




Purchasing Department

209 Water Street
Johnson City, TN 37601
(423) 975-2716

ADDENDUM

TO: All Prospective Vendors

FROM: Debbie Dillon, 
Director of Purchasing

SUBJECT: Addendum No. 1 ITB #6489
Leak Detection Survey Services

DATE: March 17, 2021

Consider this addendum an integral part of the above referenced Invitation to Bid:

See attached missing page 5 of bid specifications .
See attached Leak Detection Survey Table for total distances of each size pipe

1. Q -For pipe repairs, was any PVC or HDPE used to "patch" the pipe? If so, are those locations known and documented? A-NO
2. Q -What pipe materials are used as service connections? A- Majority are copper, some older galvanized or plastic
3. Q -How many pressure zones are there? A- 12
4. Q -What is the operating pressure in each pressure zone? A -Varies depending on location but typically 40-150 psi
5. Q -Does the utility have a regular valve exercising program? How often are valves exercised? A - Yes, on average every 7 years
6. Q -Are the mainline valves located primarily in valve boxes or valve vaults (manholes)? A- Valve Boxes
7. Q -Does the utility have a regular hydrant flushing program? How often are hydrants flushed/flow tested? A -Yes, on average every 3 years

All other specifications/requirements remain the same. **Vendor to acknowledge receipt of this addendum by initialing and returning with the bid package. Please contact this office if your response has already been submitted.** Failure to acknowledge this addendum could be cause for rejection of your submittal. Your un-opened response envelope can be returned to you for re-submittal upon request. Any questions regarding addendum submittal please contact this office.

/dd

Johnson City Water System Leak Detection Zones Summary 3/16/21

ZONE 1																						
Material	Length (feet)	Length (Miles)	Unknown	.75"	1"	1.25"	1.5"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	Total
Asbestos Cement Pipe	18,359	3.48									2,551	15,808										
Cast Iron Pipe	543,730	102.98	621					1,163		10,441	367,395	40,852	18,901	21,193	10,076	62,278	1,691	4,241		4,876		543,728
Concrete	13,168	2.49																	10,301	2,867		13,168
Copper	7,667	1.45		1,649	5,966			50														7,665
Ductile Iron Pipe	583,904	110.59	543					263		2,713	226,969	174,423	16,052	103,374		29,911		27,810	1,844			583,902
Galvanized Pipe	57,374	10.87	1,882	1,798	3,532	535		48,276	44													56,067
HDPE	9,333	1.77						9,147				2										9,149
PVC	211,474	40.05			361			111,691	22,969	57,694	8,309	5,224	2,836	2,380								211,464
Unknown	297,732	56.39	56,531	648	10,200			42,961	4,780	12,363	114,587	26,257	11,112	6,130				8,925	1,024	14		295,532
Total	1,742,741	330.06	59,577	4,095	20,059	535		213,551	27,793	83,211	719,811	262,566	48,901	133,077	10,076	92,189	1,691	40,976	13,169	7,757		1,720,675
ZONE 2																						
Material	Length (feet)	Length (Miles)	Unknown	.75"	1"	1.25"	1.5"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	Total
Asbestos Cement Pipe	11,742	2.22									7,132	4,341										11,473
Cast Iron Pipe	260,045	49.25						2,968		1,498	180,691	42,214	11,573	12,109	3,971	5,021						260,045
Copper	1,158	0.22		90	1,067																	1,157
Ductile Iron Pipe	736,661	139.52	141					35		367	236,926	315,445	18,270	85,603	45	79,131		697				736,660
Galvanized Pipe	66,507	12.60		12	5,868		3,233	57,337														66,450
HDPE	5,197	0.98						4,584														4,584
PVC	296,558	56.17	576		835			145,197	8,315	96,625	30,901	7,107	6,772									296,328
Unknown	242,817	45.99	11,184	35	2,356			96,234	1,619	13,598	88,387	26,028	1,957			571						241,969
Total	1,620,685	306.95	11,901	137	10,126	0	3,233	306,355	9,934	112,088	544,037	395,135	38,572	97,712	4,016	84,723	0	697	0	0		1,618,666
ZONE 3																						
Material	Length (feet)	Length (Miles)	Unknown	.75"	1"	1.25"	1.5"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	Total
Asbestos Cement Pipe	31,667	6.00								21,219	10,448											31,667
Cast Iron Pipe	245,690	46.53								12,529	144,846	11,622	27,285	9,143	6,492	33,386				218		245,521
Concrete	591	0.11																				0
Copper	2,842	0.54	129	572	1,564			327														2,592
Ductile Iron Pipe	576,437	109.17						54		608	114,989	273,837	15,131	131,970		30,493					473	567,555
Galvanized Pipe	113,684	21.53	924	1,791	2,619	442		103,662	4,018													113,456
HDPE	6,473	1.23						6,448														6,448
PVC	377,496	71.50		785	950		1,348	209,491	14,151	112,763	34,645	31,450										405,583
Unknown	263,844	49.97	15,822	1,367	1,291		73	99,243	3,011	44,105	60,935	19,125		11,348							7,514	263,834
Total	1,618,724	306.58	16,875	4,515	6,424	442	1,421	419,225	21,180	191,224	365,863	336,034	42,416	152,461	6,492	63,879	0	0	0	8,205	315	1,636,656

F. When ground cover is not a hard surface, probe rods shall be used at 10 feet intervals when normal contact pints are not available (as described in Paragraph D). Probe rods will be driven into the ground a minimum of 6" directly over the pipe when ground conditions allow.

G. A detailed report of decibel levels at suspected leak sound locations and observations are to be compiled during the survey for reinvestigation and possible pinpointing at a later time. This reinvestigation is to increase the speed of the survey and should eliminate correlating on most false leak sounds.

H. All indications of leaks found during survey are to be verified a second time, after which the leak shall be pinpointed with a computer based leak sound correlator. Pinpointing leak locations through interpretation of sound intensity, either by ear, decibel metering, or other like methods, is not to be used when contact points are available for use with correlator.

I. The equipment used shall not normally require valves to be operated during surveying and pinpointing. However, on occasion, services or valve may be operated to eliminate service draw noises or to change velocity noise. If required, any appurtenance operation will be performed by Johnson City personnel only.

J. The correlator equipment used should have the capability of prompting the operator to input the variables when different pipe sizes and/or pipe materials are encountered in the same span to be investigated. The correlator shall have the capability of correlating up to at least four various pipe sizes and types at one time in a given span.

K. The vendor shall furnish to the City with a daily copy of the leak reports for any leaks that are pinpointed, as well as a Final Report within thirty (30) days from the end of the project. The Final Report is to include:

1. Executive Summary showing individually recorded time for correlating, surveying and other time spent on the project. This summary also shall include footage covered, approximate GPM loss, types of leaks found, quantity of leaks found.
2. Survey Review explaining the procedures and methods used during this study.
3. Leak Reports with detailed drawing showing each leak location that is pinpointed including photograph of the location, address and/or cross street, the type of leak found, visual water (Y/N) and an estimate on the GPM lost. (This same leak report shall be supplied daily to the City when leaks are found.)