

# ***Kalkaska County Road Commission***

1049 Island Lake Road

Kalkaska, MI 49646

Telephone: 231.258.2242

Facsimile: 231.258.8205

*The Kalkaska County Road Commission is an Equal Opportunity Provider and Employer*

## **NOTICE TO BIDDERS**

Sealed bids will be received until 9:00a.m. Tuesday, March 3, 2020, at which time they will be publicly opened and read. Bids shall be received at the office of the Kalkaska County Road Commission, 1049 Island Lake Road, Kalkaska, MI 49646. The bid shall be clearly marked “Semi-Tractor” and bear the name of the bidder. Bids will be tabulated, and a recommendation will be made to the Board of Road Commissioners at their next regular meeting.

### **1. One (1) Tandem Axle Semi-tractor**

Bid prices shall include all set up and delivery charges to points designated by the Commission.

Bidders must complete the KCRC checklist.

Further information and specifications may be obtained at the office of the Kalkaska County Road Commission or by contacting Tony Moses at 231.258.2242 (desk), 231-384-3451 (cell) or via e-mail at [tmoses@kalkaskaroad.org](mailto:tmoses@kalkaskaroad.org)

David Gill, Chairman  
Board of Kalkaska County Road Commission

# ***Kalkaska County Road Commission***

1049 Island Lake Road  
Kalkaska, MI 49646  
Telephone: 231.258.2242  
Facsimile: 231.258.8205

*The Kalkaska County Road Commission is an Equal Opportunity Provider and Employer*

## **SPECIFICATIONS FOR TANDEM AXLE SEMI-TRACTOR**

The following specifications describe and are intended for use in securing one (1) tandem axle semi-tractor to be used for year-round road maintenance. The bidder shall include all applicable destination charges and shall deliver the equipment described herein to the Kalkaska County Road Commission, 1049 Island Lake Road, Kalkaska, MI 49646 or upon written notification to the equipment/body builder of the Kalkaska Road Commission's choosing. A title or manufacturers certificate of origin must be provided at delivery.

**Options** – New untitled vehicles only meeting or exceeding Kalkaska County Road Commission Specifications. Deviations from spec will be considered on “in stock” trucks.

**Delivery** – Time of delivery may be an important factor in determining successful bidder. Please state scheduled delivery date. Tandem Axle Semi-Trailer **MUST BE DELIVERED TO THE KALKASKA COUNTY ROAD COMMISSION NO LATER THAN APRIL 20, 2020.**

**Payment Terms** – Payment for Tandem Axle Semi-Tractor shall be on the day of delivery, after acceptance by the Kalkaska County Road Commission.

**Extension** – Provided all parties agree, this bid may be extended for up to two (2) years with a 2% variance.

**Note** – The Kalkaska County Road Commission reserves the right to accept or reject any or all bids, to waive any irregularity or defect in a bid, or to reject a bid that offers equipment not compatible with body builders components, or to accept that bid which, in the opinion of the Kalkaska County Road Commission, is in the best interest of the Road Commission.

**Kalkaska County Road Commission**

Minimum bid specifications for one (1) new tandem axle semi-tractor.

This vehicle is intended for maximum year-round use. Duties for this vehicle include hauling heavy materials, and equipment utilizing a gravel train, or a low-boy trailer. KCRC will be adding a “wet-kit” optimized for performance to this unit. A transmission mounted PTO and hydraulic pump style will be used. Provision for these components, regarding the fit and finish should be made wherever possible.

Truck will be a 66,000 lb. G.V.W.R. minimum.

Any specification deviations shall be marked as NO with an explanation. We intend to accept a bid on the best truck for our needs. KCRC will consider everything that meets our criteria or acceptable deviation.

**Chassis Warranty** - Bidder shall state base warranty and any extended warranty options available, with pricing structure. Bidder shall enable KCRC maintenance department to handle warranty repairs and be reimbursed for warranted time and material, where applicable per a written agreement supplied by the bidder.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Diagnostic Equipment** - Bidder shall supply assistance in obtaining all software and communication equipment needed to communicate with any computer-controlled component on these vehicles. Bidder shall train KCRC employees at our facility to use the new diagnostic equipment. A complete set of service and parts manuals shall also be included in the bid. These manuals may be in paper, or paperless form.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 1. Engine.**

- A. Bidders shall specify a Cummins X-15, optimized for performance. A minimum of 565 H.P. and 1850 lb. of torque will be required. Engine shall be equipped with a three-stage compression brake. Immersion style 110-120V block heater. Horton two-speed fan clutch with manual override switch, silicone radiator, and heater hoses with constant torque clamps, cab heater shut-off valves. Engine shall have high efficiency cooling system filled with extended life coolant. Engines shall be mounted forward of the firewall; no doghouses will be accepted.
- B. Engine Warranty.
  - Bidders shall specify base warranty, and all other options for extended warranty coverages with pricing structure.
  - Bidder shall insure in writing; engine warranty repairs can be completed within a 50-mile radius of our facility.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 2. Safety.**

A. An operator, standing flatfooted on the ground shall be able to check all fluid levels.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 3. Transmission.**

A. Eaton Fuller 13 speed transmission with a severe duty clutch, filled with synthetic fluid, remote grease lines for cross-shaft and throw out bearing.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 4. Rear Axles.**

A. Meritor 46,000 lb. Minimum. An approximate gear ratio of 4.56 should render the truck gear bound at 72 mph. All bidders must advise a ratio and supply a speed/torque chart with the bid to insure a properly operating vehicle for our application. Rear axles shall be constructed with heaviest wall thickness available with lube pump, and have inter-axle diff lock, main differential lock in rear axle only, with in cab control and warning light. Piloted iron hubs for use with heavy duty hub piloted wheels, and premium Stemco Grit Guard wheel seals.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 5. Front Axle.**

A. 20,000 lb. minimum set back axle with the shortest turning radius available. Piloted iron oil bath hubs with premium Stemco Grit guard wheel seals. Power steering reservoir shall be frame mounted. Vehicle shall be mounted with air cooled power steering cooler. Grease fittings required at all pivot points. Power steering shall be Sheppard M100 Dual gear box, with Glidekote splines on steering shaft. Bidder to state wheel cut and curb-to-curb turning radius.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 6. Rear Suspension.**

A. 46,000 minimum. Heavy duty air ride preferably certified for off-road use. Single or dual leveling valve(s) mounted forward of the rear axle, dash mounted pressure gauge, manual dump system with in-cab control and indicator light. Suspension shall be configured with four extra heavy-duty tubular type shocks, and internal bump stops integral with air bags. Air bags shall not occupy any more room rearward than the rear of the drive tire. Examples of acceptable suspensions would be New Way ARD 246-10, or Airtrack 46,000.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 7. Brakes.**

A. Braking system shall consist of a four channel ABS. Front and rear brake shoes shall be S-cam style 16.5" extended service brake shoe, heavy duty, outboard mounted drums. Rockwell/Meritor automatic slack adjusters, premium extended life brake shoe linings with stainless steel dust shields. Air parking brake system to include four (4) 30/30 brake chambers on both drive axles, mounted on gusseted cam brackets.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 8. Front Suspension.**

A. 18,000 lb. minimum. Taper-leaf springs, with heavy duty shocks and mounts.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 9. Driveline.**

A. Main: Spicer SPL250 HD-XL Driveline

B. Inter-axle: Spicer SPL170 Driveline inter-axle

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 10. Frame.**

A. Frame to meet following minimum specifications: 1/2-inch single frame thickness. 22.35 section modulus, 120,000 psi tensile steel, 2,683,000 resistance bending moment, with frame reinforcement channel mounted over rear suspension and 5<sup>th</sup> wheel plate. Huck bolts wherever possible. Frame shall be standard 34 inches in width. Cross members shall be heavy duty three-piece, C-channel with cast gussets. Axle to frame (AF) shall be fifty-five (55) inches minimum. One-hundred and ten (110) inches (CA) cab to axle. Frame to have zero (0) rake.

B. Holland FW35 5<sup>th</sup> wheel plate, outboard mounted, left hand release, with a minimum of 36" of slide. Centerline bogie setting "0"

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 11. Air Compressor.**

A. Shall have a naturally aspirated 37.4 cube air compressor.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 12. Air Drier.**

A. Bidder shall supply a Bendix air drier model AD-IS, extended purge with heater. Air drier shall be mounted in a protected location, on the passenger's side back of cab.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 13. Air Hose.**

A. All chassis air hose to be nylon with a braided harness cover and rubber lined clamps along the frame rails, air compressor discharge hose shall be Teflon lined stainless steel braided hose.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 14. Air Tanks.**

A. Air tanks shall be painted steel, and frame mounted.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 15. Radiator.**

A. Radiator shall be constructed from copper or brass with bolt on tanks. Radiator shall meet manufactures cooling system requirements. The radiator, charge air cooler, and everything bolted to it must be substantially mounted.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 16. Air Cleaner.**

A. Air cleaner shall be mounted under the hood

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 17. Electrical Features**

A. Four (4) 12-volt 750 CCA batteries, to supply a minimum of 3000 CCA.

B. Factory installed Flaming River (Model FR1044) ground side master disconnect switch with indicator light, accessible from the driver's side of the unit. Switch shall be protected with heat shrink tubing at the terminals. No other cable splices shall be accepted.

C. Battery cable shall be double-ought (00) or larger.

D. Alternator shall be pad mount, 160-ampere or larger.

E. Engine and chassis shall use weather pack connectors, and wires identified numerically and or by color.

F. Factory installed auto resetting circuit breakers shall be used instead of fuses in chassis junction box.

G. System shall have a minimum of three (3) auxiliary factory installed toggle switches and circuits with a minimum of 20-ampere capacity for auxiliary equipment. Any extra harnesses or pigtailed required to complete this task shall be included. Switch and wiring for beacon light to headliner to be included separate from auxiliary switches.

H. System shall have factory installed heated mirror circuit. Switch shall be mounted and identified on dash panel for driver control.

I. Davco 382 Fuel/Water separator, 120V/12V in addition to fuel filter supplied with engine.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 18. Battery Box/Step Combination.**

- A. This heavy-duty box shall be mounted on the passenger's side of cab. Non-slip steps and a barrier liner in the bottom of the box shall be incorporated into its design.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 20. Exhaust System.**

- A. The exhaust system shall be a vertical mounted on the right side of the cab outside of the frame rail leaving minimal clearance behind the cab as possible. The muffler shall be mounted with a stainless-steel protective shield and a grab handle. Three inches of clearance shall be maintained between exhaust pipes and frame rails.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 22. Tires and Wheels.**

- A. **Front:** 385/65R/22.5 18 ply Bridgestone M854 Mud and Snow tires mounted on Aluminum 22.5 X 12.25 10-Hole extra heavy-duty Alcoa (PN# 823627) pilot mounted style rim, with best suited offset for maximum turning radius.
- B. **Rear:** 11R 22.5 M799 Mud and Snow tires mounted on 22.5 X 8.25 extra heavy duty, two hand holes, painted steel, hub piloted rims.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 23. Cab.**

- A. A full-sized severe duty conventional day cab made of aluminum or galvanized steel, with dual air bag suspension, leveling valve, and tracking rod.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 24. Cab features.**

- A. Standard hood with reinforced upper corners at the grill opening.
- B. Factory installed two-inch wide rubber fender lips on hood.
- C. Full tilt hood with spring assist, and safety device to guard accidental closure.
- D. Mustache style bug deflector with stainless mounting brackets.
- E. Stainless steel sun visor.
- F. Oversized back of cab window, and cab corner windows
- G. Dual door stops in doors.
- H. Tilt / Telescopic steering column with eighteen (18) inch steering wheel.

- I. Ignition and doors shall be keyed alike.
- J. Driver's seat shall be a premium high back fabric with air ride, adjustable lumbar supports, right and left side arm rest, seat shroud, and a three (3) point seat belt. Seat should be of the highest quality and well designed.
- K. Passengers seat shall be a rigid mounted high back fabric, with storage below and a three (3) point seatbelt.
- L. Charcoal or gray interior with black rubber floor mat, with removable black floor mats fitted for the cab.
- M. Tinted safety glass.
- N. Interior noise reduction package.
- O. Severe service cab package.
- P. Thermal insulation cab package.
- Q. Drivers door armrest.
- R. Dual west coast style 16 X 7 heated stainless-steel mirrors with integral lights and in cab control.
- S. Dual eight (8) inch heated center mounted convex spot mirrors mounted below west coast style mirrors, with in-cab control. Shall be factory installed.
- T. Electric windshield washer/wipers with delay.
- U. Cab grab handles on both sides of cab.
- V. Two mid-mounted load lights on back of cab
- W. Chromed Pogo stick, center mounted, in front of deck plate.
- X. Heavy duty filtered air flow heater/defroster with air conditioning, with protective scoop mounted on outside air intake.
- Y. Dual air horns with covers, and electric horn.
- Z. Cab entry steps on both sides shall be made of non-slip material.
- AA. Electric power windows for drivers and passenger's sides of vehicle, both windows shall have the ability to be controlled by the operator.
- BB. AM/FM Radio with Bluetooth, and weather band
- CC. Dome and map lights.
- DD. Cruise control with PTO control integrated with engine.



- EE. A minimum of 3 air toggle switches plumbed in with pressure protection for auxiliary equipment, and one air toggle specifically for PTO function. Shall be factory installed.
- FF. A full gauge set shall be installed by the factory including the following items: Electric speedometer, tachometer, oil pressure, coolant temperature, volt meter, hour meter, fuel gauge, outside temperature, mechanical dual air pressure, air cleaner restriction, low air, rear suspension load gauge, and related audible alarms.

**Item 25. Paint.**

- A. Premium single stage paint, color as follows: Rear wheels shall be white. Frame and chassis shall be black. Cab and hood shall be painted Omaha orange. All colors shall be factory installed, with the exception of the top of the hood. Bidders shall choose the most cost-effective route to have top of hood painted in flat black. Bidders shall supply paint codes on bid proposal.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

**Item 26. Fuel, Hydraulic, DEF systems**

- A. Saddle mount 150-gallon fuel tank with thermostatically controlled C400 fuel heater, located below driver's door, outside the frame rail. DEF tank shall be mounted outside the frame rail directly behind fuel tank with a 2:1 ratio fluid capacity. Minimum 60-gallon factory installed hydraulic tank mounted on passenger's side back of cab rearward as far as possible.

Yes \_\_\_\_\_ No \_\_\_\_\_ Deviation explained \_\_\_\_\_

# ***Kalkaska County Road Commission***

1049 Island Lake Road  
Kalkaska, MI 49646  
Telephone: 231.258.2242  
Facsimile: 231.258.8205

*The Kalkaska County Road Commission is an Equal Opportunity Provider and Employer*

## **One (1) – Tandem Axle Semi-Tractor Bid Sheet 2020**

### **Tandem Axle Semi-Tractor as per specifications:**

**Manufacturer** \_\_\_\_\_  
**Model** \_\_\_\_\_  
**Model Year** \_\_\_\_\_  
**Delivery Date** \_\_\_\_\_  
**Unit Price** \_\_\_\_\_

### **State the Warranties and Guarantee to be furnished by the supplier and/or manufacturer:**

\_\_\_\_\_

### **State the Terms of the sale and discounts:**

Bid prices shall include all set up and delivery charges to points designated by the Commission. Additional fuel surcharges, set up, or delivery charges will not be accepted. Payment for units shall be made on the day of delivery after acceptance by the Kalkaska County Road Commission.

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Deviations: (three per page):**

Item # \_\_\_\_\_

Deviation:

---

---

---

---

Item # \_\_\_\_\_

Deviation:

---

---

---

---

Item # \_\_\_\_\_

Deviation:

---

---

---

---