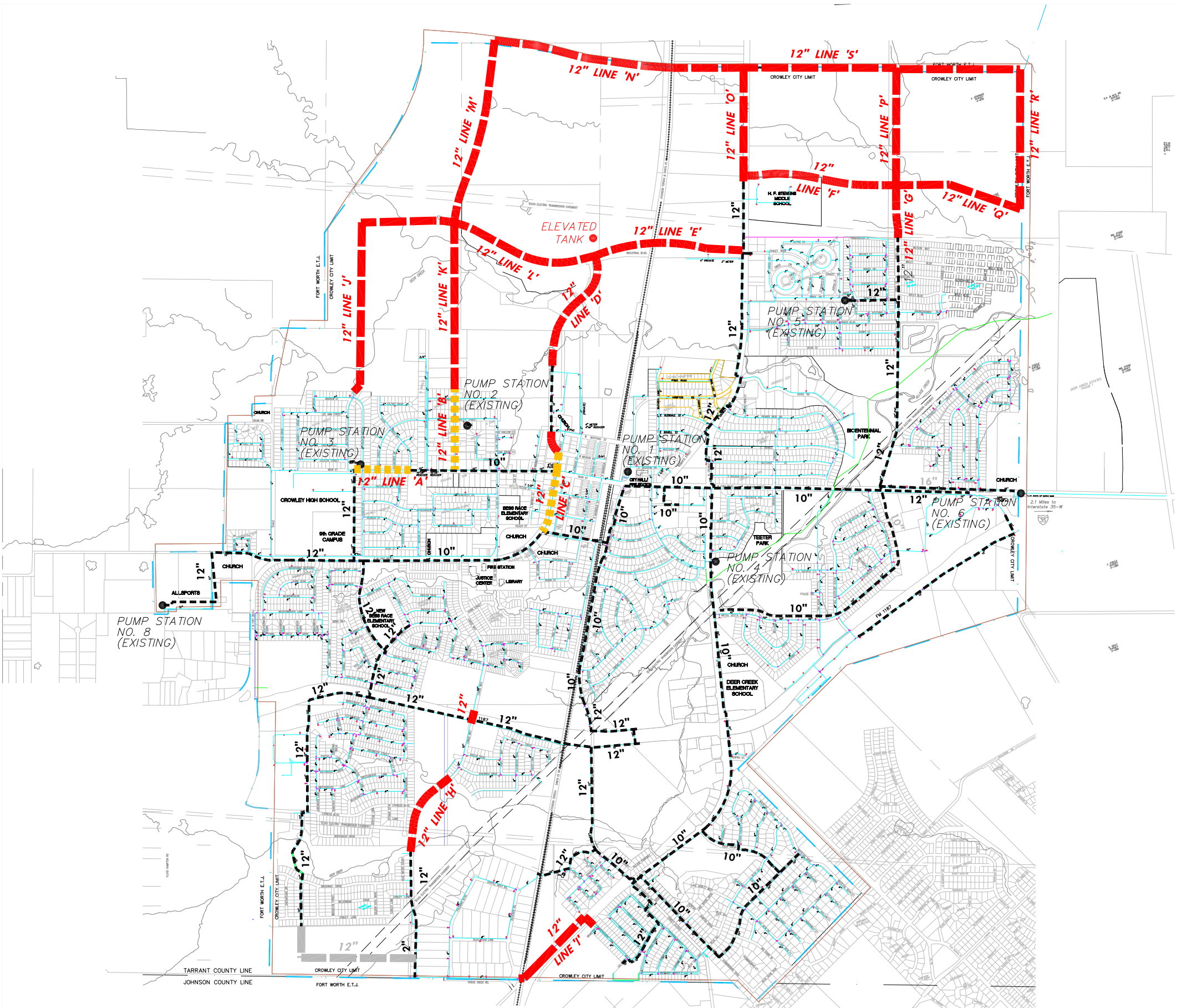
- NEW WATERLINE
(12" & LARGER - ULT. C.I.P.)
- NEW WATERLINE
(12" & LARGER - 2017-2027 C.I.P.)
- EXISTING WATERLINE
TO BE REPLACED 2017-2027 C.I.P.
- EXISTING WATERLINE
(10" AND LARGER)
- BOUNDARY OF SERVICE
AREA FOR WATER
IMPACT FEES
(BASED ON CCN #10984)



DECEMBER 2017



teague nall & perkins
5237 N. Riverside Drive, Suite 100
Fort Worth, Texas 76137
817.336.5773 ph 817.336.2813 fx
TBPE Reg No. F-230;
TBPLS: 10011600, 10011601, 10194381
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Drawing: O:\PROJECTS\GRO17127\CD\IP BASE MAP.dwg at Aug 10, 2016-9:36am by cshugart
Layout: WATER Xrefs: CROWLEY BASE-NEW.dwg

NO.	REVISION	BY	DATE

**CAPITAL IMPROVEMENTS FOR
WASTEWATER IMPACT FEES**

CITY OF CROWLEY

**SUMMARY OF 2017-2027 WASTEWATER CAPITAL IMPROVEMENT
CONSTRUCTION COSTS**

Line No	Improvement	New Construction Cost	Development Construction Cost
1	Line A	\$42,366	\$42,366
2	Line A-1	\$377,653	\$0
3	Line A-2	\$ 46,074	\$ 46,074
4	Line A-3	\$ 149,995	\$149,995
5	Line AA	\$ 195,100	\$195,100
6	Line B	\$ 733,961	\$0
7	Line C	\$ 238,033	\$ 238,033
8	Line E	\$ 287,141	\$ 287,141
9	Line EE	\$ 724,510	\$ 724,510
10	Line EEE	\$ 1,748,620	\$1,748,620
11	Line F	<u>\$ 222,925</u>	<u>\$ 222,925</u>
Total Wastewater Improvements to Year 2027		\$4,766,380	\$3,654,765

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 36" LINE 'A' - 1205 LF (Joint Project w/Fort Worth)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$6,025.00	\$6,025.00
2	36" FIBERGLASS SEWER PIPE (10'-14' DEEP)	1,205	LF	\$325.00	\$391,625.00
3	6' DIA. SEWER MANHOLE	4	EA	\$6,500.00	\$26,000.00
4	EXTRA DEPTH FOR SSMH (>6')	70	VF	\$260.00	\$18,200.00
5	CONNECT TO EXIST SYSTEM	2	EA	\$1,200.00	\$2,400.00
6	REMOVE EXIST SEWER MANHOLE	4	EA	\$1,500.00	\$6,000.00
7	TRENCH SAFETY FOR SAN SEWER INSTALLATION	1,265	LF	\$3.00	\$3,795.00
8	WATERTIGHT MANHOLE INSERT	5	EA	\$32.00	\$160.00
9	TOP SOIL & HYDROMULCH	1,340	SY	\$7.00	\$9,380.00
10	TELEVISION INSPECTION	1,265	LF	\$3.00	\$3,795.00
11	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$485,380.00
	CONTINGENCY (15%)				\$72,807.00
	SUBTOTAL				\$558,187.00
	ENGINEERING/SURVEY				\$83,728.05
	TOTAL PROJECTED CONSTRUCTION COST				\$641,915.05
	TOTAL PROJECTED CROWLEY COSTS (6.6%)				\$42,366.39
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$42,366.39

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 10" LINE 'A-1' - 1320 LF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$6,600.00	\$6,600.00
2	REMOVE EXIST SEWER MANHOLES	5	LF	\$1,500.00	\$7,500.00
3	10" SDR-26 PVC SEWER PIPE (ALL DEPTHS)	1,320	LF	\$125.00	\$165,000.00
4	8" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	100	LF	\$48.00	\$4,800.00
5	5' DIA. SEWER MANHOLE	6	EA	\$5,000.00	\$30,000.00
6	EXTRA DEPTH FOR SSMH (>6')	60	VF	\$260.00	\$15,600.00
7	4" SANITARY SEWER SERVICE CONNECTION	20	EA	\$900.00	\$18,000.00
8	CONNECT TO EXIST SYSTEM	1	LF	\$1,200.00	\$1,200.00
9	TRENCH SAFETY FOR SAN SEWER INSTALLATION	1,420	LF	\$3.00	\$4,260.00
10	WATERTIGHT MANHOLE INSERT	2	EA	\$32.00	\$64.00
11	TOP SOIL & HYDROMULCH	1,468	SY	\$7.00	\$10,276.00
12	TELEVISION INSPECTION	1,420	LF	\$3.00	\$4,260.00
13	TEMP EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$285,560.00
	CONTINGENCY (15%)				\$42,834.00
	SUBTOTAL				\$328,394.00
	ENGINEERING/SURVEY				\$49,259.10
	TOTAL PROJECTED CONSTRUCTION COST				\$377,653.10
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (0%)				\$0.00

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 36" LINE 'A-2' - 1350 LF (Joint Project w/Fort Worth)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$6,750.00	\$6,750.00
2	36" FIBERGLASS SEWER PIPE	1,350	LF	\$325.00	\$438,750.00
3	8" SDR-26 PVC SEWER PIPE (ALL DEPTHS)	40	LF	\$48.00	\$1,920.00
4	6' DIA. SEWER MANHOLE	3	EA	\$6,500.00	\$19,500.00
5	EXTRA DEPTH FOR SSMH (>6')	35	VF	\$260.00	\$9,100.00
6	REMOVE EXIST SEWER MANHOLE	5	EA	\$1,500.00	\$7,500.00
7	CONNECT TO EXIST SYSTEM	5	EA	\$1,500.00	\$7,500.00
8	TRENCH SAFETY FOR SAN SEWER INSTALLATION	1,390	LF	\$3.00	\$4,170.00
9	TOP SOIL & HYDROMULCH	1,500	SY	\$7.00	\$10,500.00
10	TELEVISION INSPECTION	1,390	LF	\$3.00	\$4,170.00
11	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$527,860.00
	CONTINGENCY (15%)				\$79,179.00
	SUBTOTAL				\$607,039.00
	ENGINEERING/SURVEY				\$91,055.85
	TOTAL PROJECTED CONSTRUCTION COST				\$698,094.85
	TOTAL PROJECTED CROWLEY COSTS (6.6%)				\$46,074.26
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$46,074.26

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 21" LINE 'A-3' - 2470 LF (Joint Project w/Fort Worth)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$12,350.00	\$12,350.00
2	21" SDR-26 PVC SEWER PIPE (6'-10' DEEP)	2,470	LF	\$250.00	\$617,500.00
3	8" SDR-26 PVC SEWER PIPE (ALL DEPTHS)	120	LF	\$48.00	\$5,760.00
4	5' DIA. SEWER MANHOLE	5	EA	\$5,000.00	\$25,000.00
5	EXTRA DEPTH FOR SSMH (>6')	22	VF	\$260.00	\$5,720.00
6	REMOVE EXIST SEWER MANHOLE	10	EA	\$1,500.00	\$15,000.00
7	CONNECT TO EXIST SYSTEM	2	EA	\$1,200.00	\$2,400.00
8	TRENCH SAFETY FOR SAN SEWER INSTALLATION	2,590	LF	\$3.00	\$7,770.00
9	TOP SOIL & HYDROMULCH	2,744	SY	\$7.00	\$19,208.00
10	TELEVISION INSPECTION	2,590	LF	\$3.00	\$7,770.00
11	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$736,478.00
	CONTINGENCY (15%)				\$110,471.70
	SUBTOTAL				\$846,949.70
	ENGINEERING/SURVEY				\$127,042.46
	TOTAL COST				\$973,992.16
	TOTAL PROJECTED CROWLEY COSTS (15.4%)				\$149,994.79
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$149,994.79

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : **WASTEWATER IMPROVEMENTS**

Description: **42" LINE 'AA' - 4,300 LF (Joint Project w/Fort Worth)**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$21,500.00	\$21,500.00
2	42" FIBERGLASS SEWER PIPE (>14' DEEP)	4,300	LF	\$380.00	\$1,634,000.00
3	10" SDR-35 PVC SEWER PIPE (>14' DEEP)	80	LF	\$125.00	\$10,000.00
4	5' TYPE A SANITARY SEWER JUNCTION STRUCTURE	9	EA	\$12,500.00	\$112,500.00
5	REMOVE EXIST SEWER MANHOLE	6	EA	\$1,500.00	\$9,000.00
6	CONNECT TO EXIST SYSTEM	2	EA	\$1,200.00	\$2,400.00
7	TRENCH SAFETY FOR SAN SEWER INSTALLATION	4,380	LF	\$8.00	\$35,040.00
8	WATERTIGHT MANHOLE INSERT	9	EA	\$32.00	\$288.00
9	TOP SOIL & HYDROMULCH	4,780	SY	\$7.00	\$33,460.00
10	TELEVISION INSPECTION	4,380	LF	\$3.00	\$13,140.00
11	TEMP. EROSION CONTROL	1	LS	\$10,000.00	\$10,000.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$1,891,328.00
	CONTINGENCY (15%)				\$283,699.20
	SUBTOTAL				\$2,175,027.20
	ENGINEERING/SURVEY				\$326,254.08
	TOTAL PROJECTED CONSTRUCTION COST				\$2,501,281.28
	TOTAL PROJECTED CROWLEY COSTS (7.8%)				\$195,099.94
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$195,099.94

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 10" LINE 'B' - 2680 LF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$13,400.00	\$13,400.00
2	10" SDR-26 PVC SEWER PIPE (10'-14' DEEP)	2180	LF	\$175.00	\$381,500.00
3	10" SDR-35 PVC SEWER PIPE (6'-10' DEEP)	500	LF	\$85.00	\$42,500.00
4	8" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	80	LF	\$45.00	\$3,600.00
5	5' DIA. SEWER MANHOLE	6	EA	\$5,000.00	\$30,000.00
6	EXTRA DEPTH FOR SSMH (>6')	50	VF	\$260.00	\$13,000.00
7	CONNECT TO EXIST SYSTEM	2	EA	\$1,200.00	\$2,400.00
8	TRENCH SAFETY FOR SAN SEWER INSTALLATION	2,760	LF	\$3.00	\$8,280.00
9	WATERTIGHT MANHOLE INSERT	5	EA	\$32.00	\$160.00
10	HMAC PAVEMENT REPAIR	70	LF	\$50.00	\$3,500.00
11	REMOVE EXIST SSMH	5	EA	\$1,500.00	\$7,500.00
12	TOP SOIL & HYDROMULCH	2,980	SY	\$7.00	\$20,860.00
13	TELEVISION INSPECTION	2,760	LF	\$3.00	\$8,280.00
14	TEMP. EROSION CONTROL	1	LS	\$10,000.00	\$10,000.00
15	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$554,980.00
	CONTINGENCY (15%)				\$83,247.00
	SUBTOTAL				\$638,227.00
	ENGINEERING/SURVEY				\$95,734.05
	TOTAL PROJECTED CONSTRUCTION COST				\$733,961.05
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (0%)				\$0.00

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 42" LINE 'C' - 3095 LF (Joint Project w/Fort Worth)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$15,175.00	\$15,175.00
2	42" FIBERGLASS SEWER PIPE	3,095	LF	\$425.00	\$1,315,375.00
3	10" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	40	LF	\$175.00	\$7,000.00
4	5' TYPE A MANHOLE	7	EA	\$12,500.00	\$87,500.00
5	EXTRA DEPTH FOR SSMH (>6')	70	VF	\$260.00	\$18,200.00
6	CONNECT TO EXIST SYSTEM	5	LF	\$1,200.00	\$6,000.00
7	TRENCH SAFETY FOR SAN SEWER INSTALLATION	3,135	LF	\$8.00	\$25,080.00
8	WATERTIGHT MANHOLE INSERT	7	EA	\$32.00	\$224.00
9	HMAC PAVEMENT REPAIR	20	LF	\$50.00	\$1,000.00
10	REMOVE EXIST SSMH	6	EA	\$1,500.00	\$9,000.00
11	TOP SOIL & HYDROMULCH	3,485	SY	\$7.00	\$24,395.00
12	TELEVISION INSPECTION	3,135	LF	\$3.00	\$9,405.00
13	TEMP. EROSION CONTROL	1	LS	\$10,000.00	\$10,000.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$1,538,354.00
	CONTINGENCY (15%)				\$230,753.10
	SUBTOTAL				\$1,769,107.10
	ENGINEERING/SURVEY				\$265,366.07
	TOTAL PROJECTED CONSTRUCTION COST				\$2,034,473.17
	TOTAL PROJECTED CROWLEY COSTS (11.7%)				\$238,033.36
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$238,033.36

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 15" LINE 'E' - 1,575 LF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$8,000.00	\$8,000.00
2	15" SDR-35 PVC SEWER PIPE (6'-10' DEEP)	1,575	LF	\$65.00	\$102,375.00
3	8" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	150	LF	\$38.00	\$5,700.00
4	5' DIA. SEWER MANHOLE	8	EA	\$5,000.00	\$40,000.00
5	EXTRA DEPTH FOR SSMH (>6')	6	VF	\$260.00	\$1,560.00
6	4" SANITARY SEWER SERVICE CONNECTION	17	EA	\$900.00	\$15,300.00
7	CONNECT TO EXIST SYSTEM	1	EA	\$1,200.00	\$1,200.00
8	TRENCH SAFETY FOR SAN SEWER INSTALLATION	1,725	LF	\$3.00	\$5,175.00
9	HMAC PAVEMENT REPAIR	100	LF	\$50.00	\$5,000.00
10	TOP SOIL & HYDROMULCH	1,805	SY	\$7.00	\$12,635.00
11	TELEVISION INSPECTION	1,725	LF	\$3.00	\$5,175.00
12	TEMPORARY EROSION CONTROL	1	LS	\$5,000.00	\$5,000.00
13	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$217,120.00
	CONTINGENCY (15%)				\$32,568.00
	SUBTOTAL				\$249,688.00
	ENGINEERING/SURVEY				\$37,453.20
	TOTAL PROJECTED CONSTRUCTION COST				\$287,141.20
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$287,141.20

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 18" LINE 'EE' - 2,210 LF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$12,000.00	\$12,000.00
2	18" SDR-35 PVC SEWER PIPE (6'-10' DEEP)	2,220	LF	\$180.00	\$399,600.00
3	8" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	200	LF	\$42.00	\$8,400.00
4	5' DIA. SEWER MANHOLE	9	EA	\$5,000.00	\$45,000.00
5	6' DIA. SEWER MANHOLE	3	EA	\$6,500.00	\$19,500.00
6	EXTRA DEPTH FOR SSMH (>6')	2	VF	\$260.00	\$520.00
7	4" SANITARY SEWER SERVICE CONNECTION	10	EA	\$900.00	\$9,000.00
8	CONNECT TO EXIST SYSTEM	2	EA	\$1,200.00	\$2,400.00
9	TRENCH SAFETY FOR SAN SEWER INSTALLATION	2,420	LF	\$3.00	\$7,260.00
10	WATERTIGHT MANHOLE INSERT	2	EA	\$32.00	\$64.00
11	TOP SOIL & HYDROMULCH	2,690	SY	\$7.00	\$18,830.00
12	TELEVISION INSPECTION	2,420	LF	\$3.00	\$7,260.00
13	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$547,834.00
	CONTINGENCY (15%)				\$82,175.10
	SUBTOTAL				\$630,009.10
	ENGINEERING/SURVEY				\$94,501.37
	TOTAL PROJECTED CONSTRUCTION COST				\$724,510.47
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$724,510.47

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS

Project : WASTEWATER IMPROVEMENTS

Description: 21" LINE 'EEE' - 5165 LF

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$26,000.00	\$26,000.00
2	21" SDR-35 PVC SEWER PIPE (6'-10' DEEP)	5,165	LF	\$220.00	\$1,136,300.00
3	8" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	80	LF	\$42.00	\$3,360.00
4	6' DIA. SEWER MANHOLE	10	EA	\$6,500.00	\$65,000.00
5	EXTRA DEPTH FOR SSMH (>6')	2	VF	\$260.00	\$520.00
6	CONNECT TO EXIST SYSTEM	1	EA	\$1,200.00	\$1,200.00
7	TRENCH SAFETY FOR SAN SEWER INSTALLATION	5,245	LF	\$3.00	\$15,735.00
8	WATERTIGHT MANHOLE INSERT	6	EA	\$32.00	\$192.00
9	TOP SOIL & HYDROMULCH	5,738	SY	\$7.00	\$40,166.00
10	TELEVISION INSPECTION	5,245	LF	\$3.00	\$15,735.00
11	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
12	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$1,322,208.00
	CONTINGENCY (15%)				\$198,331.20
	SUBTOTAL				\$1,520,539.20
	ENGINEERING/SURVEY				\$228,080.88
	TOTAL PROJECTED CONSTRUCTION COST				\$1,748,620.08
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$1,748,620.08

CONCEPTUAL OPINION of PROBABLE COST

TEAGUE NALL AND PERKINS, INC.
5237 N RIVERSIDE DRIVE, SUITE 100
FORT WORTH, TEXAS 76137

DECEMBER 2017

**CITY of CROWLEY, TEXAS
2017-2027 CAPITAL IMPROVEMENT PLAN
for
WATER AND WASTEWATER IMPROVEMENTS**

Project : WASTEWATER IMPROVEMENTS

Description: 42" LINE 'F' - 2525 LF (Joint Project w/Fort Worth)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
1	PARKWAY PREPARATION	1	LS	\$12,625.00	\$12,625.00
2	42" FIBERGLASS SEWER PIPE	2525	LF	\$425.00	\$1,073,125.00
3	10" SDR-35 PVC SEWER PIPE (ALL DEPTHS)	20	LF	\$175.00	\$3,500.00
4	5' TYPE A MANHOLE	6	EA	\$12,500.00	\$75,000.00
5	EXTRA DEPTH FOR SSMH (>6')	60	VF	\$260.00	\$15,600.00
6	CONNECT TO EXIST SYSTEM	3	EA	\$1,200.00	\$3,600.00
7	TRENCH SAFETY FOR SAN SEWER INSTALLATION	2,545	LF	\$8.00	\$20,360.00
8	WATERTIGHT MANHOLE INSERT	3	EA	\$35.00	\$105.00
9	HMAC PAVEMENT REPAIR	25	LF	\$50.00	\$1,250.00
10	REMOVE EXIST SSMH	5	EA	\$1,500.00	\$7,500.00
11	TOP SOIL & HYDROMULCH	2,805	SY	\$7.00	\$19,635.00
12	TELEVISION INSPECTION	2,545	LF	\$3.00	\$7,635.00
13	TEMP. EROSION CONTROL	1	LS	\$8,000.00	\$8,000.00
14	MISCELLANEOUS RESTORATION				
	AND ADJUSTMENTS	1	LS	\$10,000.00	\$10,000.00
	SUBTOTAL				\$1,257,935.00
	CONTINGENCY (15%)				\$188,690.25
	SUBTOTAL				\$1,446,625.25
	ENGINEERING/SURVEY				\$216,993.79
	TOTAL PROJECTED CONSTRUCTION COST				\$1,663,619.04
	TOTAL PROJECTED CROWLEY COSTS (13.4%)				\$222,924.95
	PROJECTED COST ATTRIBUTABLE TO DEVELOPMENT (100%)				\$222,924.95



CAPITAL IMPROVEMENTS PLAN
WASTEWATER COLLECTION
SYSTEM

IMPACT FEE UPDATE
(2017-2027 C.I.P.)

LEGEND

- NEW WASTEWATER LINE (ULTIMATE C.I.P.)
- NEW WASTEWATER LINE (2017-2027 C.I.P.)
- EXISTING WASTEWATER LINE (MEETS ULTIMATE C.I.P.)
- EXISTING WASTEWATER LINE TO BE REPLACED (ULTIMATE C.I.P.)
- EXISTING WASTEWATER LINE TO BE REPLACED (2017-2027 C.I.P.)
- BOUNDARY OF SERVICE AREA FOR WASTEWATER IMPACT FEES (BASED ON CCN 20392)

tnp

GRAPHIC SCALE

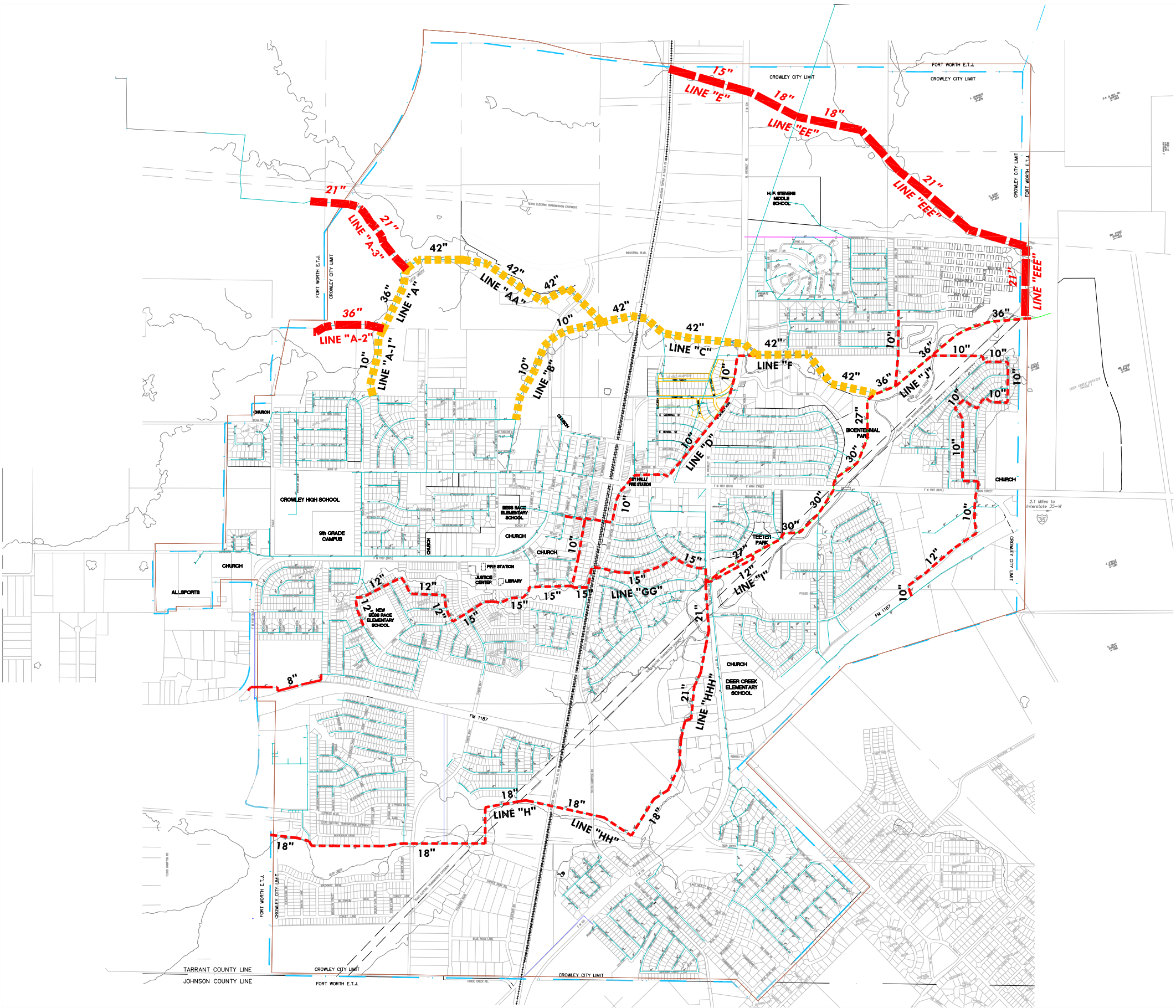


Basemap data derived from Tarrant Appraisal District map information and other records.

DECEMBER 2017

teague nall & perkins

5237 N. Riverside Drive, Suite 100
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TBPE Reg No. F-230;
TBPLS: 10011600, 10011601, 10194381
www.tnpsc.com

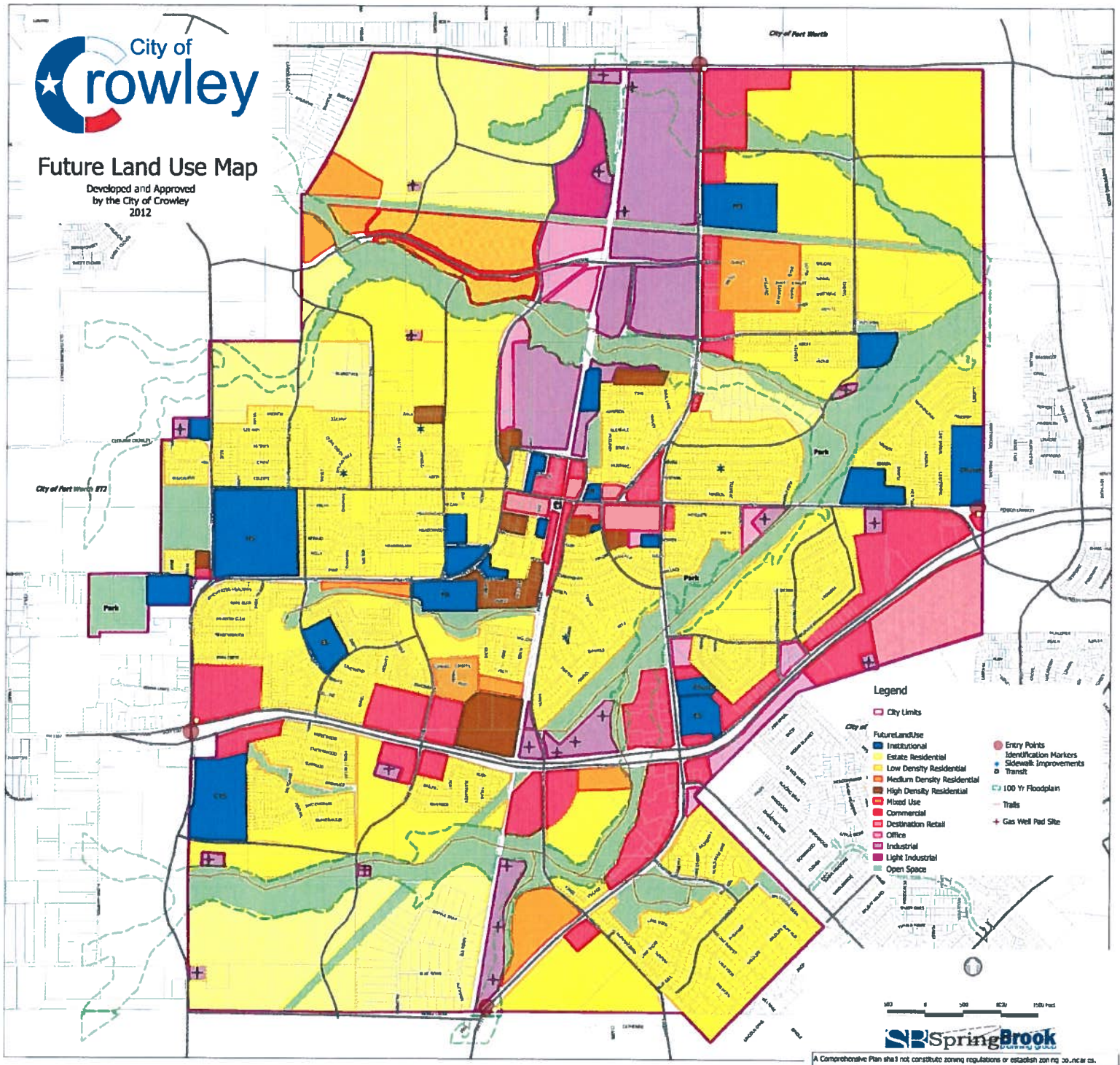


NO.	REVISION	BY	DATE



Future Land Use Map

Developed and Approved
by the City of Crowley
2012



APPENDIX



Demographic and Income Profile

Crowley City, TX
Crowley City, TX (4817960)
Geography: Place

Prepared by Orasi

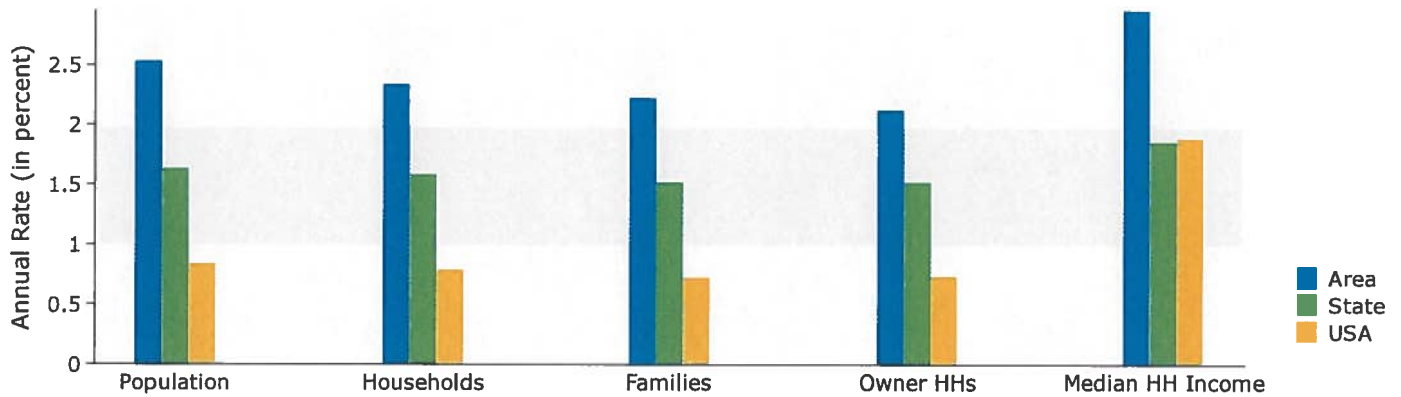
Summary	Census 2010		2016		2021		
Population	12,838		14,885		16,868		
Households	4,408		4,971		5,580		
Families	3,424		3,875		4,325		
Average Household Size	2.91		2.99		3.02		
Owner Occupied Housing Units	3,175		3,407		3,783		
Renter Occupied Housing Units	1,233		1,565		1,796		
Median Age	32.0		32.7		32.2		
Trends: 2016 - 2021 Annual Rate	Area		State		National		
Population	2.53%		1.63%		0.84%		
Households	2.34%		1.58%		0.79%		
Families	2.22%		1.52%		0.72%		
Owner HHs	2.12%		1.52%		0.73%		
Median Household Income	2.96%		1.86%		1.89%		
Households by Income	2016			2021			
	Number	Percent	Number	Percent	Number	Percent	
	<\$15,000	392	7.9%	433	7.8%		
	\$15,000 - \$24,999	333	6.7%	358	6.4%		
	\$25,000 - \$34,999	366	7.4%	440	7.9%		
	\$35,000 - \$49,999	496	10.0%	395	7.1%		
	\$50,000 - \$74,999	1,211	24.4%	1,048	18.8%		
	\$75,000 - \$99,999	859	17.3%	1,149	20.6%		
	\$100,000 - \$149,999	1,016	20.4%	1,368	24.5%		
	\$150,000 - \$199,999	196	3.9%	258	4.6%		
	\$200,000+	103	2.1%	130	2.3%		
	Median Household Income	\$66,333		\$76,759			
	Average Household Income	\$76,149		\$83,250			
	Per Capita Income	\$25,147		\$27,155			
	Population by Age	Census 2010		2016		2021	
Number		Percent	Number	Percent	Number	Percent	
0 - 4		1,054	8.2%	1,189	8.0%	1,387	8.2%
5 - 9		1,146	8.9%	1,198	8.0%	1,379	8.2%
10 - 14		1,165	9.1%	1,272	8.5%	1,360	8.1%
15 - 19		934	7.3%	1,121	7.5%	1,234	7.3%
20 - 24		766	6.0%	935	6.3%	1,011	6.0%
25 - 34		1,948	15.2%	2,248	15.1%	2,902	17.2%
35 - 44		1,930	15.0%	2,183	14.7%	2,513	14.9%
45 - 54		1,755	13.7%	1,990	13.4%	1,939	11.5%
55 - 64		1,069	8.3%	1,427	9.6%	1,612	9.6%
65 - 74		666	5.2%	863	5.8%	989	5.9%
75 - 84		315	2.5%	363	2.4%	431	2.6%
85+		90	0.7%	100	0.7%	111	0.7%
Race and Ethnicity		Census 2010		2016		2021	
	Number	Percent	Number	Percent	Number	Percent	
	White Alone	9,816	76.5%	10,405	69.9%	11,147	66.1%
	Black Alone	1,703	13.3%	2,559	17.2%	3,278	19.4%
	American Indian Alone	97	0.8%	101	0.7%	112	0.7%
	Asian Alone	197	1.5%	293	2.0%	378	2.2%
	Pacific Islander Alone	10	0.1%	13	0.1%	16	0.1%
	Some Other Race Alone	616	4.8%	976	6.6%	1,258	7.5%
	Two or More Races	399	3.1%	538	3.6%	680	4.0%
	Hispanic Origin (Any Race)	1,954	15.2%	2,814	18.9%	3,652	21.7%

Data Note: Income is expressed in current dollars.

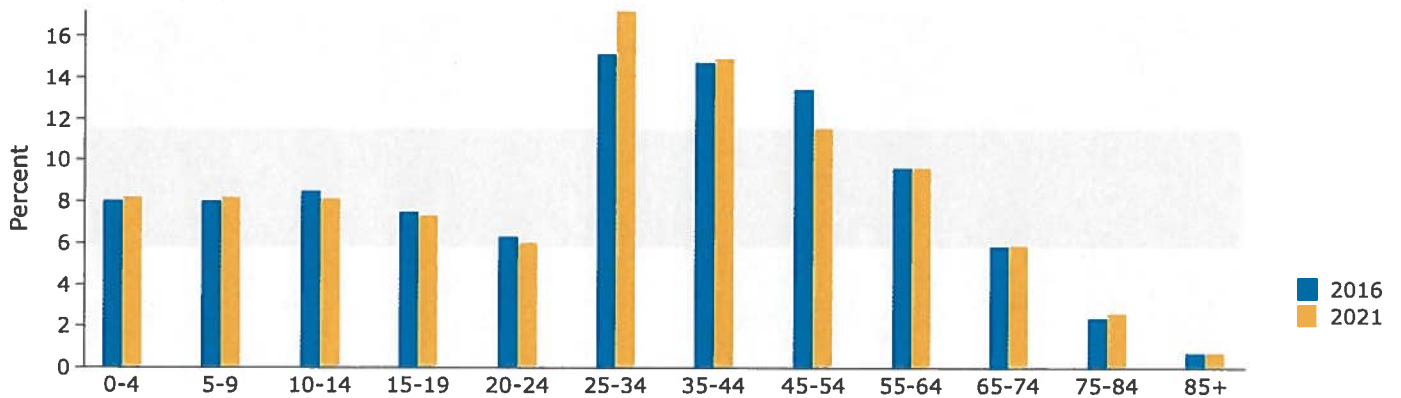
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2016 and 2021.

January 23, 2017

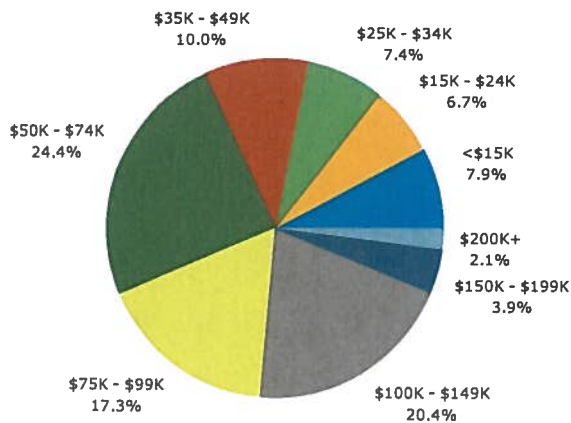
Trends 2016-2021



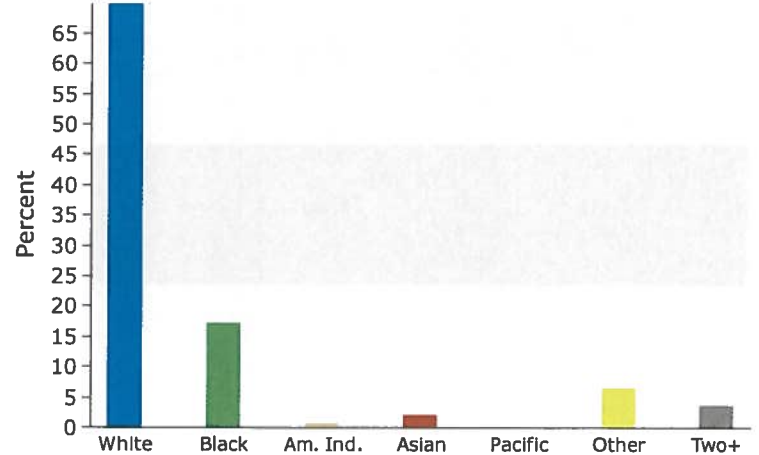
Population by Age



2016 Household Income



2016 Population by Race



2016 Percent Hispanic Origin: 18.9%