## **GREENVILLE UTILITIES COMMISSION**

# **GREENVILLE, NORTH CAROLINA**

# ONE (1) 56,000 lb. GWVR CAB & CHASSIS AND ARTICULATED CRANE

To: All Prospective Proposers and Others Concerned

Subject: Addendum No.1

The intent of this addendum is to notify all prospective proposers and others concerned that the Specifications and Documents are hereby modified as follows:

1. Replace pages 5, 6, 7, 8 and 9 with the enclosed pages.

The foregoing changes shall be incorporated in the Specifications and Documents.

Please acknowledge receipt of this addendum by e-mailing Cleve Haddock, Purchasing Technician at (252) 551-1533, <a href="mailto:haddocqc@quc.com">haddocqc@quc.com</a>.

#### **SECTION II**

# **GREENVILLE UTILITIES COMMISSION**

#### SPECIFICATIONS FOR ONE (1) 56,000 LB. GWVR CAB & CHASSIS

## AND ARTICULATED CRANE

#### August 8, 2012

It is the intent of these specifications to set up minimum requirements for one (1) articulating crane mounted behind the cab, on a new current year model, 56,000 lb. GWVR cab and chassis. This unit must be tested to meet or exceed the following minimum specifications.

When the unit is completed the successful vendor shall deliver the unit to Greenville Utilities ready to operate.

All exceptions and variations must be clearly noted on the attached Exceptions/Variation Form. A copy of this form must be signed and returned with the bid package. Failure to clearly identify all exceptions or variations, as determined by and at the discretion of Greenville Utilities, may be cause for rejection of the bid.

Complete descriptive information on all equipment quoted, i.e., articulated crane and accessories, cab-chassis, and adders, shall be provided as part of the bid package at the time of bid opening. Quotations submitted without adequate documentation, as determined by Greenville Utilities, are not acceptable and may be rejected.

Distributors may not quote on any brand of equipment that they have not been representing for a minimum of five (5) years.

#### **Articulating Crane**

Articulating Crane, mounted behind the cab, with a hydraulic lifting moment of the basic crane unit to be rated at no less than approximately 241,180 ft./lbs.; horizontal, hydraulic boom extensions to at least 48' 3" minimum and lifting capacities with the 1st boom at horizontal and the 2nd boom at 0° elevation at the following approximate minimums:

37,480 lbs. @ 5' 9" (lifting by fixed hook) 15,400 lbs. @ 15' 3" 10,650 lbs. @ 21' 4" 7,810 lbs. @ 27' 11"

6,070 lbs. @ 34' 9"

4,960 lbs. @ 41' 8"

4,050 lbs. @ 48' 3"

Boom Extensions and Cylinders - The crane shall be fully hydraulic in all its functions,

Have at least five (5) hydraulic boom extensions, each powered by an individual cylinder equipped with sequence valves. The individual extension cylinders shall be designed so as to keep the crane as straight as possible during a long extension, in detail, the first extension cylinder shall be as close to the center as possible.

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Stabilizers - The stabilizers shall be of the hydraulic out and hydraulic down type; have a

minimum spread of 8' 2". Stabilizers shall be plumbed in such a way that they

can only be operated when in view of the operator. A leveling indicator shall be provided at the controls in view of the operator. A four (4) stabilizer system must be used. A stabilizer interlock must be included to prevent boom operation unless outriggers are deployed, and to prevent outriggers from being operated when boom is out of stow position. Manual override to allow movement during maintenance or emergency situations.

<u>Rotation</u> – Crane rotation shall consist of a rack and pinion. The rotation system shall provide a minimum torque of 28,000 ft./lbs. and be capable to rotate a full capacity load against an inclination of 5°. The rotation is non-continuous with 407° rotation.

<u>Side Controls</u> – Side controls shall be provided and located for access from the ground on the street side. The control bank shall be a proportional directional spool valve and handles shall return to neutral when released. Controls must be equipped with main pressure relief valves, individual pressure relief valves per crane function and have a main pressure test port.

<u>Remote Control</u> A wireless remote must be provided for full boom operations with extra batteries.

<u>Lift and Knuckle Cylinders</u> – Main lift and knuckle cylinders shall be equipped with pilot operated counterbalance valves. The five extension cylinders shall be sequenced and plumbed into a pilot operated counterbalance valve. Stabilizer legs shall be equipped with counterbalance valves.

<u>System Oil</u> – The system oil shall be supplied from a <u>37</u> gallon oil tank mounted on the crane and shall have a return filter breather cap with sight and temperature gauges. High pressure filter and oil cooler shall be provided.

<u>Hydraulic System</u> – The hydraulic system is to be equipped with a pressure line filter. A piston pump directly mounted to the transmission PTO shall be provided. The crane will operate off 4570 Psi and 18 GPM.

Hydraulic Oil – The system shall be equipped with the appropriate hydraulic oil.

Overload Safety Device – The crane is to be equipped with an Overload Safety Device (load limiting device) which automatically blocks all crane functions that increase load radius in case of an overload situation. The load shall not drift. All functions that reduce load radius shall remain operable. The crane control station shall have a pressure gauge indicating the range when the overload device shall "kick in". An emergency push button is to be installed at the control station.

<u>Crane Construction</u> – The crane shall be manufactured from high tensile strength steel and be of all welded construction. A cast base or castings at the crane mast are not acceptable. A torque link system shall connect the turret and main boom and also the main boom with the knuckle cylinder and provide a constant lifting movement throughout an arc from below horizontal to the maximum boom angle of 88° vertically.

Winch – A 4,400 lb. (approximate) winch must be installed under boom.

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#### Other Items - (o be provided/supplied)

- Load Hook, revolving with 35,200 lbs. capacity
- Crane Operational Decals and Load Charts
- Paint Crane white to match cab
- PTO Pump installed

### **URD Body**

Furnish and install a Heavy Duty Under-Ground Service Body. The body shall be an 8' X 14' (work area) with three (3) horizontal compartments, equal length and 18" deep X 18" high mounted down the street side of the body. Four (4) under body compartments (largest that will fit) mounted two to the front most part and two to the rear most part of the body, two on each side made of 16 ga. galvanneald steel with 10 ga. galvanneald tread plate floor. All boxes must be water tight dry boxes. The body shall meet the following specifications:

#### Curb Side -

- ICC light channel (LED lights)
- · Rear Grab Handle and access step on rear curb side of body.
- Front Header
- Wheel Chock Boxes with retainer two (2) mount on driver's side under body
- · Automotive type replaceable door seals
- All doors are to have rubber bumpers or chains
- Drip molding on forward side of doors
- Regular slam door locks and all lockable and keyed alike
- · Wiring harness installed
- Body exterior to be primed and painted black
- Four (4) recessed anchor points in floor, located per Fleet Manager capable of anchoring cargo at least twice the weight limit of chassis

## Additional Features and Equipment (to be provided)

Install platform body

Rear storage compartment with door between rear frame rails

One (1) stirrup step and grab handle on rear of body

3-Point grounding system with 50' of 2/0 cable and storage bracket

Four (4) Sauber outrigger pads (size 18" x 18") – conveniently located pad holders shall be provided

Furnish and install tool circuit with retractable reel with 25' of hydraulic hose and quick disconnects fittings mounted curbside between crane and body. Provide tool circuit at the rear of body with quick disconnect fittings. Furnish a flow control valve.

Heavy Duty T-100 Pintle Hook and safety chain eyes, to be reinforced to chassis frame, 29" to bottom of throat. Rated at 25 tons and marked as such.

Furnish and install brake controller under dash

Trailer light socket; 6-way small round

Install back-up alarm

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Dimensions/Model 12/1800N – mounted in the cab with receptacle mounted on the curb side and the rear of the body

Cone holder - mounted as decide on by the Fleet Manager.

Furnish two (2) wheel chocks

Install license plate bracket with light

Furnish and install 10 lb., type A, B & C fire extinguisher and mounting bracket, installed on the curb side

Furnish DOT triangle reflector kit in cab

A full length heavy duty sub frame shall be installed tying the front and rear outriggers together to increase stability and structural strength.

Deliver completed unit to Greenville Utilities, 801 Mumford Rd., Greenville, NC 27834

Furnish two (2) sets (per unit purchased) of operator/maintenance/parts manuals, include inserts on hydraulic and electrical circuit diagrams.

One (1) day in service/training

#### **Paint**

Body, crane and other equipment, as appropriate, shall be painted white to match cab & chassis. The body shall be undercoated. All non-skid walking areas should be painted black.

#### Cab-Chassis

Articulated crane and all other equipment supplied shall be installed on a new and latest model cab-chassis with the following specifications and features:

CA (approximately 140") as needed to support body and crane request

56,000 lb. GWVR, geared for minimum high way speed of 75 MPH

Diesel engine with a minimum of 330 HP, 1000 lb-ft Torque @ 1400 RPM

Automatic Transmission – (Allison 3000, RDS, P), latest generation controls, close ratio, 5-speed with overdrive; On/Off Hwy., includes oil level sensor with PTO provision

Power Steering

Front Axle (non-driving) - 16,000 lb.

Rear Axle/Dual - 40,000 lb., driver control locking differential

Conventional Cab

Air ride driver's seat and manually adjustable passenger seat

Tilt steering column

Cruise control

Front Tires - Two (2) 315/80R22.5

Rear Tires - Four (4) 11R22.5 Traction tires

Wheel Base - As needed C.A.

Brake System – Air with spin on type air dryer (Wabco System Saver 1200)

Exhaust System - Vertical

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Heavy Duty Alternator - 12 Volt/110 amp minimum

Dual heavy-duty battery

Radio - AM/FM

Two-speed wiper with intermittent wipe

Turn Signal - front; includes reflectors and auxiliary side turn signals

Minimum 56 gallon step tanks; no slip strut on tank steps

Grab handles to assist cab entry (left and right)

Factory air-conditioning

Cab Heater

West Coast style mirrors with convex mirrors on both sides

Two (2) mounted spotlights with wireless remote control mounted on front header

Two (2) amber strobe lamps over cab, four (4) corner strobes (white) with programmable flash pattern mounted at front and rear corners

ICC light package

Airpax Dimension ADI-12/1800 pure sine wave power inverter mounted in cab under passenger seat facing curb. If no way possible to mount in cab, unit must be mounted in curbside forward most under body box with optional remote control "R" mounted in cab.

Two (2) sets of owner/operator manuals, service manuals, and parts manuals.

Diagnostic software for engine and transmission with interface/translator and cables/hardware to be used with a laptop computer, (USB type) must be provided at time of delivery. Where applicable, annual subscription must be supplied for diagnostic software. Cab and/or chassis software must be provided where applicable. No exceptions will be accepted for diagnostic software. Questions pertaining to software can be directed to Bill Darty, Fleet Manager @ (252) 551-1515.

NOTE: Factory line sheet must be provided on cab-chassis

Extend vehicle exhaust to left side of body; vertical above cab

(PLEASE MAKE SURE THIS REMAINS IN THE CHASSIS SECTION, AS THIS PERTAINS TO THE CHASSIS.)

#### Warranty

Two (2) year minimum warranty, parts and labor, on entire unit shall be provided. All warranty service for cab and chassis to be no further than 80 miles from Greenville Utilities, 801 Mumford Rd, Greenville, North Carolina, and body and crane no further than 150 miles from same. Vender must have a field service truck available for work to be performed at Greenville Utilities when feasible. All other standard manufacturer's warranties shall apply. List optional extended warranties available for unit.

### Additional Instructions to Bidders

Delivery time will be strongly considered upon award of bid, and will be Greenville Utilities Commissions option to award based on the proposed delivery time.

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