

Funding Emergency Scope Summary
City of Truth or Consequences

Please refer to the Preliminary Engineering Report – City Wide Water System Improvements for further information on the City of T or C Water system Public Water System ID – NM 3514327

Many of the distribution system’s waterlines are beyond their expected useful life due to age and are considered to be in poor condition. As a result, these old waterlines are leaking significant amounts of water.

The attached figure shows the existing system’s water leaks from city dispatch records from January 2022 until September 2022. There was a total of 367 pipe leaks/breaks within this nine-month range. Past records show an average of 4.5 hours for the city crew to complete repairs. This has increased the amount of operation and maintenance costs allocated to emergency repairs in 2022. The city estimates that out of a 270-day period, the city crew worked 206 days in waterline repairs merely; these replacements not only increase the operation and maintenance but also increase the health and sanitation issue for the city's residents due to water outages.

The Emergency Waterlines Replacements Involve replacing 37,808 linear feet, which represents 18.2 percent of the existing waterlines within the city, with new PVC C-900 DR-18.

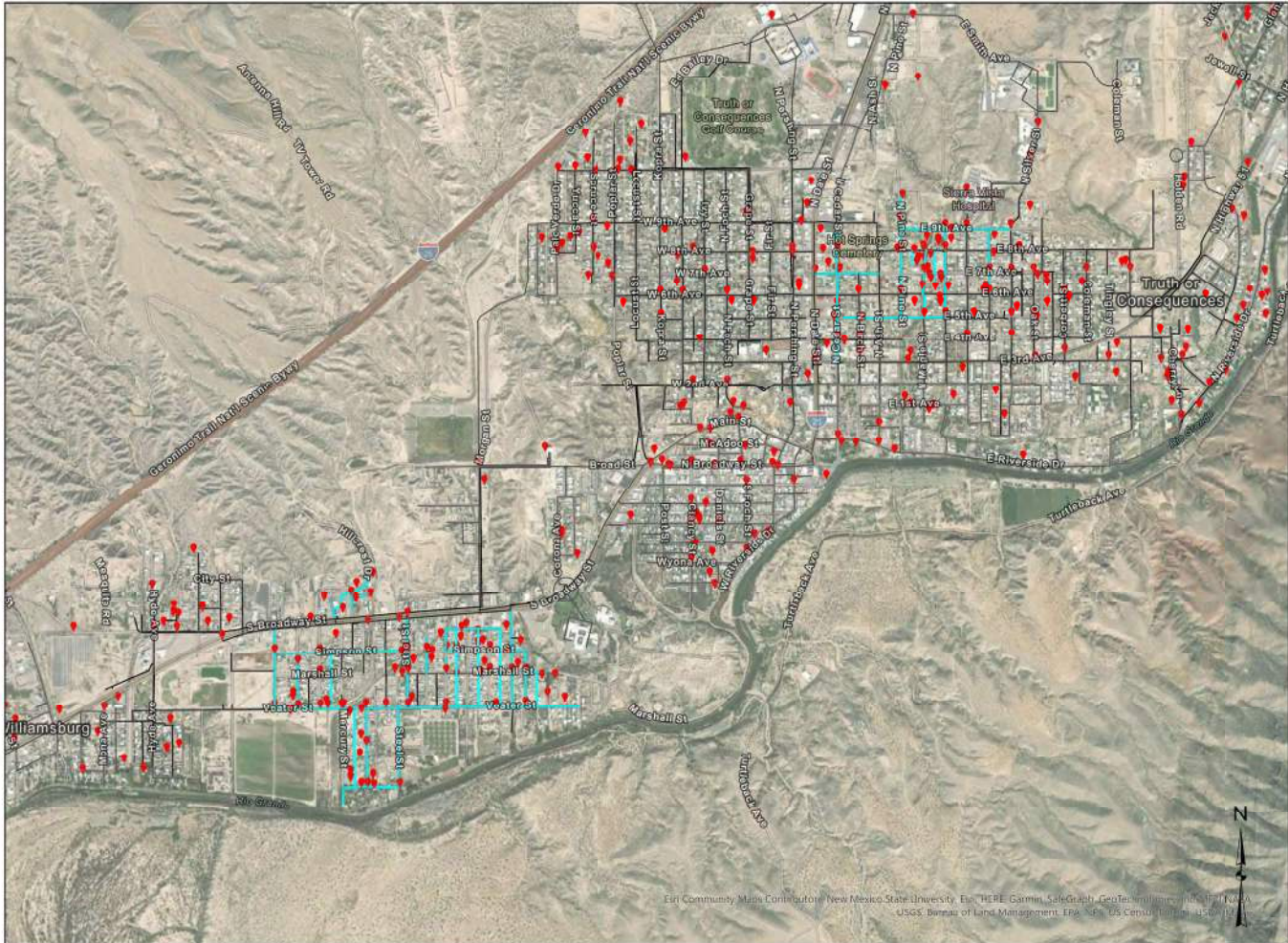
TABLE 1: EMERGENCY WATERLINES REPLACEMENT COST SUMMARY

Construction Cost	\$17,199,201
Engineering Services	\$3,063,664
Total	\$20,262,865

**Truth or Consequences
Emergency Waterlines**

LEGEND

- Emergency Waterlines
- Existing Waterlines
- Know Leaks and Breaks



City Community Maps Contributor: New Mexico State University, Esri, HERE, Garmin, Swatch, GeoEye, IGN, Aerotech, USDA, IGN, USGS, Bureau of Land Management, EPA, NPS, US Coast Guard, USGS, etc.

Open Trench Waterline					
ITEMS LIST		UNITS	QTY	UNIT COST	EXTEND COST
General					
1	Mob/Demob.	LS	1.00	649,047.70	649,047.70
2	Traffic Control	LS	1.00	1,038,476.32	1,038,476.32
3	Construction Survey/Staking	LS	1.00	281,686.70	281,686.70
4	SWPPP Preparation, Implementation, and Inspection	LS	1.00	454,333.39	454,333.39
5	Materials Testing	LS	1.00	53,005.70	53,005.70
6	Subsurface Utility Locating	LS	1.00	21,509.00	21,509.00
7	Utility Relocation	LS	1.00	21,509.00	21,509.00
8	AC Pipe Removal and Disposal	LS	1.00	15,228.00	15,228.00
Waterline					
9	6" Waterline C-900 DR-18 PVC Pipe Installed With Trenching and Backfill	LF	24,533.00	50.00	1,226,650.00
10	8" Waterline C-900 DR-18 PVC Pipe Installed With Trenching and Backfill	LF	7,176.00	100.00	717,600.00
11	14" Waterline C-900 DR-18 PVC Pipe Installed With Trenching and Backfill	LF	5,370.00	50.77	272,634.90
12	Jack and Bore w/ 18-inch Casing pipe, CIP	LF	2,083.17	220.00	458,297.17
13	4-1/2" Fire Hydrant w/ piping valves, and connection	EA	70.00	10,000.00	700,000.00
13	6" Gate Valves w/ Valve Can, CIP	EA	144.92	3,000.00	434,754.32
14	8" Gate Valves w/ Valve Can, CIP	EA	27.04	3,200.00	86,533.43
15	14" Gate Valves w/ Valve Can, CIP	EA	12.00	4,000.00	48,000.00
17	Pressurized waterline connections, CIP	EA	47.95	11,500.00	551,374.50
18	Ductile Iron MJ Fittings, All Sizes, Class 25, CIP	LB	14,919.32	3.00	44,757.97
19	Joint Restraints, CIP	EA	1,030.08	200.00	206,016.29
20	1" Water Service, New single connection to existing watermain, cip, SD 2362	EA	766.16	2,600.00	1,992,017.58
21	Water Meter Box Remove & Replace	EA	766.16	1,000.00	766,160.61
22	Dewatering of Trench, CIP	LF	6,192.57	50.00	309,628.37
23	Valve/Pipeline abandonment	LS	0.68	115,408.00	78,387.47
24	Hydrant removal and abandonment	LS	0.68	43,000.00	29,206.48
Roadway					
33	Asphalt Roadway, Remove, Dispose and Replace with SP III, 3' Thick for Residential Streets, include Subgrade Prep, CIP	SY	12,360.00	70.00	865,200.00
34	Asphalt Roadway, Remove, Dispose and Replace with SP III, 6" Thick for Aerial Streets, include Subgrade Prep, CIP	SY	12,360.00	100.00	1,236,000.00
35	Excavate and Dispose of Unsuitable Material, CIP	CY	74,160.00	10.00	741,600.00
36	Import of Engineered Fill	CY	74,160.00	25.00	1,854,000.00
37	Geogrid Base Roadway Reinforcement	SY	12,360.00	5.00	61,800.00
38	Remove and replace Curb and Gutter @ Services, CIP	LF	3,064.64	35.00	107,262.49
39	Remove and replace Sidewalk @ Services, CIP	CY	2,145.25	90.00	193,072.47
Construction Cost Subtotal:					15,515,749.88
Contingency - 10%:					1,551,575.00
NMGR @ 8.5%:					131,884.00
TOTAL ESTIMATED CONSTRUCTION COST:					17,199,208.88
ENGINEERING SERVICES					
41	Additional Engineering - Data Collection*	LS	1.00	\$341,346.00	341,346.00
44	Engineering Design Services	LS	1.00	\$1,706,732.00	1,706,732.00
45	Engineering - Bid Phase	LS	1.00	\$37,548.00	37,548.00
46	Engineering - Construction Inspection	LS	1.00	\$529,087.00	529,087.00
48	Engineering - Construction Management	LS	1.00	\$225,289.00	225,289.00
Engineering Services Subtotal:					2,840,002.00
NMGR @ 7.875%:					223,650.00
Engineering Total:					3,063,652.00
GRAND TOTAL:					20,262,860.88