Wade Williams
Mark W. Hoffman
Frank Zulski, Jr.
Brent Shank, PE
Engineer-Manager
Lisa Kleeman
Finance Director



2265 E. Hathaway Road Harbor Springs, MI 49740 Office: (231) 347-8142 Fax: (231) 347-5787 www.emmetcrc.org

11/20/2023

INVITATION TO BID

The Emmet County Road Commission will receive sealed bids until 09:00 a.m., Wednesday, December 20, 2023, at which time they will be publicly opened and read aloud at their offices located at 2265 E. Hathaway Road, Harbor Springs, Michigan 49740, for:

Six (6): 66,000 G.V.W.R. Diesel-Powered Tandem Truck

Bids shall be on forms furnished by the Road Commission and shall be submitted in a sealed envelope clearly marked as to its contents. Specifications and bid form can be found online at www.emmetcrc.org or by contacting the Road Commission at (231) 347-8142.

The right is reserved to reject any and or all bids, to waive irregularities in the bid procedure and to award bids in the best interest of the Emmet County Road Commission.

EMMET COUNTY ROAD COMMISSION

Frank Zulski, Jr. – Chairman Wade Williams – Vice Chairman Mark W. Hoffman – Member

Due 9:00 a.m., Wednesday, December 20, 2023, to:

Emmet County Road Commission 2265 E. Hathaway Road Harbor Springs, Michigan

Proposal for six (6):	66,000 G.V.W.R. Diesel-P	owered Tandem Truck
We agree to furnish t	he Emmet County Road Com	mission the following:
Year	Make	Model,
Year	Make	Model
Year	Make	Model,
submitted with this p F.O.B Conway Garage Price (tax exempt) for		
	one \$	
	one \$	
Price (tax exempt) for	one \$	
Price (tax exempt) for	one \$	
Total price (tax exem	ot) for (6) six \$	
Terms		
Delivery in	days after award of bid	1

Business name:		
Business address:		
Business phone:		
Mobile phone:		
E-mail address:		
Print name & title:		
Signature:		
Date:		

EMMET COUNTY ROAD COMMISSION

MINIMUM SPECIFICATIONS FOR:

Six (6)-66,000 G.V.W.R. Diesel-Powered Tandem Truck

GENERAL

The following specifications describe the minimum requirements for a tandem truck of the current model year. Exceptions to any specifications listed shall be noted and highlighted by the bidder. Bids not submitted on these forms will not be considered. The Board reserves the right to waive irregularities in the bid procedure, to accept or reject any and or all bids, and to award the bid in the best interest of the Emmet County Road Commission.

Four (4)- 47X Western Star Trucks (or equivalent) will be as follows:

G.V.W.R. 66,000 lbs.	comply	yes no		
WHEELBASE 185.0" w/set Forward front axle	comply	yes no		
CAB TO TRUNION 122.0"	comply	yes no		
ENGINE Comply yes no Diesel {Cummins X12, 500 HP @ 1900 RPM, 1850 LB-FT @ 950 RPM} or equivalent, with engine compression brake (Jacobs Model), with cartridge filters to include oil, coolant, air & fuel filters. Air filters shall be dry-type dual element. The air filter enclosure shall have integral snow valve within cab control, (inside/outside style) and dash mounted. Air restriction gauge, capable of providing clean dry air under all-season conditions. Note: primary fuel assembly will be a combination heater/water separator with ejector valve mounted on firewall under hood. Davco Fuel Pro, primary fuel filter assembly preferred. The engine shall have a 1350 adapter plate to accommodate a front-mounted hydraulic pump.				
TRANSMISSION Eaton/Fuller RTLO 16913A 13 SPEED Manual; speed w/double OD Air shift, and internal lube pump & oil cooler. With cast iron clutch housing. * Transmission and rear axle geared not to exceed 75 mph. Computer printout of drive train showing ground speed and torque in all gears at specified engine RPM. *Ratio to be 4.30	comply	yes no		
COOLING SYSTEM Heavy-duty aluminum cross flow radiator with petcock-type drain. (1, Radiator to be mounted above front-mounted hydraulic pump shaft. Air operated fan drive with automatic on/off- type control		yes no inch minimum)		

FRONT AXLE	compl	y yes	s no	
Drop I-beam type [20,000 lbs. min] with 23,000	lb. multi-leaf springs with torqu	e rods	and shock at	sorbers.
(Meritor FL-941) or (Deit DA-F-20.0-5)	(Set back axle)			
REAR AXLE	compl	y yes	s no	
Tandem dual drive Meritor RT-46-164p, 46,000	·			filter.
Shall have driver-controlled traction differentia		-	-	
mounted control switches. To include driver co				
DRIVELINE	compl	v ves	s no	
RPL35 Meritor main driveline	·			
RPL25 Meritor inter-axle driveline				
FRAME	compl	v ves	s no	
Heavy-duty single channel frame (15.0 MM) with	-			s for severe
duty. Omit the front bumper.				
Full depth at front with an 18" minimum extend	ling forward of grill to facilitate	snownl	low attachme	ents
24" frame to ground clearance required, with n		л.опр.	.ov accaomin	
Frame assembly must exceed 64,000 lb. G.V.W.		all loc	ations	
Traine assembly must exceed 64,000 ib. G.V.W.	in, neavy daty crossmembers at	. un loc	ations.	
REAR SUSPENSION	comply	v ves	s no	
Hendrickson Haulmaax EX	55p.	, , , , ,	,	
Walking beam type with 54" axle spacing; 52,00	00 lb canacity with rubber end	hushin	gs transverse	e torque rod
less shock absorbers & 10.5" ride height.	oo is. capacity, with russer end	Justini	65, transverse	torque rous
Tess shock absorbers & 10.5 The height.				
BRAKES	comply	v ves	s no	
Dual air anti-lock S-cam system {Meritor Q-Plus	-	, , , , ,	,	
All wheels with automatic slack adjusters (front	-	actuate	ed narking hr	akes on rear
axles, and dust shields. Air & electrical connect			-	
axies, and dast smelas. All & electrical connect	ions to rear or frame with glad r	idilas iv	or trailer rain	ctions.
STEERING	compl	v ves	sno	
TRW, TWP-60 & RCH-45 dual full power steerin	•			
11.W, 1W1 00 & Neil 43 ddai faii power steeriii	g gears with engine mounted an	cct un	ive pairip.	
AIR COMPRESSOR	comply	v ves	s no	
19.0 CFM air compressor, engine mounted dire	•			r-Wahco
system saver 1200) on outboard RH frame rail.				
equipment. The air dryer shall include quick-ch			i dildei body (or other
equipment. The air dryer shall include quick-ch	ange spin on desiccant cartinge	:.		
EXHAUST SYSTEM	comply	y VAS	s no	
Right hand outboard frame mounted vertical af				
Shall not interfere with mounting or operation	•		•	onerators'
field of vision through the rear-view mirrors. The		•		•
The chassis dealer will be responsible for requir	·	an not	be illounted	to cab.
The chassis dealer will be responsible for requir	eu clearances on chassis.			
ELECTRICAL	compl	u vec	s no	
All exterior lights shall be LED (headlight, turn, I		, yes	, 110	
12-volt system with a 160 amp [Delco 36-SI] alt	•			
Three (3) absorbed glass mat group 31 batterie.		otal		
THICE (2) ansorbed Riass mar Rionh 21 narrene	s with a minimum 3,3/3 C.C.A. t	Jiai.		

Battery box mounting, left side, under cab, (under passenger seat is acceptable) with jumpstart provision located on frame next to starter. Starter shall be grounded directly to battery with a separate ground cable. The four-way flasher system must handle a minimum 35-amp load and hazard lights for heavy duty, continuous duty. Automatic circuit breakers in lieu of fuse. A body up-fitter electrical wiring junction box shall be mounted behind cab at left frame area for lighting connections and shall be labeled. Trailer towing wiring effects on unit (per road commission requirement), 2-way radio wiring effects. Auxiliary snowplow light wiring to front of hood. Locking Master electrical disconnect switch, interior cab mounted with three-minute delay and exterior LED indicator light. CAB comply yes ____ no ____ Conventional style severe duty, with extra sound abatement package, adjustable air-ride cab. Tilt hood with fixed grill and rubber fender extensions. Upgraded hood springs included. Hood opening shall NOT interfere with plow hitch when plow attached. The driver's seat shall be a Sears Atlas II VRS Seat with arm rest. fabric covered air suspension type with high back, isolated with air lumbar support, and arm rests, Hi-Viz seat belts. Passenger seat shall be fixed foam. The steering column shall be 18" wheel with tilting & telescoping. Air conditioning with heavy-duty fresh air heater/defroster. The defroster system shall be designed to keep all windows fog and frost-free. Heavy-duty multi speed intermittent electric windshield wipers, bottom mount with heated washer system. Three-piece rear window, AM-FM radio w/ Bluetooth, adjustable swing-out sun visors. Two (2) stainless steel west coast-type heated mirrors with stainless mountings and 8-inch spot mirrors. Cab mounted grab handles shall be mounted on both driver and passenger sides. Turn signals shall be self-canceling, with a heavy-duty solid-state flasher (signal- stat 915) or equivalent. Gauges: voltmeter, hour meter, oil pressure, and coolant temperature, tachometer, speedometer, air pressure, fuel, air cleaner restriction gauge (mounted in cab). Shall have six (6) additional dash-mounted aux switches for lighting accessories, minimum 20-amp, and shall be labeled as follows: (2) plow lights (1) strobe lights (3) blade lights (4) spinner lights (5) work lights (6) wing lights Class-1 amber/green LED top strobe, center roof location, complete with wiring and mounting provisions. Driver & passenger door window shall be electric powered and controlled at driver's door panel. Dual air horns with snow covers. Outside cab lights shall be of a low-profile or flush mounted. Drive speed sensor for sander control. Under cab & interior cab floor undercoating. WHEELS & TIRES comply yes ____ no ___ Front: 22.5 x 12.25 heavy-duty painted steel 10-stud hub piloted flanged-nut mount wheels with two (2) 385/65R22.5 Michelin XZY-3, 20-ply radial load range (J) tires. Rear: 22.5 x 8.25 heavy-duty painted steel 10-stud hub piloted flanged-nut mount wheels with eight (8) 12R22. Michelin XDN2, 16-ply radial load range (H) tires. Dealer to supply two spare wheels/tires (1) front & (1) rear. **COLOR** yes ____ no ___ comply Cab- Red, solid color vermillion Interior- Black

For transportation only and shall be returned to truck supplier for credit.

FUEL TANK

comply yes ___ no ___

Option:

One (1) Fifth Wheel Hitch with Cab mount Air and frame end air.

Two (2) – 49X Western Star (or equivalent) will be as follows:

G.V.W.R.	comply yes no
66,000 lbs.	
WHEELBASE	comply yes no
214.0" w/set back front axle	
CAB TO TRUNION	comply yes no
138.0"	
ENGINE	comply yes no
Diesel {Cummins X12, 500 HP @ 1900 RPM, 1850 LB-FT @ 950 RP	
or equivalent, with engine compression brake (Jacobs Model), with fuel filters. Air filters shall be dry-type dual element. The air filter	_
within cab control, (inside/outside style) and dash mounted.	enclosure shall have integral show valve
Air restriction gauge, capable of providing clean dry air under all-	season conditions.
Note: primary fuel assembly will be a combination heater/water s	
firewall under hood. Davco Fuel Pro, primary fuel filter assembly	preferred.
The engine shall have a 1350 adapter plate to accommodate a fro	ont-mounted hydraulic pump.
TRANSMISSION	comply yes no
Eaton/Fuller RTLO 16913A 13 SPEED Manual; speed w/double OD	
Air shift, and internal lube pump & oil cooler.	
With cast iron clutch housing. * Transmission and rear axle geared not to exceed 75 mph.	
Computer printout of drive train showing ground speed and	
torque in all gears at specified engine RPM.	
*Ratio to be 4.30	
COOLING SYSTEM	comply yes no
Heavy-duty aluminum cross flow radiator with petcock-type drain	•
Radiator to be mounted above front-mounted hydraulic pump sh	art.
Air operated fan drive with automatic on/off- type control	
FRONT AXLE	comply yes no
Drop I-beam type [20,000 lbs. min] with 23,000 lb. multi-leaf sprii	ngs with torque rods and shock absorbers.
(Meritor FL-941) or (Deit DA-F-20.0-5) (Set back axle)	
REAR AXLE	comply yes no
Tandem dual drive Meritor RT-46-164p, 46,000 lb. min. capacity v	·
Shall have driver-controlled traction differentials in forward rear amounted control switches. To include driver controlled inter-axle	•

DRIVELINE	comply	yes	_ no
RPL35 Meritor main driveline			
RPL25 Meritor inter-axle driveline			
-			
FRAME	comply		
Heavy-duty single channel frame (15.0 MM) with full-length heat-treate	ed C-chann	el reinfo	rcements for severe
duty. Omit the front bumper.			
Full depth at front with an 18" minimum extending forward of grill to fa	icilitate sno	owplow	attachments.
24" frame to ground clearance required, with minimum 65" A.F.			
Frame assembly must exceed 64,000 lb. G.V.W.R.; heavy duty crossmen	nbers at al	I locatio	ns.
REAR SUSPENSION	comply	ves	no
Hendrickson Haulmaax EX	COp.,	, 00	
Walking beam type with 54" axle spacing; 52,000 lb. capacity, with rubb	ner end hu	shings t	ransverse torque rods
less shock absorbers & 10.5" ride height.	oci ciia ba	31111g3, t	ransverse torque rous
Tess shock absorbers & 10.5 That height.			
<u>BRAKES</u>	comply	yes	_ no
Dual air anti-lock S-cam system {Meritor Q-Plus front & rear}			· —
All wheels with automatic slack adjusters (front & rear), and heavy-duty	spring act	tuated p	arking brakes on rear
axles, and dust shields. Air & electrical connections to rear of frame wit	h glad har	nds for tr	ailer functions.
<u>STEERING</u>	comply	yes	_ no
TRW, TWP-60 & RCH-45 dual full power steering gears with engine mou	inted direc	t-drive p	oump.
<u>AIR COMPRESSOR</u>	comply		
19.0 CFM air compressor, engine mounted direct drive with air storage		-	
system saver 1200) on outboard RH frame rail. Shall be mounted to not		with un	derbody or other
equipment. The air dryer shall include quick-change spin on desiccant of	cartridge.		
EXHAUST SYSTEM	comply	ves	no
Right hand outboard frame mounted vertical after-treatment system as			
Shall not interfere with mounting or operation of underbody scraper, do	•	-	
field of vision through the rear-view mirrors. The vertical portion of exh			•
The chassis dealer will be responsible for required clearances on chassis			
and the same of th			
ELECTRICAL	comply	yes	_ no
All exterior lights shall be LED (headlight, turn, brake etc.)			
12-volt system with a 160 amp [Delco 36-SI] alternator			
Three (3) absorbed glass mat group 31 batteries with a minimum 3,375			
Battery box mounting, left side, under cab, (under passenger seat is acc	eptable) w	/ith jump	start provision
located on frame next to starter. Starter shall be grounded directly to be	attery wit	h a sepa	rate ground cable.
The four-way flasher system must handle a minimum 35-amp load and	hazard ligh	nts for he	eavy duty, continuous
duty. Automatic circuit breakers in lieu of fuse.		_	
A body up-fitter electrical wiring junction box shall be mounted behind	cab at left	frame a	rea for lighting
connections and shall be labeled.	١	alia	
Trailer towing wiring effects on unit (per road commission requirement	-		-
Auxiliary snowplow light wiring to front of hood. Locking Master electric	cai disconr	iect swit	cn, interior cab

mounted with three-minute delay and exterior LED indicator light.

<u>CAB</u>	omply yes no
Conventional style severe duty, with extra sound abatement package, adju	ustable air-ride cab.
Tilt hood with fixed grill and rubber fender extensions. Upgraded hood spr	ings included.
Hood opening shall NOT interfere with plow hitch when plow attached.	
The driver's seat shall be a Sears Atlas II VRS Seat with arm rests fabric co	overed air suspension type with high
back, isolated with air lumbar support, and arm rests, Hi-Viz seat belts. Pa	ssenger seat shall be fixed foam.
The steering column shall be 18" wheel with tilting & telescoping.	-
Air conditioning with heavy-duty fresh air heater/defroster. The defroster	system shall be designed to keep all
windows fog and frost-free.	,
Heavy-duty multi speed intermittent electric windshield wipers, bottom m	ount with heated washer system.
Three-piece rear window, AM-FM radio w/ Bluetooth, adjustable swing-ou	-
Two (2) stainless steel west coast-type heated mirrors with stainless moun	
mounted grab handles shall be mounted on both driver and passenger side	
Turn signals shall be self-canceling, with a heavy-duty solid-state flasher (s	
Gauges: voltmeter, hour meter, oil pressure, and coolant temperature, tac	
fuel, air cleaner restriction gauge (mounted in cab).	
Shall have six (6) additional dash-mounted aux switches for lighting access	ories, minimum 20-amp, and shall be
	B) blade lights
	5) wing lights
Class-1 amber/green LED top strobe, center roof location, complete with v	
Driver & passenger door window shall be electric powered and controlled	<u> </u>
Dual air horns with snow covers. Outside cab lights shall be of a low-profil	•
Drive speed sensor for sander control.	
Under cab & interior cab floor undercoating.	
0	
WHEELS & TIRES	comply yes no
Front: 22.5 x 12.25 heavy-duty painted steel 10-stud hub piloted flanged-n	
425/65R22.5 Michelin XZY-3, 20-ply radial load range (J) tires.	,
Rear: 22.5 x 8.25 heavy-duty painted steel 10-stud hub piloted flanged-nut	mount wheels with eight (8) 12R22.
Michelin XDN2, 16-ply radial load range (H) tires.	5 ()
Dealer to supply two spare wheels/tires (1) front & (1) rear.	
COLOR	comply yes no
Cab- Red, solid color vermillion Interior- Black	
FUEL TANK	comply yes no
For transportation only and shall be returned to truck supplier for credit.	
To transportation only and shall be retarned to track supplier for create.	
MISCELLANEOUS	
Parts & service manuals with electrical schematics & line-setting sheet.	
Component parts & serial numbers on separate sheets, i.e., engine, transn	nission differentials helts and cooling
hoses. Differences in bid specifications must be noted & highlighted on th	_
moses. Emerences in sia specifications mast be noted a mignification th	c page marked exception and

OPTIONS

(1) Engine & Drive train and chassis extended Warranty, 7 year/250,000-mile w/ EW-4 package.

clarifications to bid specifications, and other such items as required by Federal and State safety statutes.

(2) Towing & Road Service- 5 year/unlimited (\$1,000.00 per occurrence)

NOTE

Six of these trucks will be used as plow trucks with attachments. Component clearances to accommodate hydraulic system, front plow, sander, underbody, wing plow etc., will be the responsibility of chassis dealer.

One of these trucks will be used as plow trucks with attachments. Component clearances to accommodate hydraulic system, front plow, sander, underbody, wing plow etc., and 36" sliding fifth wheel hitch (removeable), will be the responsibility of chassis dealer.

I have read and understand the instructions in the bid specifications, and I certify that the above specifications will be met with the following exceptions:

ENGINE TRANSMISSION, DRIVELINE & SUSPENSION **CAB & CHASSIS ELECTRICAL** WHEELS & TIRES **OTHER** Submitted by: Signature and Title **Business Name**

EXCEPTIONS AND CLARIFICATIONS TO BID SPECIFICATIONS