



Newaygo County Road Commission

935 EAST ONE MILE ROAD
WHITE CLOUD, MI 49349
Phone (231) 689-6682
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www.newaygoroads.org

NOTICE TO BIDDERS

Sealed bids will be received by the Board of County Road Commissioners of Newaygo County, at their office at 935 East One Mile Road, White Cloud, MI 49349, on Wednesday, July 26, 2017, until 8:00 a.m. for the following:

- **One 2018 6 x 4 cab & chassis unit (spreader body)**

Specifications may be obtained at the office of the Newaygo County Road Commission during regular business hours or by visiting our website at www.newaygoroads.org

All proposals must be in sealed envelopes, plainly marked as to item bid and shall bear the name of the bidder. All bids shall be on Road Commission bid form.

The Newaygo County Road Commission hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of sex, race, color or national origin in consideration for an award.

The Board reserves the right to accept or reject any or all bids, to waive any irregularities in the bids and to make award in any manner they deem to be in the best interest of Newaygo County.

BOARD OF COUNTY ROAD COMMISSIONERS
OF
NEWAYGO COUNTY

Douglas Harmon, Chairman
Louis J. Meeuwenberg, Vice-Chairman
William Gonyon, Commissioner

SPECIFICATIONS – SPREADER TRUCK

Specifications for one 2018 6 x 4 cab & chassis unit to be equipped with a front mounted hydraulic pump, underbody scraper, frame mounted self-unloading 304 stainless steel spreader body with cross conveyor, electronic groundspeed control, hydraulic pre-wetting system, side wing, front mounted snow plow hitch with high speed one-way snowplow. Vehicle to be complete and fully operational, standard factory equipped including, but not limited to the following:

GVWR – approximately 64,000 lbs.

WB – approximately 200 inches

CA –approximately 130 inches

AF - approximately 70 inches

ENGINE – Diesel with a minimum of 425 H.P. at 1800 R.P.M., 1350 lbs. ft. torque, 12.8L or larger, with engine compression brake. To be equipped with lube oil cooler, spin on lube filter, fuel filter, and water filter.

AUTOMATIC TRANSMISSION - Allison HD4500RDS 6-speed wide ratio with water to oil cooler, dash mounted temperature gauge, TranSynd fluid, and a push button shifter.

FRAME - Minimum section modulus 43.09, 110,000 PSI yield strength straight frame with “C” channel reinforcements. Integral frame to extend 27 inches in front of grille with adequate front crossmember for mounting hydraulics and snowplow hitch. Cab to end of frame proper length for 13 foot self-unloading spreader body installed approximately 24 inches back of cab. Minimum of 24 inches ground clearance with full payload required for underbody scraper mounting.

FRONT AXLE -18,000 lb. with oil type seals. Springs to be equal or exceed axle capacity. Heavy-duty front shock absorbers to be installed.

REAR AXLES - 46,000 lb. RT 46-160 Rockwell 5:38 ratio with driver controlled locking differentials, to disengage at approximately 25 M.P.H., in front and rear and driver controlled locking power divider, mounted with a 46,000 lb. air suspension with 54-55 inch axle spread, to include dual ride adjusting valves and air dump switch with engagement warning light.

DRIVE LINE – 1810HD Dana Spicer main driveline with half round yokes. 1710HD Dana Spicer interaxle driveline with half round yokes.

RIMS- Aluminum, heavy-duty hub piloted flanged nut metric mount 12.25” dc 22.5” for front (11,000 lb. rating), 8.25” x 22.5” for rear (10,000 lb. rating.)

TIRES FRONT - 385/65R22.5 18 ply steel radials

TIRES REAR - 12Rx22.5 16 ply mud and snow type steel radials.

BRAKES - Rockwell, full air, cam type with spring loaded diaphragm type emergency brakes on rear. Maximum effective lining area. Front minimum 16.5 x 6 inch S-cam with type 24 chambers. Rear minimum 16.5 x 8.62 inch S-cam with type 30 chambers. Dust shields on all wheels. Meritor style automatic slack adjusters on front and rear. Hub piloted drums. ABS, and front and rear extended brake package. Option: full air disc brakes.

AIR SYSTEM - Minimum 18.7 CFM gear driven water-cooled compressor with air dryer. Air reservoirs with heated moisture ejectors. Dash mounted air gauges and low air warning device. All air tanks and plumbing, air dryer, etc. must be mounted so as not to interfere with above frame fuel tank, spreader body and underbody scraper installation.

COOLING -Heavy-duty radiator and charge air cooler, matched to engine and drive train. Antifreeze protection to -40 degrees F. Replaceable coolant filter. Silicone hose package with constant torque clamps and straight radiator hoses with metal sections and elbows desired. Also, include the manual override switch for engine cooling fan.

CAB AND HOOD - Full size, fully insulated aluminum cab (steel only as an alternate) with dark interior, and heavy duty, black insulated back, floor mat. Tilt type fiberglass hood with, stationary grille, with rock guard. Exterior assist handles on both sides. Dual arm rests and sun visors.

ELECTRICAL AND GAUGING - 3-12 volt, maintenance free batteries with sealed terminals. CCA to exceed the engine requirement. Minimum 100 Amp alternator. Color-coded wiring and conveniently located circuit breaker panel. Easy access, quick disconnects gauges and lights. Full gauging including mechanical oil pressure, electronic speedometer, odometer, and tachometer, hour meter, volt meter, water temperature, fuel level, and air pressure. Switch for power R.H. window. Backup alarm. Halogen headlights. Panel and interior lights. 12-volt power outlet. Low oil pressure and high temperature warning device and engine shutdown. All lights (LED), reflectors and accessories to conform to the laws of the State of Michigan, including flush mounted marker lights, backup lights and hazard switch.

EXHAUST SYSTEM - Vertical muffler with cab mounted vertical stack mounted behind cab on right hand side, complete with guard and grab handles. To include automatic over the road regeneration and a dash mounted switch; outlet to be curved stack.

AIR CLEANER - Cartridge type, matched to engine, with restriction gauge. Capable of drawing air from inside or outside the hood, which is driver controlled.

GLASS – All glass shall be tinted. R.H. door glass to be self-defrosting and power controlled up and down by switch readily accessible to driver.
Option: heated windshield if available.

HEATER, DEFROSTER AND AIR CONDITIONER - High output deluxe fresh air type with dash-integrated air conditioning. Minimum cooling, 17,000 BTU/HR and heating 40,000 BTU/HR with manual speed, temperature and mode selection controls. Unit to have maximum airflow to heat or cool cab in adverse conditions. Defrosters should be capable of heating the door glass as well as the windshield. Silicone heater hose from engine to heater.

MIRRORS - Dual “West Coast” 7x16-inch heated, retractable mirrors, with 8-inch spot mirrors mounted below regular mirrors.

SEAT - Driver’s seat High Back 2000 National model 195, air ride. Cloth, not vinyl, seat must be at least 20 inches wide and securely anchored to floor with extra material if required. Excessive rocking or swaying of seat assembly may be reason not to accept vehicle. Retractable, safety orange seat belts to be installed. Standard shock absorbing, fixed base, cloth, companion seat.

RADIO - AM/FM stereo, with clock and wx band. Mount for 2-way radio.

WINDSHIELD WIPERS - Dual, multiple speeds, electric with automatic type washers and intermittent feature.

AIR HORNS - Dual horns on single base mounted on L.H. side of cab.

THROTTLE - Capable of being locked in any position.

FRONT BUMPER - Heavy duty, minimum 40-inch straight center section with curved ends and step loops.

COLOR - Omaha orange, base coat clear coat, on cab. Black enamel on bumper and frame.

FUEL AND HYDRAULIC TANKS - 120-gallon fuel tank, minimum 7 gauge steel. 30-gallon hydraulic oil tank, minimum 7 gauge steel, installed behind cab above frame. Depending on chassis exhaust configuration, tank dimensions may have to be modified in order to allow for proper exhaust clearance. Equipment vender will be required to submit a drawing for Newaygo County approval prior to installation. Tank mounting hardware shall be of heavy-duty construction bolted to truck frame and independent of all underbody and dump body equipment. Fuel tank must have adequate baffles and be securely welded at all seams and stress points. Fuel tank shall be equipped with an electronic gauge sender unit that will adequately display full range of tank capacity. Hydraulic tank mounted on right hand side with oil level indicator on tank. Hydraulic tank shall be equipped with a top mounted Zinga type, 10-micron, return line oil filter. Filter shall be equipped with a drop hose to discharge oil to within 6" of bottom of tank and shut-off valves on all other lines. Hydraulic tank shall also be equipped with an electronic low oil sensor with an indicator light mounted in cab console. Float type sensor will not be acceptable.

DEF TANK – Adequate size and capacity to be filled with every two tanks of fuel with cover that fully encases the tank for protection.

HYDRAULICS & GROUND SPEED CONTROL – Engine to be equipped with a crankshaft adapter to receive a flange yoke of a Spicer 1300 series slip shaft and universal joint drive, which will drive a Rexroth load sense pump model A10V100 pump, 2" flange inlet, 1.125" outlet, mounted as close to grill as possible. The low oil sensor in the hydraulic tank shall be wired to a normally open solenoid shut down valve mounted on the pressure side of pump, with an on/off/momentary control switch in the cab, via a Bosch type relay. In a low oil situation, the pump shall be automatically neutralized. Low oil over ride shall be incorporated into the switch. The switch shall be three-position on/off/momentary on type. The momentary portion of the switch shall be wired to the low oil override system to allow the operator to engage the pump momentarily to stow equipment prior to transport. System shall be equipped with a Parker 30P-1-10Q-BM-25-5161 high-pressure filter in the main pressure line between the pump and valves. A Compu Spread model CS430 open loop electronic groundspeed spreader control along with Rexroth M4-12 flow control valves will be used. System to contain all necessary flow divider valves and controls for up and down pressure and swinging underbody scraper, up and down pressure of front mounted snow plow, two speed conveyor, bi directional cross conveyor, spinner, side wing, and pump of liquid prewetting system. Adjustable pressure relief's pre-set at proper P.S.I. for operation. Pressure gauge for underbody scraper down pressure and all controls mounted in or on console in cab between seats. Hydraulic spool valves may be mounted to spreader body in a stainless steel enclosure, with air controllers. System shall incorporate ball valves at tank and proper filters. System shall be capable or

operating scraper, plow, cross conveyer, and spreader individually or simultaneously without interfering with the efficiency of each other. Electrical wiring shall be run through conduit for the length of spreader body and use "Weather Pack" connectors for removable connections.

UNDERBODY SCRAPER - Monroe model 4500. Complete 12 foot hydraulic scraper with cab controlled power reverse with standard equipment including 1 inch hanger board, full length solid hinge shaft, 1 inch x 20 inch x 12 foot moldboard with two 3.5 inch diameter double acting horizontal hydraulic cylinders with heavy duty spring-shock assemblies, two 4 inch power reversing cylinders, 1 inch solid circle with no lock pin notches, heavy duty circle hangars and required relief and check valves and mounting hardware. Bidders to include a complete and accurate description on unit offered.

FRONT PLOW HITCH - One Husting 34" quick hitch truck portion complete, will be mounted on front of truck so as not to impede servicing of hydraulic system and not to impede tilting of hood. Plow lights will be hood-mounted, with Dominion Automotive light kit #725548. Headlights to be wired and switched opposite of truck lights.

FRONT PLOW - High speed slotted trip one-way snowplow with Husting 34" quick hitch. Moldboard length 14'4", 35" nose height, 64" discharge height, 5/8" x 8' x 11' center punch cutting edge, 108" push width, with slotted trip moldboard.

SELF UNLOADING STAINLESS STEEL SPREADER BODY - 13 foot, 10 cu. yd. heavy duty truck mounted spreader capable unloading through swinging end gate and adjustable metering feed gate. Spreader to be a Monroe Duz Mor model or equivalent. Body sides, front and tailgate shall be of 3/16" stainless steel. Sides shall be 54 inches high with a slope not less than 45 degrees with 2.5" deep x 4" wide supports on 36" centers. Tailgate perimeter shall be boxed with 2.5" x 3" supports constructed of 3/16" stainless steel. Body floor and longitudinals shall be of 1/4" stainless steel. Body shall be continuously welded. Body shall include a 1/2 cab shield of 3/16" stainless steel and shall include 1/2" thick poly mud flaps mounted in front and behind drive tires. Conveyor shall be a 34" wide 667xh 28,000 lbs. per strand tensile strength, pintle type chain with 1/2" crossbars on 4-1/2" centers with replaceable floor and bolt in chain shields. Conveyor drive shall consist of dual 6:1 gearboxes, with 18 CID White hydraulic motors, plumbed to an air operated, cab controlled, series/parallel valve, for high and low speed operation of conveyor, turning 2" diameter shafts with 8-tooth sprockets riding in 4-bolt flange bearings equipped with grease fittings. Tailgate shall have a screw jack adjustable opening for conveyor discharge and cab controlled air operated release. Spreader body will be equipped with a 18" wide, 350 degree rated belt, bi-directional stainless steel cross conveyor mounted at rear, with left side mounted spinner and right side mounted berm chute. Spinner shall rotate counter-clockwise, and be directed towards centerline of road. Conveyor, rear of tail gate and cross conveyor shall have removable stainless steel covers to keep snow from accumulating on and plugging conveyors, but shall not impede flow of materials. Cross conveyor, spinner, and berm chute assembly, hydraulic and air hoses to be equipped with quick disconnect couplers. All hydraulic plumbing to the rear of the body shall be with schedule 80 pipe, or flared hydraulic tubing and mounted to the side of body with poly clamps. Plumbing under body will not be acceptable. Body shall be installed on truck frame with a 1/2" thick sheet of HMW poly between body and frame. All wiring for sander body shall be terminated to and extended from a Betts model 351044 junction box mounted at rear of body. Truck-Lite LED tail lights (P/N 6050-3), backup lights, sander light, and alternating lights shall be mounted in light boxes with location to be determined by road commission personnel. A ladder shall be mounted left side of spreader body.

SIDE WING - Install Monroe model MJW-7' junior mid mount wing including the following, 7 ft. moldboard length, 27" intake height, 28" discharge height. 4"x 4" x3/4" bottom angle. A 4" x 10" toe cylinder, 3" x 10" heel cylinder. Moldboard will be 3/16" construction with 3/8", one piece ribs. Heavy duty, spring cushioned push arm with shear pin. Front cross tube with mounting plate. Safety chain shall be installed for transport. Wing Post shall be mounted just ahead of the front drive tire with the rear push arm mounted behind the rear drive tire. Wing Post shall be equipped with a u shaped support at the top of the wing post. Rear push arm is to be equipped with a 6" cushion spring. Rear push arm support brace shall be constructed of 4" x 6" x 1/4" tubing and shall be supported by both frame rails. Hydraulic circuit for the wing shall be equipped with a sequencing valve for proper operation of the wing. The sequencing valve shall have built in load checks to prevent the wing from drifting down when not in use. Sequencing valve shall have built in, manually adjustable flow controls. Wing is to be equipped with hydraulic disconnects for easy removal Wing will also be equipped with a cushioned rubber stop to prevent it from hitting the body when placed in the stored position. All welding on the moldboard shall be continuous.

Wing components and moldboard shall be shot blasted and powder coated. Install work light on frame of truck to illuminate wing. Install poly light box mounted on the end of the wing with a red LED light. Install reverse curved steel cutting edge.

PRE-WETTING SYSTEM - A hydraulic driven, positive displacement bronze gear pump rated at 7 GPM shall be installed inside a sealed enclosure. Also included in the per-wet system shall be a manually adjustable proportional flow divider that provides the selected gallons per ton ratio. Control valve shall include a normally open solenoid valve for system on/off. Also included shall be a cab mounted on/off switch low liquid light. The pre-wet system shall be driven off the exhaust flow of the main conveyor. Liquid pump will be mounted in an enclosure on self-unloading spreader body along with two 100 gallon liquid reservoir tanks. Spray nozzles shall be installed in spinner chute to pre-wet materials just before reaching spinner. Pump enclosure, liquid reservoir, nozzles, and mounting hardware should be of heavy-duty construction, and readily removable for summer storage. Electrical wiring shall be run through conduit for length of spreader body and use "Weather Pack" connectors for removable connections.

TARP SYSTEM - Rollrite model RR503 electric tarp system will be installed on self-unloading spreader body.

EXTRA LIGHTING – Top green LED strobe light with, guard, to be mounted on tarp box on cab shield. Alternating green amber flasher light system to be incorporated into rear of spreader body. Sander light to directed toward spinner discharge area. A work light, taillight, and clearance light shall be mounted for the wing. Extra lighting shall be driver controlled with switches mounted on console between cab seats.

MISCELLANEOUS - Vehicle batteries shall be isolated from system by a master disconnect switch, on the negative or ground side of circuit, mounted inside the left rear corner of cab. Front tapered bumper shall include, treadplate, filler plates on each end, and have stirrup steps on each side.

WARRANTY – Bidders shall include the minimum coverage on the following:

- Basic Vehicle 1 Year or 100,000 miles
- Brightwork 1 Year or 100,000 miles
- Cab Corrosion 5 Years or 300,000 miles
- Cab Structure 5 Years or 300,000 miles

- Cab Paint 1 Year or 100,000 miles
- Chassis Paint 1 Year or 100,000 miles
- Chassis Corrosion 1 Year or 100,000 miles
- Crossmembers 5 Years or 300,000 miles
- Frame Rails 5 Years or 300,000 miles
- Driveline 2 Years or 200,000 miles
- Engine 5 Years or 300,000 miles
- Transmission 5 Years or 300,000 miles
- Rear-ends 5 Years or 300,000 miles
- Hydraulics 1 Year or 100,000 miles
- Underbody Blade 1 Year or 100,000 miles
- Sander/Box 1 Year or 100,000 miles
- Pre-wetting System 1 Year or 100,000 miles

Bidder to include a complete and accurate description of unit bid. It shall be the responsibility of the successful bidder to make pre-delivery inspection of all mechanical operations of the vehicle for completeness and quality of workmanship. Successful bidder to supply diagnostic software and data link, service manual, operator’s manual, and parts manuals for truck, chassis, engine, transmission, hydraulic system, underbody scraper, self-unloading spreader body, cross conveyor, side wing, and pre-wetting system. Charges for title, registration, pre-delivery service, and all other such charges shall be included in bid. Bidder will supply delivery date. Please feel free to offer alternates or options with quotes.

After the bid is awarded, both the truck dealer and the equipment dealer will be required to attend a specification review and preconstruction meeting to be held at the Newaygo County Road Commission in order to assure the proper integration of both chassis and equipment components.

The Board reserves the right to reject or accept any or all proposals, or any part thereof, and to make award in any manner they deem to be in the best interest of the Newaygo County Road Commission.

BID FORM

DUE BY 8:00 a.m. on Wednesday, July 26, 2017

Submitted to:

*Newaygo County Road Commission
935 East One Mile Road
White Cloud, MI 49349*

- **One 2018 6x4 cab & chassis unit (spreader body)** \$ _____
Per specifications

DELIVERY DATE _____

The Newaygo County Road Commission by mutual agreement with said bidder, reserves the right to order up to three (3) units at the above specified bid price.

Submitted by:

Company: _____

Name: _____

Street Address: _____

City: _____

State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____