ADS ENVIRONMENTAL SERVICES®

City of Ann Arbor, MI

Procurement Unit

301 E. Huron Street

Ann Arbor, MI 48104

REFERENCE NO.	**AnnArbor.17-01**
DATE	3/7/2017
TERMS	90 days
SHIPMENT	See below
DELIVERY	30 days ARO
PRICE VALIDITY	90 days

Reference:　　**RFP No. 17-01 Fee Proposal**

Item	QTY	ADS Triton+ Flow Meter	UNIT PRICE	TOTAL
P1.	12	ADS Triton+ Flow Metering System: IS Rated Monitoring System with (1) internal modem, (2) mini wing antenna, (3) non-contact ultrasonic depth sensor [CS5D], peak combo sensor (velocity, pressure, up-ultrasonic) [CS4] and installation and mounting kit [iKit] to accommodate pipe sizes from 8.0" to 42.0". **Part Number: FST KIT #1**	$ 4,215.00	$ 50,580.00
P2.	12	Flow Monitor Installation and Commissioning Services: • Installation of sensors / data logger • Placement, wiring and programming of Triton+ data logger • Initial Site Confirmation • Site Report **Part Number: Installation**	$660.00	$7,920.00
P3.	144	Maintenance Services: • Manhole Entry for any Probe/Sensor Cleaning • Data Analysis for Meter Maintenance and Scheduling • Firmware Updates/Upgrades as released by Manufacturer • Site confirmations (as needed) to ensure accuracy • Includes Wireless SIM Fee's for data Transmission Priced at Per Unit / Per Month. 12 Locations for 12 Months = 144 Unit/Months	$240.00 (Unit/Month)	$34,560.00
		TOTAL (Meter Purchase, Installation, 12 Months of Maintenance)		**$93,060.00**

ADS Environmental Services
Troy, MI
Tel: 708.341.9701   EMAIL: cskehan@idexcorp.com
www.adsenv.com

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		OPTIONAL ITEMS (Item B6 in RFP)		
OPT		Meter Removal (storage provided at ADS warehouse if needed)	$300.00 Each	**D.U.R.**
OPT		Meter Installation at New Location	$660.00 Each	**D.U.R.**
OPT		Monthly Meter Maintenance per Meter Beyond Initial 12-month period	$250.00 (Unit/Month)	**D.U.R.**

The above prices do not include applicable sales or use taxes and it has been noted that the City is Tax Exempt

The above prices do not include any special, modified, or custom documentation or manuals that may be required. Standard ADS Environmental Services manuals, appropriate to the flow monitors delivered, are included with the equipment and can be downloaded at www.adsenv.com

The purchase of ADS Products Conditions of Sale found at: http://www.adsenv.com/equipmenttermsandconditions This includes all information about the hardware warranty period for ADS monitoring Equipment.

Warranty Terms: All new products manufactured by ADS will be free from defects in material and workmanship for up to one (1) year following the date of shipment from ADS. Any unauthorized repair or replacement, use, installation or incorporation of unauthorized parts or accessories, including without limitation opening up a monitor, will void this product warranty. Any repair or replacement will be covered by this new product warranty for ninety (90) days from the date that such repaired or replaced product is shipped from ADS. This warranty is available to the Client as the original purchaser of the product and only if it has been installed, operated, and maintained in accordance with ADS' standards. This warranty does not apply to damage by catastrophes of nature, fire, explosion, acts of God (including, but not limited to, lightning damage and power surges), accidents, improper use or service, damage during transportation, or other similar causes beyond ADS' control.

ADS uses FedEx and/or UPS for all Shipping (Ground) to the Field Office performing the installation work (Troy, MI). Hardware is typically shipped within 30 days of ADS receiving a purchase order/signed agreement for the project. Field installation work will be scheduled between ADS and the Owner/Client.

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Page 2 of 2

ADS TRITON+

The new *ADS TRITON+*™ is a "Fit-for-Purpose" open channel flow monitor for use in sanitary, combined, and storm sewers. It is designed to be the most versatile flow monitoring system available for wastewater collection applications. It supports single pipe or dual pipe flow measurement installations and is certified to the highest level of Intrinsic Safety.

ADS TRITON+

This multiple technology flow monitor will power almost every available sensor technology that is used in wastewater applications today. It is the most versatile and cost-effective, multiple-technology flow monitor on the market. The *TRITON+* includes three multiple technology sensor options: a Peak Combo Sensor, a Surface Combo Sensor, and an Ultrasonic Level Sensor (see inside for technology and specifications). This array of monitoring technologies provides for unmatched flexibility in a fully integrated, fit-for-purpose monitoring platform.

The *TRITON+* platform adapts to a wide range of customer applications and budgets. It can be configured as an economical single sensor monitor or dual sensor monitor. It offers a longer battery life and fewer parts for a more reliable system. This provides a lower purchase price and a lower ownership cost over the life of the monitor. The *TRITON+* has the lowest operational cost per data sample of any Intrinsically Safe flow monitor available.

TRITON+ Features

- Versatile performance that is easy to install and operate
- Two sensor ports supporting 3 interchangeable sensors providing up to 6 sensor readings at a time
- Single or dual pipe/monitoring point measurement capabilities
- Multi-carrier cellular or serial communication to help optimize coverage and cost
- Industry-leading battery life with a 3G/4G UMTS/HSPA+ wireless connection providing up to 15 months at the standard 15-minute sample rate (*varies with sensor configuration*)
- External power and Modbus network connectivity option available with an ADS External Power and Communications Unit (ExPAC) and a 9-36 VDC power supply
- Analog and digital I/O expansion (4-20 mA and dry contacts) available with an ADS External I/O unit (XIO)
- Modbus protocols enabling RTUs to help simplify SCADA system integration
- Supports the delivery of CSV files to an FTP site at user-defined intervals
- Supports actuation of a water quality sampler for flow proportional or level-based operation
- Monitor-Level Intelligence (MLI®) enables the *TRITON+* to effectively operate over a wide range of hydraulic conditions
- Superior noise reduction design for maximizing acoustic signal detection from depth and velocity sensors
- Five software packages for accessing flow information: Q*start*™ (configuration and activation); Profile® (data collection, analysis, and reporting); IntelliServe® (web-based alarming); Sliicer.com® (I/I analysis); and FlowView Portal® (online data presentation and reporting)
- Intrinsically-Safe (IS) certification by IECEx for use in Zone 0/Class I, Division 1, Groups C & D, ATEX Zone 0, and CSA Class I, Zone 0, IIB
- Thick, seamless, high-impact, ABS plastic canister with aluminum end cap (meets IP68 standard)
- Innovative circuit board dome-enclosure protects and limits exposure of electronics when opening the canister to change the battery

About ADS

A leading technology and service provider, ADS Environmental Services® has established the industry standard for open channel flow monitoring and has the only ETV-verified flow monitoring technology for wastewater collection systems. These battery-powered monitors are specially designed to operate with reliability, durability, and accuracy in sewer environments.

To Learn more, visit www.adsenv.com/TRITON+

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TRITON+ Specifications

Connectors
U.S. Military specification MIL-C 26482 series 1, for environmental sealing, with gold-plated contacts

Communications
- Hepta band UMTS/HSPA+ cellular wireless modem
- Direct connection to PC using an ADS USB serial cable

Monitor Interfaces
- Supports simultaneous interfaces with up to two combo sensors
- Supports optional Analog and Digital I/O with ADS XIO: two 4-20 mA inputs and outputs, two switch inputs and two relay outputs

Power
Internal - Battery life with a cellular modem:
- Over 15 months at a 15-minute sample rate*
- Over 6 months at a 5-minute sample rate*
External - Optional external power available with ADS External Power and Communications Unit (ExPAC) with an ADS- or customer-supplied 9-36 Volt DC power supply

Rate based on collecting data once a day and varies according to sensor configuration and operating temperature

Operating and Storage Temperature
-4 degrees to 140 degrees F (-20 degrees to 60 degrees C)

Connectivity
- Modbus ASCII: Wireless; Wired using ExPac
- Modbus RTU: Wireless; Wired using ExPac
- Modbus TCP: Wireless only

Intrinsic Safety Certification
- Certified under the ATEX European Intrinsic Safety standards for Zone 0 rated hazardous areas
- Certified under IECEx (International Electro technical Commission Explosion Proof) Intrinsic Safety standards for use in Zone 0/Class I, Division 1, Groups C&D rated hazardous areas
- CSA Certified to CLASS 2258 03 - Process Control Equipment, Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations, Ex ia IIB T3 (152 degrees C)

Other Certifications/Compliances
- FCC Part 15 and Part 68 compliant
- ROHS (lead-free) compliant
- Carries the EU CE mark
- Canada IC CS-03 compliant
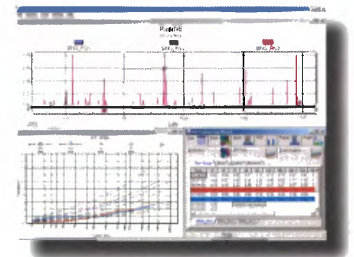

ADS Flow Monitoring Software

Qstart is desktop software providing field crews with a simple, easy-to-use tool for quickly activating and configuring ADS flow monitors. Qstart enables the user to collect and review the monitor's depth and velocity data in hydrograph and tabular views simultaneously.

FlowView Portal is web-hosted software providing robust report delivery, enabling the user to manage data, customize reports, and select viewing parameters. FlowView Portal has a virtually unlimited database for storing and accessing historical data, using data for comparison and trend analysis purposes, and sharing information electronically.

IntelliServe is web-hosted software providing real-time operational intelligence on the status of flow activity throughout the wastewater collection system. IntelliServe utilizes dynamic (or smart) alarming to inform clients about the occurrence of rain events, flow performance abnormalities, and data anomalies at the flow monitoring locations.

Sliicer.com is web-hosted software providing a powerful set of engineering tools designed for both the consulting and municipal engineer. Sliicer.com's inflow and infiltration tools examine wastewater collection system dry and wet weather flow data and provide rigorous performance measurements in one-tenth the time of other analysis tools.

Profile is desktop software providing the industry's best data analysis tools, from basic flow monitoring data to complex hydraulic analysis. Profile is intuitive software that saves time and improves data quality by compiling project data into one location for analysis and reporting.

FLOW MONITORING APPLICATIONS

- Billing
- Inflow/Infiltration
- Model Calibration
- Combined Sewer Overflows (CSOs)
- Stormwater Monitoring
- Capacity Analysis
- Spill Notification