LYON COUNTY HIGHWAY DEPARTMENT

MARSHALL, MINNESOTA

PROPOSAL

FOR

THE PURCHASE OF

TRUCK BOX, HOIST, HYDRAULIC EQUIPMENT, AND SNOW REMOVAL EQUIPMENT FOR TANDEM TRUCK

Letting Date: January 13, 2015
10:45 A.M.

COMMISSIONER'S ROOM #3
Marshall, Minnesota

PROPOSAL OF: _____

_____

_____

STATE OF MINNESOTA - COUNTY OF LYON
PROPOSAL FOR BOX, HOIST, HYDRAULIC EQUIPMENT, AND SNOW REMOVAL EQUIPMENT FOR TANDEM TRUCK

Proposals will be received until 10:45 AM on the 13th day of January, 2015 at the Lyon County Commissioner's Room #3, Government Center, 607 West Main, Marshall, MN 56258.

Bids must be accompanied by a bidder's guarantee made payable to the Lyon County Treasurer in an amount equal to or not less than 5% of the item bid on Schedule of Prices (Item #5).

The Board of County Commissioners reserves the right to accept or reject any or all bids or parts of bids and to waive informalities therein. BIDS CONTAINING ANY ALTERATION OR ERASURE WILL BE REJECTED, UNLESS THE ALTERATION OR ERASURE IS CORRECTED AS HEREIN PROVIDED. AN ALTERATION OR ERASURE MAY BE CROSSED OUT AND THE CORRECTION THEREOF PRINTED IN INK OR TYPEWRITTEN ADJACENT THERETO AND INITIALED IN INK BY THE PERSON SIGNING THE BID. BIDS MADE IN PENCIL WILL BE REJECTED.

Proposal of _____
(NAME)

_____
(ADDRESS)

To furnish and deliver all materials and/or equipment and to do and perform all necessary work, in accordance with the Specifications and Special Provisions contained herein and as on file in the office of the County Auditor. The point of delivery shall be as stated within this proposal.

To the Board of County Commissioners of Lyon County, Minnesota
Sirs:
In accordance with the advertisement of the County Auditor, inviting proposals for the delivery of materials and/or equipment hereinbefore named, and in conformity with the Specifications and Special Provisions pertaining thereto, on file in the office of the County Auditor:

(I) (We) hereby certify that (I) (we) (am) (are) the only person(s) interested in this proposal as principal; that this proposal is made and submitted without fraud or collusion with any other person, firm or corporation whatsoever; that an examination has been made of the Contract form, together with the Specifications and Special Provisions.

(I) (We) further propose to execute the form of Contract within 10 days after receiving written notice of award.

(I) (We) agree that the bidders guarantee in the amount stated above, herewith enclosed, will be forfeited, not as a penalty, but in liquidation of damages sustained by the County for failure of the bidder to execute the Contract or comply with any other requirements imposed precedent to approval of the Contract.

(I) (We) further agree that the said certified check or bidder's bond will be held by the County as security for delivery and acceptance of the proposal items, unless a supply bond equal to 25% of the total Contract is substituted therefore.

(I) (We) agree to all the provisions of Minnesota Statutes 1969, Section 181.59.

INSTRUCTIONS TO BIDDERS

1. All bids shall be submitted on this form. In event the award is made to the undersigned, this form together with the Highway Engineer's Purchase Order, or Dealer's Bill of Sale, signed by the County Engineer or his representative shall act as a Contract for delivery.

2. The bid price shall be for the complete units in accordance with the attached specifications and specified equipment installed.

3. The bid price shall be F.O.B. Marshall, Minnesota, in first class operating condition, with acceptance subject to Highway Department inspection and approval.

4. Bids must be accompanied by a certified check or bidder's bond made payable to the Lyon County Treasurer in an amount not less than five percent (5%) of the total bid.

5. The bid must be made out in ink or typewritten. No bids made out in pencil shall be accepted.

6. Complete manufacturer's specifications, illustrated descriptive brochure shall be submitted and attached with each bid. Insufficient descriptive information shall be cause for rejection of the bid.

7. Bid shall not include Federal Excise Tax. County will furnish Tax Exemption Certificate to successful bidder.

8. The trade-in of a County unit may be considered.

9. Multiple bids may be submitted by each bidder by attaching additional copies of the bid sheet page. Bidders must bid all items listed on the bid sheet so that TOTAL AMOUNT OF BID represents the cost of dump body, hoist, hydraulic equipment and snow removal equipment as specified.

10. Payment to successful bidder shall be within 30 days after delivery to Lyon County Highway Department.

11. All bids must be enclosed in an envelope plainly marked as "BID FOR DUMP BODY, HOIST, HYDRAULIC EQUIPMENT AND SNOW REMOVAL EQUIPMENT".

12. Truck delivery must be coordinated with provider of truck chassis so that truck box, hoist, hydraulic equipment and snow removal equipment can be installed and complete truck delivered within 60 days of bid acceptance. After that time a $100/calendar day penalty will be deducted from the payment.

13. Successful bidder shall be responsible for obtaining license plates for truck. License fees should not be added to bid price but added at the time of invoicing.

GENERAL PROVISIONS

1) INTENT OF CONTRACT

Furnish and deliver to the Lyon County Highway Department, Marshall, Minnesota, one new tandem axle diesel truck with new box, hoist, hydraulic equipment and snow removal equipment.

2) AWARD OF CONTRACT

The contract will be awarded on the basis of the lowest and best combination of bids. Factors of price, service, delivery date, and warranties will be considered in making the award. The Lyon County Board of Commissioners reserves the right to withhold the award for a period of thirty (30) days. All bids shall be held firm until the award is made.

3) DELIVERY/TRANSPORTATION

The bid price shall include any and all freight and transportation charges necessary for delivery of the complete bid package to the Lyon County Highway Shop in Marshall, MN

4) WARRANTY

The bidder shall describe the warranty (manufacturers standard)in the space provided on the Schedule of Prices or on attached documentation. These warranties shall be provided at the time of delivery, and signed by the vendor.

5) The County Board reserves the right to accept or reject any or all bids and to waive any specifications provided in the bid proposal if the Board decides it is in the best interest of the County. The Board reserves the right to award in the best interest of the County.

SPECIFICATIONS

FOR

DUMP BODY, HOIST, HYDRAULIC EQUIPMENT AND HITCH
for 48,000 lb. GVW Tandem Axle Truck

Provided

Bidder's Statement
Of Compliance

1. GENERAL:
Bidder shall furnish and install the following equipment for dump body, hoist and valve system.

2. BODY:
DIMENSIONS: 14'6" long x 96" wide O.D.

FRONT PANEL: 56" high, 3/16" HARDOX-450 steel const, reinforced top rail with inclined mount & rubber flap seal, along with removable tarp mtg brackets installed.

SIDES: 46" high, 3/16" HARDOX-450 steel panel, 18" radius corners, fully boxed top rails w/inv structural steel angles full length, board pockets front and rear/DELETED, full depth 7 ga stainless steel rear corner posts, Dual 2-line (split) sander manifolds at RH & LH rear corner post area, removable 3-1/2" Bustin walk-rail full length both sides, TMTE "FLIP-A-WAY" access ladder – LH front,with interior step and upper grab handle installed.

TAILGATE: 46" high, 3/16" HARDOX-450 main panel, 10 ga GR50 reinf, 3 panel design, 1-1/4" dia bottom pins, 1-3/4" dia upper pins, 1" thick upper hinges, 3/8" alloy spreader chains, 1" thick steel lower latches w/over-center locking feature, airtrip ready linkage. (See also "SANDER" for flow plates type).

FLOOR: ¼" HARDOX-450 steel.

UNDERSTRUCTURE: W8" x 13.0#/ft struct (I-BEAM) longsills, w/8" structural channel rear bolster.

PREP/PAINT: Exterior industrially steel shot-blasted & washed, Urethane primed, and finish coated with "ORANGE" Polyurethane Enamel to match cab.

UNDERSIDE: Industrially steel shot-blasted and washed, all non-welded joints seam-sealed, Urethane primed, and finish coated with BLACK Polyurethane Enamel, including between longsills, and the vert exterior of longsills.

LIGHTS/WIRE: W/D-HOUSINGS: FMVSS 108 compliant, rubber mounted LED clearance lights, LED cluster of 3, w/factory sealed wire harness, ground strap, strobe/stop-tail-turn/backup light provisions in corner posts, with lights provided by Strobe System and installed.

MUD FLAPS: Rear of rear tires, attached to mounts. (See also Fenders).

CABSHIELD: ½ type, 24" cabshield canopy, 7 ga const, stationary "free-standing" style, w/2vert shovel holders standard, adj tubing strobe brkts, cabshield mounted reservoir brkts, installed. Vertical support frame to be Hot-Dip Galvanized, Canopy to be shot blasted & washed, all non-welded joints seam-sealed, Urethane primed and finish coated with Orange Polyurethane enamel to match cab. (See also Strobe System).

3. REAR HITCH: ¾" A572-50 steel pull plate w/bracing to truck frame, safety chain D-rings, Premier 370 air-cushion pintle hook approximately 21 inches above ground level, w/transfer of 7 contact female electrical socket, and transfer of air connections to rear plate. 1" hyd pup line from valve to rear plate, terminated with quick coupler, along with pup tailgate switch in cab & wiring to rear socket. Should be at a height not to interfere with pup tongue.

When in the maximum dump position, design should allow minimum of 6" clearance between pole of pup and tailgate of truck box. This is not to be controlled by any type of cable stop.

4. HOIST:
NTEA, Class 70 double acting hoist to provide maximum dump angle of not less than 50 degrees. Shall be a trunnion mounted telescopic hoist (non-inverted) with lower port. Rear hinge point shall be 5" x 5" angle type, constructed with 3" thick (wide) solid pivot blocks, with 2" diameter pins. Can be Teflon composite or greaseable pivot points.

4-a 48" Hoist Stabilizer, must be provided to control body sway. Stabilizer shall be installed by bolting to truck frame and dump body longsills, and included integrated dual safety prop mechanism.

5. FENDERS: Pro-Tech Diamond Plate aluminum fenders mounted complete.

6. VIBRATOR: Cougar model: DC-3200 12 volt D.C., installed on front center underside of body, switch mounted in cab (See Cab Layout Drawing).

7. TAILGATE TRIP: 3-1/2" dia Aluminum Air cylinder, w/1" dia Stainless Steel piston rod, solenoid air valve, w/piping and fittings and installed.

8. D.O.T. WARNING LIGHT SYS: (custom built by Whelen) TMTE-1 warning light system, consisting of: (2) 23H 3-light LED Micro-Edges, (2) 5M-400 Linear Super-LEDs, (2) Side TIR3 LEDs, 400 Max B-T-T LEDs, and (2) 400 LED Backup Lights, in stainless steel housings. System also includes (1) LED Wing Plow light, and (2) 4" dia LED work lights (sander & wing). Installed complete with TPR cables, and switches in cab.

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9. HYDRAULIC PUMP:
The hydraulic pump shall be a U.S. manufactured axial piston pressure and flow compensated load-sensing type. The pump shall be cast iron construction and rated to 6.00 cubic inches per revolution at maximum stroke which will deliver 24.7 gpm @ 1000 engine rpm. The pump shall have a 2" inch suction line and ¾" case drain line plumbed directly back to the reservoir. The pump shall be rated for 3000 PSI maximum and 2500 PSI continuous. The pump shall have a 1¼" keyed drive shaft and SAE type C mounting flange. The pump shall be Force America PVWH45 or prior approved equal.

A 1" high pressure ball valve shall be installed at the discharge port of the pump.

9-a MOUNTING:
The hydraulic pump shall be mounted with shaft centerline parallel to the crankshaft centerline and at a level to create at least a one-degree and no more than a three-degree angle on the driveline. The pump mounting shall be incorporated with a bracket fabricated to mount in the extended frame rails of the truck.

9-b DRIVE LINE:
The hydraulic pump shall be driven directly off the engine crankshaft via a splined driveline to allow for movement. The driveline shall include grease fittings on both u-joints. Driveline shall be a Spicer model 1310 series.

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10. HYDRAULIC VALVE:
The hydraulic valve shall be of modular manifold design. Each hydraulic function requires an individual manifold stacked together to form the manifold base. The manifold base shall consist of an inlet section with SAE #16 inlet porting, SAE #20 outlet porting, and SAE #4 load sense porting. There shall be a main system relief in the inlet section to protect the system from high pressure in case the pump compensators fail. The dump body and pup manifolds shall be stacked next to the inlet section, and capable of 40 GPM with SAE #12 porting. The hydraulic control valves shall be pulse-width modulated, proportionally controlled. Each hydraulic valve segment shall be individually mounted to the manifold base assembly and be serviceable without removing any hydraulic hoses or any other hydraulic valve segments. Each hydraulic valve segment shall have individual pressure compensation to achieve independent simultaneous operations. All segments shall have heavy-duty continuous duty coils and connections shall be with Din connectors. All coils shall operate at 12 VDC and require a maximum of 1400 mille-amps. Each segment shall be equipped with manual overrides. Valve assembly shall be a Force America Add-A-Fold® model or prior approved equal. The valve is to be arranged as follows:

BoxHoist	4-way with down side work port relief valve
Pup Hoist	3-way
Plow lift	Low leak 3-way
Wing toe	4-way
Wing heel	4-way
Wing Push Bar	4-way
Scraper lift	4-way – Circuit shall include an accumulator with lock valve
Auger/Conveyor	2-way
Spinner	2-way

11. HYDRAULIC VALVE ENCLOSURE:
The valve assembly shall be mounted vertical in a weather tight enclosure. The valve enclosure shall be fabricated from 12 gauge stainless steel minimum. Enclosure shall be designed to not allow humidity to be trapped inside. Valve to be mounted with all ports coming out of the base, and holes allowing for hose adaptor fitting. Enclosure will allow for bulkhead style fittings or cable to enter the base. Valve to be boxed in with the cover, not the base. The cover shall be held to the enclosure by two heavy rubber latches and hinged so the cover will open downward when the valve is vertical. All plumbing shall be external, directly out of the base of the valve enclosure. The enclosure shall be mounted above and outside the frame rail vertical on the left side of truck between the truck cab and dump box. The enclosure shall be hinged so the valve enclosure can be let down to access hoses going into the base of the enclosure. Hinge area shall be designed so hoses coming out of the enclosure can run thru pivot area so hoses will not stretch tight when letting enclosure down. Enclosure shall have sufficient bracing to hold valve enclosure vertical.

12. CABSHIELD RESERVOIR & FILTRATION: 30 gal. stainless steel Cabshield mounted reservoir, w/sight/level gauge, filler-breather, magnetic drain plug, 100 mesh suction screen, and gate type shut off valve. Quick drain valve and line to be installed, along with Low oil indicator system, with warning light in cab. Filter shall be return line type, in-tank mounted, w/replaceable element and 12 volt cond indicator installed, filled with DEXTON III hydraulic oil.

13. WING LOCK VALVE:
The wing heel cylinder shall be equipped with an anti-drift "Wing Loc" device to prevent the wing from settling.

14. CONTROL CENTER:
The electronic controller shall be a seven axis fully proportional multi-stick controller to operate all cylinder functions. Controller shall be of a modular design. Multi-stick communication electronics shall include as standard the capability to control (9) proportional outputs simultaneously. The control shall be a 5-stick configuration, mounted to seat pedestal to allow movement up and down with driver's seat.

For ease of operation the multi-stick control shall include the following features: a momentary push-button at the top of the hoist stick to provide hoist-interlock. A solid-state red LED labeled "Hoist" shall illuminate when the driver engages the hoist interlock. The "Hoist" LED shall remain illuminated while the hoist is under operation. The "Hoist" LED shall be integrated into the communication control circuit and will time-out after a period of hoist inactivity. The plow joystick

shall include a momentary pushbutton for activation of remote standby. The multi-stick communication hardware/software shall include 4 integral float options. The use of add-on float modules is unacceptable. For flexibility of use the integral float programming shall have the following standard features: (4) axis functional float on any or all of the (9) outputs with selectable forward/back, right/left functionality, 3-way or 4-way functionality, selectable (3) second float delay timer and optional float enable switch inputs. A dead-front nomenclature backlit in red by a solid-state LED shall indicate that the float function is active. To insure longevity of performance all lighting to be solid-state LED technology. The use of incandescent lamps or EL backlighting is unacceptable. Function joysticks shall be of contact less design and offer up to a 5-Million cycle life. The use of potentiometers shall be unacceptable. To insure safe operation joystick communication hardware/software shall include the following standard features: input power monitor circuitry and output shut down during low-voltage conditions, power-on joystick input off center checking and output shutdown, joystick out of range checking and output shutdown and true outputs off with joystick centered, Multi-stick control shall employ solid-state LED backlit nomenclatures on positions 1,2,3, and 4. Expansion position number 5 shall have surface mounted labels for identification of auxiliary functions. For ease of service the multi-stick control shall have the following easily accessible at the valve drive module: (9) sets of MIN/MAX adjustments, output status indicator LED's for each output and (9) output error status indicators with flashing error codes. For ease of service multi-stick control shall have self diagnostic valve output drivers that detect over current and over temperature conditions. To insure longevity multi-stick control shall have solid-state overload protection. Fuses or bi-metal circuit breakers are unacceptable. The unit must be supplied with separate cable assembly with plug ends that connects controller to valve control connection and main power connection. The center must also be supplied with color-coded wiring throughout. A heavy-duty prewire valve harness shall be included for the valve assembly with LED Din connectors. The control center shall be a Force America Patrol Commander Ultra series.

15. SPREADER CONTROL CONSOLE:

The spreader control shall regulate the auger/conveyor and spinner speeds. There shall be two individual detented knobs providing proportional control from closed to fully open on the control valve of the auger/conveyor and spinner. Front face panel shall have "standby" indicator light activated by pushing the auger dial, blast mode adjustable for momentary or timed up to16 seconds with cancellation and flashing indicator light. A heavy-duty prewire valve harness shall be included for the valve assembly with LED Din connectors. Other features shall include remote standby and blast inputs, switch selectable speedometer interrupt (spreader shutdown when vehicle stops), reverse polarity protected, & adjustable back lighting via vehicle controls. Spreader control shall be a Force America model SSC-6100, with 7" LCD Screen display.

ROAD WATCH: Road Watch RWSS system, and hooked up to 6100 salter control – installed.

16. HYDRAULIC LINES AND PLUMBING:

A. All hydraulic lines and plumbing shall be of sufficient capacity so as not to create heat or turbulence within hydraulic system.

B. Suction line between reservoir and pump shall be a minimum of 2" I.D. with a minimum SAE 100-R4 rating and shall be secured on both ends via heavy duty banding straps, radiator hose clamps unacceptable.

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C. All pressure hoses, including signal sense to pump shall have swivel fittings on both ends and have a minimum SAE 100-R2 rating.

_____

D. Return lines and case drain shall have minimum SAE 100-R1 rating.

_____

E. Hydraulic lines shall be routed to minimize interference with equipment and chassis components requiring periodic servicing.

_____

F. Support brackets, grommets, and tie wraps shall be provided where appropriate to protect lines from damage by abrasion, cutting or impact. Support brackets shall be stainless steel or galvanized only.

_____

G. Hoses shall not be routed near exhaust manifolds pipes, bolts, sharp edges, and exhaust system to prevent wear, fatigue or fire.

_____

H. Pipe fittings shall not be used in any high-pressure line.

_____

I. Maximum distance between support clamps on all hydraulic lines shall be 24"

_____

17. SAFETY:
Safety prop for truck box to meet all codes. (see Hoist above)_____

18. WARRANTY:
24 MONTHS (from In-Service/Invoice Date), on all components, equipment and services sold by and installed by subcontractors. This includes: dump body, hoist, hydraulic system, controls, lighting and snow fighting equipment.

_____

SNOWPLOW, WING AND SANDER

Bidder shall indicate a single source, to be a firm offer with no substitutions on delivery. Snowplow and wing to be installed complete on truck ready for use, including any truck modifications required for installation. Lyon County Engineer shall be contacted prior to mounting of the plow and wing.

SPECIFICATION		EXCEPTION
1.	SNOWPLOW LIGHTS: Combo HOH (High Output Halogen) HAMSAR 81091 & 91092 dual headlight w/turn signal, mirror mounted on std aluminum brackets, w/OEM selector switch in cab.	_____
2.	UNDERBLADE:W/WALKING CRADLE: Falls model IB-11A with dual lift cylinders fixed angle 11', RH discharge, up to 35°, 1" thick moldboard, all mtg hdwe & plbg, w/pressure gauge cab mounted. Nitrogen accumulator cushion and auto reset w/external adj pressure reducing/relief valve included. Blade auto lift in reverse system provided and installed.	_____
3.	SNOWPLOW: Falls Model 411 snowplow, complete with all std equip, spring trip tilt bars, rubber flap and plow push unit for Falls X44 hitch system. Painted Falls std "Orange" lead-free paint color.	_____
4.	PLOW HITCH: Falls Model 44-B heavy duty hitch system, complete with all std features, spring return, all mtg hdwe, plbg and S.A. lift cylinder. Installed and painted gloss black.	_____
4-a	Supply extra male hitch for Falls V-Plow	_____
5.	SNOW WING: REAR LIFT – Falls Model SDL-10 snow wing, scraper discharge mounted, complete with all std features, Rear Lift Mechanism, Nitro-Cush hydraulic push bar, all mtg hdwe and plbg, installed complete, and painted Falls std "Orange" lead-free paint color.	_____
6.	SANDER: Falls Model #1ASD-9SSFL6 special stainless steel under-gate sander, 9" dia. X 6" pitch auger, external-removable, carbon steel side spill plates, LH poly spinner ass'y, RH steel berm chute plbg and mtg hdwe installed. NOTE: PLUMBING CONNECTIONS AT RH AND LH CORNER POST MANIFOLDS.	_____
7.	CAMERA: Rear view camera and inside screen. Camera to be mounted on cab shield to see to the RH side of unit installed.	_____
8.	WARRANTY: 24 MONTHS (from In-Service/Invoice Date), on all components, equipment and services sold by and installed by subcontractors. This includes: dump body, hoist, hydraulic system, controls, lighting and snow fighting equipment.	

LYON COUNTY HIGHWAY DEPARTMENT Marshall, Minnesota

THE HONORABLE BOARD OF COUNTY COMMISSIONERS OF LYON COUNTY

GENTLEMEN:

In accordance with the advertisement of the Lyon Highway Engineer, inviting proposals for the purchase of dump body, hoist, hydraulic equipment and snow removal equipment, in conformity with the specifications pertaining thereto, we propose to furnish this equipment to Lyon County at the following price: (Federal Excise Tax not applicable)

SCHEDULE OF PRICES

BID ITEM		PRICE
1.	1 DUMP BODY, HOIST AND HYDRAULIC SYSTEM	+ $_____
	a. Make/Model of Dump Body_____	
	b. Make/Model of Hoist_____	
	c. Make/Model of Pump_____	
	d. Make/Model of Valves_____	
	e. Warranty Policy: Dump Body_____	
	Hoist_____	
	Pump_____	
	Valves_____	
2.	SNOWPLOW, WING, SANDER AND UNDERBODY PLOW	+ $_____
	A. Warranty Policy: Snowplow_____	
	Wing_____	
	Sander_____	
	Underbody Plow_____	
3.	TOTAL AMOUNT OF BID	$_____

OPTIONAL COST FOR EXTENDED WARRANTY ON TRUCK $_____

Please state number of years _____

NAME OF FIRM: _____

ADDRESS: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

APPROXIMATE DATE OF DELIVERY: _____

(Federal Excise Tax not applicable)