

**GOGEBIC COUNTY ROAD COMMISSION
SEMI TRACTOR CHASSIS 2019
BID SPECIFICATIONS**

Each unit bid as described below shall be a new, current year manufacture, Tractor that is manufacturer's latest design and production, complete, serviced, ready for work, and includes all items furnished and installed as specified and includes delivery to the truck equipment dealer and ultimate delivery to the Gogebic County Road Commission, F.O.B. Bessemer, Michigan.

MANUFACTURER: _____

MODEL & YEAR: _____

DEALER: _____

For the following bid specifications sheets, use the column marked compliance to indicate compliance with the specifications. Write "yes" in the blank if the component complies. If not, so indicate and provide model actual or attach detailed manufacturer's specifications for the substitute component. If not applicable, so indicate by writing "NA" in the blank and provide necessary comments. Bidders must fill in compliance and cost for each line item or option. Questions asked of the bidder for a specification item shall be answered on the line provided.

GENERAL	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
New model year 2020		
Minimum 24" under clearance in area between front and rear wheels required for underbody scraper and hydraulic systems		
Please attach warranty coverage for entire vehicle along with any warranty options that you wish the Road Commission to consider		

DIMENSION	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Shortest possible wheelbase for use as Tractor in summer and accommodate a 14' spreader box in Winter. Successful bidder to work with truck equipment dealer to provide optimum wheelbase. Should be long enough for a rear mount wing & Underbody scraper & have room for adequate tire clearance.		
List the wheelbase dimension (inches) *set back axle preferred		
List the cab to center trunnion dimension (Approximately 138 inches)		
List turning radius –Maximum of 36 feet desired		
Final Wheelbase, CT and Overhang will be determined by truck supplier and body company with approval of Road Commission		

GVWR & TRUCK WEIGHT (excluding tire requirements)	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
20,000 Lb. Front Axle		
46,000 lb. Tandem Drive (6x4) Diesel Semi-Tractor		
All components to meet or exceed these GVW weights at hub. If does not comply, please indicate why.		
Front weight in pounds (including oil & fluids, less fuel)		
Rear weight in pounds (including oil & fluids, less fuel)		
Total weight in pounds (including oil & fluids, less fuel)		

FRAME	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Single Heavy-Duty Frame rails to be heat-treated steel (120,000 psi minimum yield)		
Integral front frame extension is required, 24" minimum from grill forward for mounting snowplow hitch and hydraulic pump- No frame cut-outs		
Partial Inner Frame Reinforcement at Front Suspension for snow plow use		
Minimum section modules 26.70 cu. in.		
Frame RBM rating of 3,200,000 lbf. - in.		
Tapered end of frame for tractor application		
Grade 8 Bolts – Huck bolts not desired		

FIFTH WHEEL	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Trailer towing provision mounted forward of 5 th wheel		
12-foot Detachable Straight Air Hose- Connections back of cab forward of 5 th wheel		
7 Way Receptacle mounted back of cab forward of 5 th wheel, 12-foot Detachable Straight electrical cable		
Holland FW35 ILS 24-inch air slide 5 th wheel – 2" slide increments- inboard angle		
Mounted between the center of the drive lines		
6.94 Inch 5 th wheel height		
Tractor Protection valve in cab		
Trailer Hand Control Brake Valve		

FRONT AXLE & EQUIPMENT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Set back front axle		
20,000 lb. steer axle		
Outboard mounted brake drums		
Zerk fittings on tie rod ends, kingpins, and drag link ball joints		
Front springs 23,000 lb. Flat-Leaf.		
16.5"x6" S-cam air brakes		
Non-asbestos brake linings		
Rockwell "Q" plus linings		
4 channel anti-lock brake system (ABS) front and rear combined		
Automatic slack adjusters		
Brake dust shields		
Oil lubricated bearings – synthetic oil		
Dual gear power steering		
Front shock absorbers		
5 Year/200,000-mile warranty		

REAR AXLE & EQUIPMENT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Single speed, 46,000 lb., heavy-duty tandem drive axle with lube pump		
Full locking axles –Both tandem rear axles - driver controlled- 3 switches- Interaxle/Forward rear axle/rear-rear axle. Indicator lights for all		
SPL 250HD Main Driveline SPL170XL Interaxle Drivelive		
Magnetic rear oil drain plug		
Spring set parking brakes on drive axles ONLY		
Synthetic oil		
Outboard mounted brake drums		
16.5" x 7.0 S-cam air brakes		
Rockwell "Q" plus lining		
4 channel Anti-lock brake system (ABS) front and rear combined		
Automatic slack adjusters		
5 year/200,000-mile warranty		
Brake dust shields, both axles		
Gear ratio. Provide axle ratio recommendation to Road Commission and obtain final approval prior to purchase agreement. Ratio to provide approx. 65 m.p.h.		
46,000 lb. Hendrickson Haulmaxx suspension or equal. 54" Axle spacing		

Rear shock absorbers both rear axles		
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ENGINE & EQUIPMENT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Minimum 450hp/1650 lb. ft torque with Jacobs engine brake engine shall be equipped for DEF fluid. No substitutes. Minimum 6-gallon DEF Tank		
Specify Engine Make/Model/HP/Torque rating		
Specify Displacement		
Engine Idle shut-down equipped		
7 year/250,000-mile warranty – MUST Include DEF and entire Aftertreatment device		
Windows based engine diagnostic equipment with download cables		
Plastic composite or stainless-steel oil pan and Magnetic engine oil drain plug		
Front PTO adaptor plate for frame-mounted single pump		
Delco-Remy, 28 SI (160 amp), brushless alternator		
Heavy-duty engine mounting package		
Delco 39MT with over crank protection, 12-volt starting motor		
Key ignition, starter- 2 spare keys		
Sealed electrical chassis connectors, wires color coded and numbered		
Electrical system – 12-volt with circuit breaker protection- POINT TO POINT WIRING- Multiplex Wiring not Desired		
Three (3) 12-volt, High temp AGM batteries, 2775 CCA, approved for severe service, maintenance free, treaded stud type terminal.		
Batteries to be mounted INSIDE Cab Under Passenger Seat.		
Stranded copper battery cables to be (00) or larger		
Battery disconnect switch located in cab- Must have a red indicator light in clear view of the driver indicating when power is ON.		
Kysor fan clutch with lightweight nylon fan blades and automatic fan control		
Inside/Outside under hood air intake provision, capable of providing clean air under all seasonal conditions		
Dual element H.D. air cleaner with restriction gauge in cab		
Fin and tube type radiator		
Radiator protection screen behind grille		
Silicone radiator hoses		

Stainless steel, constant torque clamps on hose 2" or larger		
Radiator shall be filled with manufacturers approved anti-freeze solution that provides protection to at least -40 degrees Fahrenheit		
Environmentally safe, extended life coolant		
Entire Aftertreatment device to be mounted Vertically, top of frame, behind cab so it does not to interfere with underbody scraper, spreader box and load cover mechanism. Must be room for Fuel Hydraulic Tank to be mounted adjacent to keep the wheelbase as short as possible. 24" ground clearance must be maintained Must have Stainless Steel Heat Shield. *Under Door ATD not Desired		
All exhaust components (including flex tubing) shall be stainless-steel		
Spin on Filters for Oil and Fuel Filters		
Block Heater with Chrome Receptacle mounted under LHS Door		

TRANSMISSION & CLUTCH	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Allison 4500 RDS 6 Speed transmission		
Transmission oil cooler		
Transmission rear support		
In cab transmission oil temp gauge		
Magnetic transmission oil drain plug		
Dash mounted push button shifter control		
Transmission Control Module to be located inside cab		
5 year/250,000-mile warranty		

AIR EQUIPMENT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
19.0 CFM air compressor		
Bendix AD-9 spin on canister air dryer with heater		
Nylon chassis hose, braided chassis harness cover, rubber-lined clamps along frame rail		
Air Tanks mounted as to not interfere with underbody scraper mounting or other equipment.		

TIRES & WHEELS	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Front Tires-Michelin XZY-3, 425/65/R22.5 20 ply *Alternate Tires must get the approval of Road Commission prior to bidding		

Rear Tires-Michelin XDN2 11R22.5 16 Ply *Alternate Tires must get the approval of Road Commission prior to bidding		
Non-directional		
22.5" x 12.25" hub piloted 10-hole <u>Heavy Duty</u> aluminum disc front wheels-		
22.5" x 8.25" hub piloted 10-hole <u>Heavy Duty</u> Aluminum disc rear wheels		

FUEL TANK	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
80-gallon fuel tank side mount May be supplied by the truck manufacturer or Body equipment bidder- Temporary tank can be returned to truck dealer.		
Arctic Fox fuel tank heater		

BATTERY BOX, BUMPER & TOOLBOX	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Batteries to be mounted inside cab under passenger seat.		
Temporary only- Bumper to be fabricated by Body Company with Plow hitch assembly		

CAB & EQUIPMENT, LIGHTS AND CONTROLS	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Galvanized steel or aluminum <u>SEVERE SERVICE</u> cab with fiberglass front hood & gas charged Hood Struts. Air ride cab – 5-year cab warranty		
Cab assist grab handles, one on each side and cab access entry steps on each side- Minimum Length of 40"		
Stationary grille to be fixed for hood to open over plow hitch		
Cab to be raised minimum 3" from frame		
Suspended Pedals		
Splash guards of size recommended by manufacturer for chassis and completed truck		
Fender Extensions on front fender		
Cruise control		
Heated two-piece windshield		
Tinted safety glass in all windows		
Premium air ride driver's seat, Hi-Back cloth driver's seat, 1 Chamber Air Lumbar, Cushion Extension, Rear Cushion Tilt, arm rests, left & right		
Bench style fixed passenger seat, cloth		
3-point seat belt with shoulder harness, driver and passenger		

Two tow hooks-rear outside of frame		
Stainless-steel exterior windshield visor		
Inside sun visors, right & left		
Dome light-to work off door switch		
Rubber floor		
Removable rubber floor mats also driver and passenger side		
Double insulated cab and sidewalls		
Junction box(es) in cab to isolate from the elements		
Truck electrical systems shall be suppressed and not affect road commission radio equipment		
Dedicated snowplow light switch, including wiring run to front of truck frame		
Provide (9) - 20-amp auxiliary switches in cab with wiring terminating in cab (minimum)		
Cigarette lighter with ashtray		
All keys alike-Ignition and cab door- 2 extra keys		
Combo fresh air heater (& defroster)/air conditioner with manufacturer's highest output heater available		
Replaceable Fresh air Filter		
Silicone heater hoses		
Breakaway stainless-steel Power mirrors and brackets, 16" by 7" with heat element		
Provide two (2) heated convex mirrors under standard mirror bracket		
Two (2) Air Horns with snow shields and Dual electric horns		
AM/FM stereo radio with weather band, Bluetooth and USB and Auxiliary Ports		
Self-Resetting circuit breakers		
Explain where main fuse panel is located		
Electric intermittent windshield wipers, cowl mounted, electric windshield washer, snow wiper blades		
Back-up alarm		
Provide gauges including: Water temperature, air filter/restriction (filter minder), fuel, oil pressure and temperature, dual air pressure, voltmeter, transmission oil temperature, Fuel Filter Restriction indicator		
Engine safety devices-warning light and audible alarm system activated when engine oil pressure falls below safe operating limit or when water temperature exceeds safe operating limit.		

Standard warning lights including: high water temp, engine oil pressure, low air pressure warning lights with buzzers and Hi-beam & turn signal indicator		
Engine hour meter		
Electric speedometer and tachometer		
Power windows		
Halogen headlights, marker lights on the cab (5), combination stop, turn and tail lights		
Mirror mounted turn signals in addition to standard		
Combination light control switch with turn signal mounted dimmer switch		
Four-way hazard switch required to operate all turn signal lights simultaneously in a flashing mode with heavy duty flasher		
All lights, signals and reflectors to meet or exceed Federal standard and regulations		
Tilt & telescope steering wheel		
Cup Holder		
Steps for safe entry and exit from cab to be provided by truck Manufacturer and must provide for ground clearance for mounting of underbody scarper and auxiliary equipment.		
Body Builder Access- provide 150-amp service for body builder installed components and Additional Speed sensor for spreader control.		

PAINT	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Cab color to be federal yellow		
Solid color paint, base and clear coat finish		
Frame and running gear to be solid color paint-black		

SAFETY	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Each truck shall be furnished complete with all safety components required by the current Federal Safety Standards for the size of truck proposed to be furnished		

16. OTHER DEALER FEATURES Use this sheet to describe other features included. Bidder may provide information as to why their equipment is the most advantageous purchase for the Gogebic County Road Commission. Data with factors such as operating and repair cost per hour or re-sale value may be provided. Attach addition sheet(s) and or report(s) or studies with the proposal if needed.

Successful bidder on cab & chassis shall have their fleet service manager or other representative contact the Gogebic County Road Commission regarding swept back painted bumper warranty, service manuals, and service bulletins prior to vehicle delivery to equipment dealer destinations.

MANUALS	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Provide one complete set of filters for a full service		
Provide one (1) parts book, service manual and operator's manual for each truck (paper copies)		
Provide e-manuals and e-service programming		
Provide one copy of Line Sheet for vehicle		
Service bulletins as required for vehicle		

PRE-DELIVERY SERVICE & INSPECTION	COMPLIANCE (Y, N, or NA)	MODEL ACTUAL and/or COMMENTS
Provide final manufacturers or dealers pre-delivery check sheet with the service manager's signature		

**GOGEBIC COUNTY ROAD COMMISSION
SEMI TRACTOR CHASSIS 2019
BID FORM**

BID ADDENDUM ACKNOWLEDGEMENT

Bidders shall acknowledge receiving any and all bid addendums that may be required as part of the final bid specifications. Bid addendums shall be provided by Gogebic County Road Commission ONLY and shall be included in the TOTAL NET BID per Tandem Truck. Bidder shall review and fully understand addendum(s) and sign and date acknowledgement below. Bidder shall attach bid addendum to bid form as part of their bid submittal.

BID ADDENDUM # _____

BIDDER SIGNATURE _____

DATE _____

BID ADDENDUM # _____

BIDDER SIGNATURE _____

DATE _____

TOTAL NET BID –Tractor/Spreader Combination

(Excluding taxes – delivered body company)\$ _____

Delivery Date: _____

Submitted by: _____

Signed by: _____

Note: It is the intent that this unit will be used as a highway maintenance truck equipped with a fifth wheel, sand spreader box, snowplow, patrol wing, and underbody blade.

Bids to be opened on **Monday, February 4, 2019 10:00 am (CST)** at the Board Room of the Gogebic County Road Commission office: 200 North More Street, Courthouse Annex, Bessemer, MI 49911.