

Sole Source Procurement Instructions

Department: Harrisonburg Public Utilities

Date: 04-19-24

Vendor: ASTERRA

Product/Service: Remote sensing water leak surveying

It is the policy of the City of Harrisonburg that contracts/products be awarded on a competitive basis and that the use of a sole source procurement must be limited to those instances where only one source is practicably available. Per Virginia Code 2.2-4303 and 2.2-4360, the sole source document must be posted online for a minimum of ten (10) days before purchasing the product/service.

1. Explain why this is the only product or service that can meet the needs of the department making the purchase.

The Public Utilities Department is seeking remote sensing water leak survey and data analysis to identify possible water leaks in the water distribution system. ASTERRA provides highly accurate leak detection analysis to more precisely locate potential leaks than HPU's current methods. Deliverables from ASTERRA will provide a list of potential leaks throughout the entire pipe network to prioritize leak listening efforts.

2. Explain why this vendor is the only practicably available source from which to obtain this product or service.

ASTERRA developed a unique and patented algorithm for leaks detection in urban freshwater distribution and wastewater collection networks. ASTERRA uses spectral aerial imaging, taken from a satellite mounted sensor, using the L band microwave wavelength, to spot leakage in subterranean drinking water and wastewater networks. Drinking water and wastewater is detected by looking for the particular spectral signature typical to drinking water and wastewater. Competition is precluded by the existence of patent: ASTERRA' algorithm and process are patented US 9285475 Mar, 15 2016 SYSTEM AND METHOD OF UNDERGROUND WATER DETECTION assigned to ASTERRA. ASTERRA is 100% owned subsidiary of Utilis Inc.

3. Explain why the price is considered reasonable.

HPU evaluated the cost of typical leak detection techniques and found the cost competitive as the services will offset labor cost and provide direction and accuracy in finding leaks. Surveying the entire distribution system for leaks and prioritizing areas for investigation will provide a more efficient approach than current annual listening methods which covers a tenth of the Network each year.

4. Describe the efforts that were made to conduct a noncompetitive negotiation to get the best possible price for the taxpayers.

The Public Utilities Engineering staff met with the ASTERRA salesman who then provided a proposal that offered differing levels of service that specifically tailored to Harrisonburg's pipe network and desired products and services they offered. The proposal itemized quantities and prices to compare value and cost.

Please attach this form to the Requisition and forward to Purchasing.

Signature: _____



Date: _____

5-8-24