



Request for Proposal

10/23/2018

The City of Conway is soliciting Bids/Proposals for a 100 HP Turbo Tier 4 Diesel Compact Track Loader: (Please note when a specific specifications is requested there can be no substitutions without the full knowledge and consent of city representatives).

All Proposals need to be submitted to Ken Senn P.O. Drawer 1075, Conway S.C. 29528 or hand delivered to 2940 Jerry Barnhill Blvd., Conway, S.C. 29527 no later than **Thursday, November 8, , 2018, by 2:00 PM.** Bids need to be good for 60 days. If you have any questions you can contact Ken Senn at 843-397-2539.

Please complete the attached bid proposal with specifications.

Acceptance or Rejection of Proposal:

The City of Conway reserves the right to reject any and/or all proposals when such rejection is in the best interest of the City of Conway to reject Proposal of Bidder who has not met the prerequisites on the bid proposal, who has previously failed to perform properly or complete on time contracts of a similar nature; and to reject proposal of bidder is, in the opinion of the City of Conway, in a perform contract. The City of Conway also reserves the right to waive any information and technicalities in bidding. All bidders must have a city license, as required by city ordnances, in order to participate in the bidding process. **THE CITY OF CONWAY RESERVES THE RIGHT TO WAIVE IRREGULARITIES AND TO REJECT ANY AND ALL BIDS.**

The Following are the Specification;

DIMENSIONAL SPECIFICATIONS

Angle of Departure	33°
Dump Angle@ Maximum Height	42°
Dump Height with Standard Bucket	112.3" (2853 mm)
Reach@ Maximum Height.....	36.5" (927 mm)
Ground Clearance	8.6" (218 mm)
Height to Hinge Pin	144" (3657 mm)
Cab Height	83.4" (2118 mm)
Length without Attachment	119.3" (3030 mm)
Length with Standard Bucket.....	153.9" (3910 mm)
Overall Operating Height	184.6" (4689 mm)
Carry Position	9.5" (241 mm)
Rollback Angle @ Carry Position	31°
Turning Radius with Standard Bucket.....	99" (2514 mm)
Length of Track on Ground	68.9" (1749 mm)
Overall Width 17.7" Tracks	83" (2108 mm)
Bucket Width	84.8" (2153 mm)

PERFORMANCE

	Roller Suspension Undercarriage (Standard)
Rated Operating Capacity*	35251bs. (1599 kg)
With 200 lb. Weight Kit	3625 lbs. (1644 kg)
With 300 lb. Weight Kit	3700 lbs. (1678 kg)
With 400 lb. Weight Kit	37751bs. (1712 kg)
Tipping Load (per ISO 14397-1)	100721bs. (4569 kg)
Operating Weight (SAE J732)	12678 lbs.(5751 kg)
Travel Speed	7.2 mph 11.6 km/hr)
Travel Speed - 2 Speed Option	
Low Range	6.5 mph (10.5 km/hr)
High Range	11.4 mph (18.3 km/hr)
Lift Breakout Force	7158 lbs. (3247 kg)
Tilt Breakout Force	7890 lbs. (3579 kg)
Push Force	7450 lbs.(3379 kg)
Ground Pressure with 17.7" Track	4.7 psi (0.033 MPa)

*Rated Operating Capacity (ROC) @ 35% of Tipping Load

ENGINE/ELECTRICAL

Loader shall have a 4 cylinder, liquid-cooled diesel; 99.2 hp (74 kW) at 2600 governed RPM.

Loader engine shall have a minimum torque of 247.1 lbf-ft (335 N-m) at 1500 RPM.

Loader engine shall be turbo charged.

Loader shall be equipped with a hydraulically driven, variable speed cooling fan.

Engine must meet EPA Interim Tier 4 Emission Standards.

Dual element air cleaner and air intake heater cold weather assist shall be provided as standard equipment.

- Cold weather assist shall be automatically activated.

- Air cleaner shall be a dry replaceable cartridge with safety element.

- Air intake pre-cleaner shall be included in the air cleaner housing.

Air intake pre-cleaner shall be standard equipment.

Engine coolant shall include propylene glycol anti-freeze with freeze protection to -34°F (-37°C).

Loader shall be equipped with a Diesel Oxidation Catalyst (DOC) and Diesel Particulate Filter (DPF).

Engine shall utilize an Engine Gas Recirculation (EGR) system.

Loader shall not require Diesel Exhaust Fluid.

Loader shall indicate when the DPF is regenerating.

A DPF Regeneration Inhibit Switch shall be available.

A DPF Remote Parked Regeneration Kit shall be available.

- The kit must require the operator to safely start the loader from outside the cab and must lock all hydraulic functions when a parked regeneration is performed.

Loader shall be equipped with an Engine Control Unit to electronically monitor and control the performance of the engine.

The loader's fuel injection system shall include a High Pressure Common Rail (HPCR).

Loader shall use an Electromagnetic fuel pump.

Fuel filter shall have a 4 micron C rating at 99.6% efficiency.

Loader shall be equipped with a dual path cooling system which brings cool, clean air from above the machine for engine and hydraulic system cooling. While at the same time removing hot air from the engine and hydrostatic area.

Battery shall be a 12 volt with a minimum of 950 cold-cranking amps.

Alternator shall be a minimum 90 amp.

Starter shall be a 12 volt; 4.02 hp (3.0 kW), gear type.

Engine accessory belt shall not require any adjustments.

Engine shutdown shall be provided as standard equipment and shall monitor engine coolant temperature, engine oil pressure and engine RPM to help prevent engine damage.

Engine block heater shall be provided as optional equipment to provide easier starting during cold weather operation.

DRIVE SYSTEM

- Shall have a fully hydrostatic track drive.
- Transmission shall be infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors.
- Hydrostatic piston pumps shall be belt driven from the engine.
 - Drive belt shall not require any adjustments.
- Undercarriage shall be of a roller suspension type.
- Shall have 4 suspended rollers per side.
- Shall have an all steel suspension design.
- Steel rollers and idlers shall be permanently sealed and lubricated requiring no routine maintenance.
- Shall use austempered ductile iron sprockets.
- Grease cylinder shall be used for adjustment.
- Track tension shall be adjusted by adding grease to the tensioning cylinder
- Rubber track shall have steel cables and embeds.
- Parking brake shall be spring applied, pressure release multi-disk brake.
- Tracks: 17.7" rubber tracks

HYDRAULIC SYSTEM

- Pump type shall be a gear type pump for standard and high flow hydraulics.
- Hydraulic pump capacity for standard flow shall be capable of providing 23.8 gpm (90.1 L/min) for bucket, lift arm and attachment operation.
- Hydraulic pump capacity for high flow shall be capable of providing 37.7 gpm (142.7 L/min) for high flow hydraulic attachment operation.
- System pressure at the quick couplers shall be 3500 psi (24.2 MPa).
- Variable flow auxiliary hydraulics shall be standard equipment.
- Shall include flush-face pressure release quick couplers.
- Shall include dual direction detent.
- Control valve shall be three spool, open center, series type.
 - Lift spool shall include a detent position for lift arm float function.
 - Front auxiliary hydraulic spool shall include a detent function in both forward and reverse directions.
- Cylinders shall be a double-acting type. Dual tilt cylinders shall have a cushioning feature on dump and roll back.
- Hydraulic system shutdown shall be provided as standard equipment and shall monitor hydraulic oil temperature and hydrostatic charge pressure.
- A hydraulic oil cooler shall be standard equipment.
- Auxiliary hydraulic hoses shall be routed inside the lift arm.
- Auxiliary quick coupler block shall be mounted to the lift arm front and must be protected with steel guarding.
- Shall have inertia welded rods and bases at the end of the cylinders.
- Hydraulic bucket positioning.
 - Shall include on/off switch inside operator cab.
- Ride control.
- Lift circuit port relief valve shall be standard equipment.
- Auxiliary hydraulics circuit port relief valve.
- A feature for draining pressure from the auxiliary hydraulics circuit shall be provided by pressing and holding the quick couplers.
- Cylinders shall meet the following minimum specifications:

Function	# of Cylinders	Bore Diameter	Rod Diameter	Stroke
Lift	2	3.50" (88.9 mm)	2.00" (50.8 mm)	27.51" (698.75 mm)
Tilt	2	3.25" (82.6 mm)	1.50" (38.1 mm)	15.29" (388.36 mm)

Compact Track Loader 35251bs. Rated Operating Capacity

OPERATOR CONTROLS

Loader direction, steering, and travel speed shall be controlled by two independent power assisted steering levers.

- Standard- Shall be controlled by separate foot pedals.

Selectable Joystick Control system shall be available to allow operator to switch between ISO control pattern (loader direction, steering and travel speed on left hand joystick; loader lift and tilt functions on right hand joystick) or H-Pattern (left hand joystick controls lift function and left side drive function; right hand joystick controls tilt function and right side drive function).

Speed Management shall be standard equipment to allow the loader to be maneuvered at a slower travel speed, even during maximum movement of the joysticks.

Drive Response shall be standard equipment to change how responsive the loader's drive and steering systems are when the operator moves the joysticks.

Steering Drift Compensation shall be standard equipment to be used to reduce steering drift to maintain a desired travel path in both forward and reverse directions.

Horsepower Management shall be standard equipment to allow the engine to operate at maximum horsepower and torque.

Optional Auto Idle shall be available on SJC equipped loaders to automatically reduce the engine speed to idle after a set time interval of loader drive and/or hydraulic inactivity.

Auto Idle shall be turned on or off with the press of a button.

The time interval before the engine speed reduces to idle shall be adjustable from 4 to 250 seconds on loaders equipped with deluxe loader instrumentation.

Standard front auxiliary hydraulics shall be controlled by electrical switches located on the right-hand joystick.

Engine speed shall be controlled by a rotary knob mounted on right hand cab post.

Engine speed shall be controlled by a foot pedal with optional Selectable Joystick Controls.

Parking brake shall be controlled by a finger operated rocker switch on left hand cab post.

Engine starting and shutdown functions shall be controlled electrically with a key switch or optional keyless start.

An optional Radio Remote Control Kit shall be available for SJC equipped loaders.

OPERATOR COMFORT

- Shall have an enclosed cab.
- Air conditioning without changing loader profile. Cab heat without changing loader profile.
- Front door shall be a one piece design and curved.
- Enclosed cab shall be pressurized.
- A suspension seat shall be standard equipment.
- An air ride seat.
- Arm rest shall be standard equipment.
- Cup holder shall be available.
- Engine throttle shall be located directly in front of the operator.
- The optional Selectable Joystick Control system shall be mounted to the seat and shall be able to adjust independently of the seat.
- Sound reduction kits.
- Top and rear windows shall be available as standard equipment.
- Front and rear window wipers.
- Shall have special application polycarbonate doors and windows.
- Shall have a forestry application kit.
- Dome lights shall be available as standard equipment.
- Front and rear operating lights shall be available as standard equipment.
- Side windows shall be mounted on the outside of the cab.
- Side and rear window defrost shall be provided in the heat or air conditioned options.
- An FM/AM Radio.
- 12 volt power ports shall be available as standard equipment.
- Clean out holes in the foot well shall be provided as standard equipment.

CAPACITIES

- Fuel Tank shall have a minimum capacity of 35.6 gal. (134.8 L).
- Cooling System with heater shall have a minimum capacity of 4.9 gal. (18.5 L).
- Hydraulic Reservoir shall have a minimum capacity of 3.0 gal. (11.4 L).
- Hydrostatic System shall have a minimum capacity of 9.5 gal. (36 L).

STANDARD LOADER INSTRUMENTATION

The loader conditions shall be monitored by a combination of gauges and warning lights in the operator's line of sight that monitor the following functions. The system shall alert the operator of monitored loader malfunctions by way of an audible alarm and visual warning lights.

Gauges

- Engine Coolant Temp
- Fuel Level

Warning Lights

- Engine Coolant Temp
- Engine Malfunction
- Fuel Level
- General Warning
- Hydraulic Malfunction

Indicators

- Seat Bar
- Lift & Tilt Valve
- Parking Brake
- Seat Belt
- 3-Point Shoulder Belt
- Turn Signals

Data Display Screen

- Battery Voltage
- Drive Response Setting
- Engine Preheat
- Engine RPM
- Maintenance Clock
- Hourmeter
- Service Codes
- Speed Management
- Steering Drift

DELUXE LOADER INSTRUMENTATION

The following features of the Deluxe Instrument Panel with Keyless Start are in addition to the Standard Instrument Panel:

Additional Displays for:

- Coolant Temperature & Oil Pressure
- Engine RPM
- Hydraulic Oil Temperature
- Hydrostatic Charge Pressure
- System Voltage
- Keyless Start
- Multi-Language Display
- Password Lockout
- High Flow Lockout
- Attachment Control
- Real Time Fuel Consumption Rate
- Overall Fuel Consumption
- Overall Idle Time

Additional Features:

- Diagnostic Capability
- Digital Clock
- Engine/Hydraulic Systems Shutdown Function
- Help Screens
- Job Clock

ATTACHMENTS

All attachments shall be mounted on a quick-change mechanism. No attachments will be considered unless it can be removed or mounted by an experienced operator within two minutes or less.

The quick change mechanism shall be driven by hydraulics.

Backhoe operation must be possible with the lift arms in the down position.

A remote attachment control device shall be available for specified attachments to start the loader and operate the attachment from outside the operator control area.

A single control unit shall be provided which will control all available attachments.

Standard flow hydraulics.

High flow hydraulics.

SERVICEABILITY

Engine shall be transversely mounted to provide easy access to daily maintenance items. Access shall be available to the following through the rear door/tailgate and rear screen.

- Air cleaner
- Alternator
- Battery
- Cooling system (engine oil and hydraulic oil coolers) for cleaning
- Engine oil and fuel filters
- Engine oil drain and dipstick
- Starter
- DPF/DOC

Easy access shall be provided to all lift arm grease points.

- lift arm pins and connecting points shall be of a single plane design.

Quick-Tach pivots shall have replaceable wear bushings.

Rod end of the tilt cylinder shall have a replaceable bushing.

Tailgate shall be constructed from a 1/4" thick solid steel door with no holes or slots.

Tailgate shall have an optional lock for vandal proofing.

Tailgate shall be equipped with doorstop to hold door open while servicing.

Tip-up operator cab shall give access to certain hydraulic system components.

SAFETY EQUIPMENT

An enclosable operator cab with side screens shall be provided as standard equipment. Cab shall meet SAE standards J1040 and J1043 for Rollover Protective Structure and Falling Object Protective Structure. Minimum inside cab width of 33" (838 mm).

A seat belt and an electric switch operated parking brake shall be furnished as standard equipment.

A 3-point seat belt.

Additional operator protection shall be provided by a seat bar or similar device which restricts lift arm operation when not in use.

A lift arm support device shall assist in servicing the loader shall be provided as standard equipment.

Grab handles shall assist the operator in mounting and dismounting the loader will be provided as standard equipment.

Loader shall be equipped with an interlock control system which requires that the operator be seated in the loader with the seat bar down in place and the engine running before the hydraulic lift, tilt and the traction drive system can be operated. The auxiliary hydraulics shall deactivate when the operator raises the seat bar. Should the engine not start or a system problem occur with the lift arms raised, the lift arms can be lowered by turning the lift arm by-pass control knob clockwise 1.4 turn. Then, pull up and hold until the lift arms slowly lower.

Shall have operational instructions and warning decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.

Shall have a weather resistant operator handbook written in English attached to the loader.

Loader shall include an alarm package including a horn and backup alarm.

Strobe lights or rotating beacons.

4 way flashing lights shall be available as an option.

Turn signals shall be available as an option.

FOPS Level II shall be available as an option.

Fire extinguisher kit shall be available as an option.

TRAINING RESOURCES

A comprehensive Compact Track Loader Operator Training Kit shall be available. The kit shall include a video, classroom and hands-on training. This kit shall also be available in Spanish.

A comprehensive Service Safety Training Kit shall be available. The kit shall include a video, classroom and hands-on training.

Add-On Options:

- High flow Hydraulics
- Sound reduction
- Hydraulic Bucket Positioning
- Selectable Joystick Controls (SJC)
- Radio
- Reversing Fan
- Automatic Ride Control
- Rear Camera Kit
- 84' C/I Heavy Duty Bucket---Bolt-on Cutting Edge, 84"
- 2.5K Standard Duty Pallet Fork Frame--- 42" 2.5K standard Duty Pallet Fork Teeth
- 80" Bush Hog(HF)
- 2- Repair Manuals

Unit Price

Tax

Total

Company Name

Salesman

Address

Phone Number

Email Address
