

ADDENDUM NUMBER #2

<u>PROJECT</u>	<u>BIDS DUE</u>
Union Township Pump Station #2 Upgrades GFA Project No: 11320	Date: June 13, 2013 Time: 11:00 AM Location: Charter Township of Union 2010 South Lincoln Mt. Pleasant, MI 48858

The Addendum is issued prior to the receipt of bid proposals to amend the Contract Documents as follows. Bidders shall acknowledge receipt of this addendum by means of a handwritten note on the Bid Schedule.

GENERAL

1. THIS PROJECT IS NOT PREVAILING WAGE NOR TAX EXEMPT
2. All permits have been obtained by the Owner. The contractor is still responsible to obtain/coordinate the building, mechanical, plumbing, and electrical permit, inspections and associated fees as required by the Township.
3. Contractor is responsible for providing, installing and calibrating instrumentation including but not limited to the Generator Set, ATS, flowmeter, wiring, and conduit. Owner is providing programming of all equipment as to be performed by Perceptive Controls. Contractor shall coordinate with Perceptive as necessary to complete work.

SPECIFICATIONS

1. Specification 16230: Section 2.1.C. shall be stricken from the specification and replaced with the following:
 - 2.1.C. Shall be supplied with three (3) contacts – Common Fault, Failure and Status. The shall be displayed on the Generator with ability to be displayed on SCADA (as completed by Owner)
2. Specification 16230: Section 3.6.A shall also have the word “Automatic Transfer Switch” and associated appurtenances included.
3. Section 16230: Section 2.1.D. first sentence shall be stricken in its’ entirety and replaced with the following:

The ATS shall be UL1008 listed, constructed with an industrial 600VAC contactor, 225 Amp, WCR rating of 30,000 at 480 VAC as manufactured by Bridgeway Cummins or approved equal.
4. Section 16230: Supplemental Material List for Generator/ATS shall be stricken in its entirety and replaced with attached.

DRAWINGS

1. Drawing Sheet 3: The proposed new manhole frame and cover for the existing Bypass Manhole shall be EJIW #1120 or equal with self sealing cover (bolted).
2. Drawing Sheet 3: Clarification- The existing 10” Force Main material is unknown. Contractor is responsible to field verify and install insertion valve and live tap accordingly. Costs for exploration and modifications to fittings and installation to be included with cost of project.
3. Drawing Sheet 6: Proposed Plug Valve (typical of 1) located on the vertical piping shall include a chainwheel.
4. Drawing Sheet 5: Clarification- Existing Generator Set and accessories shall be removed and disposal coordinated with Owner including but not limited to the existing exhaust piping, silencer, and wall thimble. Contractor shall be responsible for providing and installing new. Refer to attached Specification 16230 Supplemental Material List for specifics.
5. Drawing Sheet 7: The following notes shall be added:

The contractor shall field verify existing building conditions and be responsible for removing and disposing as advised by the Owner the existing generator set and accessories and installing new in accordance with manufacturers recommendations. This shall include but not limited to the following:

- Disconnection / Connection of existing louvers to the Generator Set Run Relay Signal
- Verification existing natural gas supply piping shall provide required pressure and flow to the proposed generator set location under any and all site operating conditions. Contractor shall be responsible to upgrade if required at no additional cost to project
- Disconnection / Connection of existing power and control wiring between Generator Set and ATS

Any modifications to existing building including but not limited to walls and/or floor, to accommodate the new package installation shall be included with cost of project.

This Addendum No. 2 becomes part of the Contract Documents as of this date and supersedes the information in the originally issued Contract Documents where applicable. The Contractor shall acknowledge receipt of the Addendum in the Bid Schedule included with his/her bid.

SUPPLEMENTAL MATERIAL LIST FOR GENERATOR/ATS

GENERAL

NOTE: Bidders are instructed that “Nameplate Rated KW” in any size is not considered sufficient to prove equal performance requirement has been met. All vendors shall quote equipment to meet specified performance for: Engine HP, package derate due to altitude and temperature, alternator KW @ rated temperature rise, Starting KVA @ 30% dip. ATS shall be spec grade, industrial, 600VAC contactor based, WCR rating of 30,000 at 480 VAC, provide ATS with Five Year Comprehensive warranty.

NOTE: All vendors are instructed to meet required performance, features and distributor level support. No “Bid Qualifier” statements, such as: “Standard equipment quoted to meet intent of specs” will be allowed - inclusion of qualifier statements for equipment features, performance or support will be cause for bid rejection.

NOTE: Contractor shall be responsible for providing and installing the following:

- Insulated wall thimble
- All site fuel and exhaust piping complete with high temperature (1200 Deg F minimum) insulation for piping and silencer
- Exhaust extension with bevel / birdscreen or Long Radius Elbow, riser and high quality cast Rain Cap.
- Radiator duct adaptor with flex section

Contractor shall be responsible for supplying and installing material as required for the generator set package in compliance with manufacturers recommendations.

*All proposed exhaust piping bends shall be long radius elbows

**All proposed natural gas and exhaust piping shall be Schedule 40 BIP

SUPPORT

All equipment distributors bidding this project shall be the authorized distributor for the project location and offer the following full time distributor level product support in house for equipment in the field:

24/7 Emergency Service, Parts availability from Distributor and manufacturer for all portions of the equipment. In house rental fleet with mobile diesel gen sets sized to back up this project site available. Full time, factory trained power generation field service technicians, equipped with service diagnostic tool to allow rapid troubleshooting, adjustment, programming or software updates for the engine, controls and the ATS.

Equipment distributor shall be 100% authorized for any level service and warranty repair on all portions of the equipment, including Engine, Alternator, Controls and the associated ATS. All support, equipment start up and training shall be performed by the local authorized equipment distributors full time power systems field service technician, no portion of distributor support requirements is assignable to sales, dealers, rental house, or any third party organization.

Specified equipment, features and performance:**GEN SET Spark Ignited Genset: 60Hz-Minimum 85kW (if meets performance spec), Nat Gas Fueled**

U.S. EPA, Certified for Stationary Emergency Application
 Genset-Spark Ignited, Natural Gas Fueled, 60Hz, Minimum Rating of 85kW @ 125 Rise
 Duty Rating-Standby Power @ 125 Degree F Alternator Rise
 Engine: 6.8L, 176HP, 1800RPM, no derate under 5000' altitude or 104 degrees F temperature
 Engine Governor-Electronic, Isochronous
 Package Listing-UL 2200
 Emissions Certified - SI, EPA, Emergency, Stationary, 40CFR60
 Three way catalyst provided by generator manufacturer as part of generator exhaust silencer in base bid
 Fuel System-Nat Gas, not to exceed 1000CFH and 7" – 14" WC operating pressure range
 Voltage-277/480, 3 Phase, Wye, 4 Wire
 Direct Connected, 1800RPM Engine Gen Set package no high speed or geared allowed
 Alternator-Oversized, Rated 105KW @ 125 rise, 12 Lead, 423 SKVA with PMG exciter
 CONTROL-Programmable microprocessor w/integral comprehensive alternator protection
 Exciter/Regulator-PMG, 3 Phase L-N Sensing with PWM Output
 Meters-AC Output, Analog: Voltage, Amperage, Hertz, KW and PF
 Relays-Genset Status, User Configurable, 3 available, One "Run", One "Common Fault"
 Circuit Breaker-150A, 3P, 600V, TM, 80%, UL/IEC
 Engine Starter - 12 VDC Motor
 Battery Charging Alternator- 12VDC Output, 65 Amp minimum
 Engine Cooling Radiator, pusher fan, High Ambient Temperature (puller fan not allowed)
 Duct Adaptor-Radiator Outlet
 Louver Control "Run Relay" 12VDC Installed
 Coolant Heater-120 Volt Ac, Single Phase, 1500 Watt
 Safety Shutdowns-Low Coolant Level, Low Oil pressure, High Temperature
 Pre-Alarm Senders for: ALOP, AHWT and LCT
 Exhaust - Silencer-Residential grade or better, with 3-Way Catalyst, as provided by Gen set manufacturer.
 Exhaust – Flexible Section, Corrugated SS, provided with Generator Set
 Exhaust – Wall Thimble, High Temperature Insulated, with Rain Guard. Wall thimble shall be a standard manufactured product meeting NFPA 37, with spec sheet, detailed drawings, no local source or made on site units will be acceptable. Construction carbon steel with high temp paint (provided by Mechanical Contractor).
 Exhaust – Insulation, High Temp insulation wrap shall be provided by site mechanical contractor
 Exhaust – Extension, with 45 Degree bevel end with birdscreen or Long Radius Elbow, riser and high quality cast Rain Cap. (provided by mechanical contractor).
 Warranty- Gen Set, Extended, 5 Years / 1,500 Hours, Comprehensive, Warranty covers: Parts, Labor, Travel Time and Mileage full term, with no deductibles, provide matching 5-year comprehensive warranty for the ATS.
 Battery, rack and cables, 12VDC Engine Starting Battery – minimum 750CCA
 Extensions-Oil Drain and Coolant Drain, extended to edge of skid with valves
 Fuel Wye Strainer-Gaseous- 2" NPT Inlet/Outlet, Nat Gas
 Fuel Flex Hose-Nat Gas SS Overbraid
 Initial fill of Engine Lube Oil and 50/50 Antifreeze Installed
 Two sets of Manuals: Operation, Maintenance and Parts for the system, including the ATS.

CHARGER

Battery Charger, 10A Auto-Float/Equalize type with alarms, wall mount, NEMA 1, 120VAC input, 12VDC output

ATS

Automatic Transfer Switch- Spec Grade, Industrial 600VAC Contactor based, 225A

NOTE: All equipment shall be Spec-grade, industrial, 600VAC Contactor based with program transition feature. If the Gen set manufacturer does not manufacture their own ATS fully meeting the specifications, bidders shall include either ASCO 7000-Series or Russelectric RTS models with Program transition in their bid. If providing this alternate ATS, the ATS manufacturer's full time field service technician shall be required to provide all equipment start up, programming and adjustment, check out and operator training. This is not assignable to gen set distributor, sales, dealer or any other third party. Start up, etc. as above, shall be by ATS distributor's full time field service technician only, and included in the base bid. Equipment clarifications: Inphase Monitor or Synch Check relay are not acceptable as substitute for required program transition feature. "Light Commercial" and "Brand - Labeled" ATS's not manufactured by the gen Set manufacturer are not allowed. ATS constructed with Circuit Breakers or Breaker Components will not be allowed.

Transfer Switch, 225 Amp rated

Switched Poles – 3, with fully rated Solid Neutral bar

Heavy Duty Silver Alloy contacts with multi-leaf arc chutes, rated for 100% continuous current, 100% load interruption, and require no routine contact maintenance

Application-Utility To Genset

Listing-UL 1008/CSA Certification

Frequency-60 Hertz

System-3 Phase,3 Wire Or 4 Wire

Voltage-277/480 Vac

Cabinet-Type 1, lockable enclosure

Control-ATS programmable microprocessor with Full three phase monitoring both sources, with Line to neutral sensing, full three phase and anti-single phasing protection

Monitoring-Load - Current monitored on the load side

AC Analog Meters-Bar Graph Display: Voltage, Amperage, Frequency, KW and PF

Display-Digital program parameters, monitor ATS, 50 time/date stamped events logged

Time Delays, Adjustable: Start, transfer, retransfer and cooldown

Program transition mode, adjustable time delay, inphase monitor does not meet this requirement

Plant exerciser, load/no load fully programmable

Module-Relay Signal, Pre-signal contact and full ATS status contacts

Main shaft Aux Contact, plus Auxiliary Relay-Switch In Emergency Position-12VDC

Main shaft Aux Contact, plus Auxiliary Relay-Switch In Normal Position-12VDC

Transfer Switch Warranty – Comprehensive 5-Year covering Parts, Labor, Travel time and mileage, covers

Main Contacts only to 10 years.

ATS Manuals Two Sets Hard Copy-Operation and Maintenance

ATS WCR a minimum of 30,000 @ 480VAC.