# **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, 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, <u>haddocgc@guc.com</u>.

## **SECTION II**

## **GREENVILLE UTILITIES COMMISSION**

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

## AND ARTICULATED CRANE

#### AUGUST 15, 2013

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 1<sup>st</sup> boom at horizontal and the 2<sup>nd</sup> 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" **3,945 lbs. @ 48' 1"** Boom Extensions and Cylinders – The cr

<u>Boom Extensions and Cylinders</u> – 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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<u>Stabilizers</u> – 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. The boom shall have full capacity on the side that outriggers are fully deployed and the rear of truck while opposite side outriggers are lowered but not fully deployed. 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  $5^{\circ}$ . 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. Levers provided for all crane functions.

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

<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 **37** 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.

<u>Hydraulic Oil</u> – The system shall be equipped with the appropriate hydraulic oil. <u>Overload Safety Device</u> – 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 **76°** vertically.

<u>Winch</u> – A **4400 lb. (approximate)** winch must be installed under boom.

# 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

Mount "area" **LED** lighting under truck, two (2) per side and one (1) front and rear to illuminate the walking perimeter around the truck, lights shall have metal guards and have master switch in cab.

3-Point grounding system with reel and 50' of 2/0 cable mounted under right rear body.

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 approximately ' (as much as will fit) of non-conductive 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

Dimensions/Model 12/1800N – Install two (2) weather resistant 110 double outlets, one on front of the forward most tool box on left side of body facing forward and one mounted on the right rear of body facing to the right.

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

Furnish two (2) wheel chocks and holders on left side of body

Install license plate bracket with light

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

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.

Storage box with interlock (truck cannot move while remote is out of box) for crane remote.

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 1997

Crane and other equipment, as appropriate, shall be painted white to match cab & chassis. URD body and boxes shall be black unless specifications call for

aluminum. 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) 385/65R22.5 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 exhaust 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 50 gallon step tank or largest manufacture will provide maintaining original under cab location and not interfering with body or equipment; 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