



**CONTRACT NO. S2012-06 FOR SUPPLY  
AND DELIVERY OF TWO (2) TANDEM  
AXLE DUMP TRUCKS COMPLETE WITH  
PLOW AND SANDER EQUIPMENT**



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**CONTENTS**

<b>PART A</b>	Form of Proposal
<b>PART B</b>	Instructions to Bidders and Standard Terms and Conditions
<b>PART C</b>	No Bid Form
<b>CLOSING DATE AND TIME:</b>	Proposals will be received by Ms. Kim Coates, A.M.C.T., Clerk, Township of Scugog, 181 Perry Street, P.O. Box 780, Port Perry, ON, L9L 1A7, until 2:00 p.m., Friday, February 24, 2012, in sealed envelopes clearly marked as to contents. Also refer to Section B.5 of this document.
<b>PUBLIC OPENING:</b>	Proposals will be opened at 2:05 p.m., Friday, February 24, 2012, in the Main Boardroom at the Municipal Office.
<b>CONTACT:</b>	Please refer to Section B.3 of this document.

**PART A - BID FORM**

**CONTRACT NO. S2012-06 FOR SUPPLY AND DELIVERY OF TWO (2)  
TANDEM AXLE DUMP TRUCKS COMPLETE WITH PLOW AND  
SANDER EQUIPMENT**

*PLEASE USE INK OR TYPEWRITER  
INITIAL EACH PAGE AT THE BOTTOM*

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NAME OF FIRM

---

STREET ADDRESS

---

CITY, PROVINCE

POSTAL CODE

---

PHONE NUMBER

FAX NUMBER

---

G.S.T. REGISTRATION NUMBER

---

NAME OF PERSON SIGNING FOR FIRM

---

POSITION OF PERSON SIGNING FOR FIRM

**Bids Received by:**

**Ms. Kim Coates**

**Clerk**

**Township of Scugog**

**181 Perry Street, P.O. Box 780**

**Port Perry, ON L9L 1A7**

**UNTIL 2:00 PM ON FRIDAY, FEBRUARY 24, 2012**

## A.1 TECHNICAL SPECIFICATIONS

This specification is for two (2) new tandem axle dump trucks complete with plow and sander equipment. One (1) new tandem axle dump truck shall be equipped with a one-way plow, the second new tandem axle dump truck shall be equipped with a reversible plow. Both tandem axle dump trucks must be equipped to operate either plow system and must be equipped with the appropriate valving, piping, hydraulic and related components to operate either plow on both trucks. The machines shall be the manufacturer's heaviest duty model, meeting or exceeding the requirements set out below. All items and components shall be of a standard production model and not modified for bid purposes.

The Bidder shall specify the make, model and year of the tandem axle dump trucks:

Make: \_\_\_\_\_

Model: \_\_\_\_\_

Year: \_\_\_\_\_

The Bidder shall fill in each blank in the BIDDER'S BID column in the table below with either:

- A check mark (✓) on the line to indicate the item being proposed is exactly as specified in the MINIMUM SPECIFICATIONS column; or
- A description to indicate any deviation from the item specified in the MINIMUM SPECIFICATIONS column. Any deletions, additions or variations from the specifications must be noted.

The Bidder must complete every space in the BIDDER'S BID column to receive maximum consideration.

Item No.	SPECIFICATIONS	BIDDER'S		BID SPECIFY
		YES	NO	
<b>SECTION A – TANDEM TRUCK</b>				

1. *VEHICLE WEIGHT*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The G.V.W. of the tandem truck shall be 60,000 lbs. minimum.	_____	_____	
	The allowable G.V.W. as supplied shall be shown on a metal tag affixed to the truck.	_____	_____	
	The chassis weight shall be 15,000 lbs. minimum.	_____	_____	
2.	<b>AXLES</b>			
	Set Back Front axle shall be 20,000 lbs. capacity minimum with dual power steering with shocks.	_____	_____	
	Front axle shall have oil lubricated wheel bearings using synthetic oil. The wheel hub cover shall be non-vented using Stemco non-vent oil seals. The hub cover shall incorporate a screw-in fill plug.	_____	_____	
	Rear axle shall be MT.40.14X.40CRP, which is tandem, dual drive with interaxle differential and driver controlled interaxle differential lockout. Spread shall be 54".	_____	_____	
	Driver shall be able to lock both rear differentials in "low low".	_____	_____	
	Rear axle shall be single speed.	_____	_____	
	Shall be supplied with synthetic rear axle oil.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Rear suspension shall be equipped with Hendrickson HMX – 460-60 Walking Beam type, 46,000 lbs. capacity, with rubber springs, shocks and transverse torque rods.	_____	_____	
	Road speed at rated RPM in top gear shall be 105 km/h approximately.	_____	_____	
3.	<b><i>BRAKES</i></b>			
	Service brakes shall be full air brakes.	_____	_____	
	Rear brakes size shall be 16-1/2" x 7".	_____	_____	
	Front brakes size shall be a minimum of 16-1/2" x 6".	_____	_____	
	Shall be equipped with S cam type front and rear brakes.	_____	_____	
	Shall be equipped with positive four rear wheel spring loaded parking brake, air reservoir and instrument panel control switch.	_____	_____	
	Shall be equipped with trailer air brake connection with lever in cab and electrical seven (7)-way plug at end of frame.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall be able to release the brakes from the cab with no pressure in the main air reservoir.	_____	_____	
	Low pressure indicator shall be supplied.	_____	_____	
	Automatic drain valve shall be supplied with heater to drain moisture from the air tank.	_____	_____	
	Tank shall have manual drain included.	_____	_____	
	Air compressor shall have a minimum capacity of 15.9 c.f.m. with dry-type air cleaner on intake.	_____	_____	
	Bendix AD-9 air drier with heater shall be supplied.	_____	_____	
	Spring brake parking alarm shall be supplied. The alarm shall sound when the door is open and the brake is not set.	_____	_____	
4.	<i>FRAME</i>			
	Resisting Bending Moment (section modulus x yield strength) shall be 2,000,000 lbs. minimum.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Section modulus shall be 30.0 minimum.	_____	_____	
	<b>Note:</b> Trucks with trunion type motor mounts shall require frame reinforcement; mounting of snow plow cheek plates shall be possible.			
	Provision shall be made to prevent diamond shaping of the frame. The frame shall be bridged or a crossmember shall be supplied within 10" of the rear of the cab in order to transfer snow plow wing push to each frame rail.	_____	_____	
	This cross member shall be gusseted fore and aft.	_____	_____	
	Frame shall be supplied as per requirements outlined on the last page.	_____	_____	
5.	<i>SUSPENSION</i>			
	Cab to axle length shall be 134".	_____	_____	
	Wheelbase shall be to 201" approximately.	_____	_____	
	Front spring capacity, at the ground, shall be 20,000 lbs. each minimum.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Rear spring capacity, at the ground, shall be 46,000 lbs. minimum, rubber block type.	_____	_____	
6.	<i>WHEELS AND TIRES</i>			
	Shall be equipped with dual rear wheels.	_____	_____	
	REAR, Shall be supplied with eight (8) first line steel belted radial tubeless tires 11R 22.5 – 16 ply rating.	_____	_____	
	FRONT, Shall be supplied with two (2) first line steel belted radial tubeless type tires 425/65/R22.5 – 20 ply rating.	_____	_____	
	Front tire tread design shall be Michelin XZY or equivalent standard highway tread.	_____	_____	
	Rear tire tread design shall be Michelin XDE M/S or equivalent traction tread.	_____	_____	
	Front wheels shall be 22.5 Disc Steel 10-stud Hub Piloted 12.25 DC rims.	_____	_____	
	Rear dual wheels shall be 22.5 Disc painted steel 5 hand hole, 10-stud Hub Piloted 8.25 DC rims with .472" thickness.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall be supplied with powder coated rims (white).	_____	_____	
7.	<i>ENGINE</i>			
	Shall be equipped with 11 litre diesel type engine or approved equivalent and meet 2012 EPA, Max Force or Cummins.	_____	_____	
	Engine shall be net 390 hp minimum at 2,100 RPM minimum.	_____	_____	
	Engine net torque shall be 1,450 lb. ft. at 1,000 RPM.	_____	_____	
	Engine displacement shall be 11 Litre minimum with two (2) speed engine fan	_____	_____	
	Engine brake shall be included.	_____	_____	
	Laminate steel composite oil pan shall be included.	_____	_____	
8.	<i>ALLISON AUTOMATIC TRANSMISSION</i>			
	Shall be equipped with Allison 4500 RDS-P Series, 6 speed with 4 <sup>th</sup> Generation controls or approved equivalent.	_____	_____	
	Shall be supplied with synthetic oil and spin off type external filter if available.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	H.D. transmission cooler shall be installed.	_____	_____	
	Dash mounted P.T.O. pump shall be included.	_____	_____	
9.	<i>ENGINE EQUIPMENT</i>			
	High temperature and low-pressure engine protection alarm bell or buzzer device shall be installed.	_____	_____	
	Air cleaner shall be heavy duty two (2) stage dry type with integral snow valve.	_____	_____	
	Oil filter shall be full flow type and spin on water filter.	_____	_____	
	Alternator shall be 160 amp. Capacity minimum with built-in diode, rectifiers and shielded slip rings and brushless.	_____	_____	
	Cab and cowl filters shall be installed on air intakes and heater inlets.	_____	_____	
	Horizontal muffler with vertical exhaust pipe, right side, shall be installed complete with bright finish heat shield positioned to allow for wing equipment.	_____	_____	
	Oil dip stick shall be long enough for side hood checks.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Bug screen and stationary grill shall be included.	_____	_____	
	Engine hood shall be forward tilting type with adequate hatches to provide easy engine access and fender extensions for wider front tires.	_____	_____	
	For snow plowing purposes, a minimum 3-1/2" diameter opening through the radiator shall be provided centred with the crankshaft of the engine to allow adequate clearance for the P.T.O. shaft. Shaft shall be provided with adaptor on crankshaft for P.T.O. drive.	_____	_____	
	<b>Note:</b> The opening shall not be required where the crankshaft is located low enough to allow the front mounted pump to operate with sufficient clearance below the radiator.			
	Batteries shall be maintenance free, S.A.E. rating combined 12 volt, with total 1950 CCA minimum. Batteries shall be mounted on the right-hand side under cab. Shall be supplied with a combination of 3 batteries .	_____	_____	

Item No.	SPECIFICATIONS	BIDDER'S		BID SPECIFY
		YES	NO	
	Shall be equipped with a heavy duty fuel oil water separator with sight glass, mounted outside left frame rail behind cab, Conmet CM-99-327D or equivalent.	_____	_____	
	As a cold starting aid, an engine block heater shall be supplied with proper connections to electricity and shall be secured and protected (wire loom).	_____	_____	
	Engine block heater shall be 1500 watts minimum.	_____	_____	
	Block heater plug-in shall be located at the driver's door and must be a fixed type with a covering flap.	_____	_____	
10.	<b>CAB</b>			
	Conventional "premium" cab shall be supplied.	_____	_____	
	Air ride cab suspension shall be included.	_____	_____	
	Driver's side seat shall be bucket type and shall be high back air suspension type with adjustable fore and aft, fully padded with breathable upholstery inserts, arm rest, and air lumbar support.	_____	_____	
	Passenger seat shall be standard fixed with under seat storage.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Floor mat shall be rubber.	_____	_____	
	Sun visors shall be dual.	_____	_____	
	Windshield wipers shall be dual, winter blades with two (2) speed electric, intermittent feature and electric washer pump.	_____	_____	
	Wiper system to be equipped with speed control to force wipers to slowest speed when park brake set	_____	_____	
	Windshield washer shall be dual jet type. Windshield, heated, single piece.	_____	_____	
	Look down bright finish convex mirror shall be included above passenger door. 6" x 10"	_____	_____	
	Outside mirrors shall be 7 x 16", c/w intergral convex on both sides, break away type, heated heads, LED clearance lights, bright finish heads, hardware and brackets.	_____	_____	
	Shall be equipped with electrically adjusting mirrors, with dash mounted controls. The two (2) outside mirrors shall be supplied with heaters.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Front, hood mounted convex mirrors, left and right side, approximately 70 sq inch and shall not interfere with front wing post.	_____	_____	
	Road Watch temperature sensor in Fahrenheit complete with Road Watch adaptor	_____	_____	
	Shall be equipped with a fresh air heater and defroster with air conditioning.	_____	_____	
	Tilt steering shall be included.	_____	_____	
	Exterior sun visor with LED marker lights shall be included.	_____	_____	
	Shall be equipped with an hour meter.	_____	_____	
	Grab bars shall be included on each side to assist easy entry and exit.	_____	_____	
	Shall be equipped with dual chrome air horns with snow shields.	_____	_____	
	Shall be equipped with power operated side windows with a factory installed switch that is accessible by the driver and power door locks.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	A terminal panel shall be incorporated into the wiring system to access the following wiring circuits to add additional lighting for the body installation. Panel to be located inside the cab, preferably on the rear cab wall:			
	• Left and right turn;	_____	_____	
	• Parking lights;	_____	_____	
	• Back up lights;	_____	_____	
	• Independent brake light;	_____	_____	
	• Head lights, long life Halogen, two lamp system;	_____	_____	
	• Front lights, turn signals, dual faced amber/amber, top fender mounted with flush mounted front turn signal, side markers parking lights and reflectors;	_____	_____	
	• Rear lights, stop turn, tail and back up lights, Truck Lite with LED bulbs;	_____	_____	
	• 2 way radio wiring effects, 20 amp fused circuit will be installed in header console;	_____	_____	
	• Parking brake alarm to sound when park brake not on with ignition in off position,	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>Any exposed wiring shall be shrink wrapped and protected with wire loom.</li> </ul>	_____	_____	
	The fuse box shall incorporate circuit breakers.	_____	_____	
	Cab will be equipped with dash mounted air restriction gauge.	_____	_____	
	The turn signal flasher shall be electronic (heavy duty).	_____	_____	
	A 2-1/2 lb dry chemical fire extinguisher shall be included.	_____	_____	
	Shall be equipped with AM/FM radio and CD player.	_____	_____	
	First aid kit (to current standards) shall be included.	_____	_____	
	Back up alarm shall be included.	_____	_____	
	Flare kit shall be included.	_____	_____	
	Battery disconnect switch shall be cab mounted.	_____	_____	
	Front mud flaps shall be included fore and aft of tandem axles.	_____	_____	
	Plow controls shall be mounted in such fashion that minimizes driver arm fatigue.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Beverage cup holders shall be included.	_____	_____	
11.	<i>FUEL TANK</i>			
	Shall be supplied with one (1) aluminium 378.5 L (100 U.S. Gallon) minimum tank, with step in tank and stainless steel hold down straps	_____	_____	
	The fuel tank shall not extend beyond back of cab on either side.	_____	_____	
	A fuel gauge shall be provided.	_____	_____	
12.	<i>LIGHTS</i>			
	Pre-trip inspection – test exterior lights shall be included.	_____	_____	
	Five (5) identification streamlined cab LED lights shall be included.	_____	_____	
	Six (6) interior body circuit switches shall be included.	_____	_____	
	Four(4) -way flasher shall be included.	_____	_____	
	Cab dome light shall be included.	_____	_____	
13.	<i>PAINT</i>			
	Exterior shall be painted factory standard <u>“WHITE”</u> or manufacturer’s equivalent.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Frame and underbody shall be painted Black Glass Shield.	_____	_____	
	Interior shall be painted manufacturer's standard non-glare.	_____	_____	
	The body shall be sand-blasted and epoxy primed before application of finish paint as per MTO Standard #ES-301.	_____	_____	
14.	<i>STEERING</i>			
	Dual power steering boxes shall be supplied.	_____	_____	
15.	<i>FLUIDS</i>			
	Shall be supplied with anti-freeze to -40 degrees Celsius.	_____	_____	
	Shall be supplied with long or extended life coolant.	_____	_____	
16.	<i>UNDERCOATING</i>			
	Under carriage shall be undercoated with Krown Rust Spray or approved equivalent.	_____	_____	
17.	<i>WARRANTY AND OTHER</i>			
	Signed warranty shall be supplied with unit.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Line setting ticket and/or vehicle specification sheet shall be supplied indicating component sizes and capacities, lubrication and electrical specifications, etc., for records in order to facilitate future repairs.	_____	_____	
	All add on wiring shall be approved "GROTE" BLUE SEAL connections and wiring.	_____	_____	
	Training shall be supplied (mechanical and operation) at the discretion of the Township.	_____	_____	
	Approved weight scale ticket (loaded and unloaded) shall be supplied.	_____	_____	
	Shall not be delivered with dealer markings or transfers.	_____	_____	

**SECTION B – COMBINATION DUMP BODY AND SALT/SAND SPREADER**

1. GENERAL

Shall be equipped with Viking Model ProLine 1415HT or equivalent approved by the Township of Scugog

\_\_\_\_\_

The dump box shall remain stationary on the chassis frame while spreading.

\_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Rear discharge shall be front hoist tilt action as per conventional dump bodies.	_____	_____	
	Body shall be oval shaped, permitting materials to unload by gravity flow onto spreader chain.	_____	_____	
	The main conveyor shall be centred and recessed along the length of the box.	_____	_____	
	The cross conveyors shall be auger style with front discharge on the left and right sides of the dump box.	_____	_____	
	Total weight of the complete body assembly in ready to work condition including hoist, tarp, tailgate, cross conveyor, main conveyor, and all other required components shall not exceed 6,800 lbs.	_____	_____	
	Water level capacity shall be 10.7 cu.yd.	_____	_____	
	Water level capacity with 10" sideboards shall be 13.8 cu.yd.	_____	_____	
	Outside length shall be 15'.	_____	_____	
	Inside length shall be 14'.	_____	_____	
	Overall width outside shall be 96".	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Overall width inside shall be 86".	_____	_____	
	Height of sides shall be 45" from conveyor floor.	_____	_____	
	Height of front panel shall be 60".	_____	_____	
	Height of tailgate shall be 53" from conveyor floor.	_____	_____	
2.	<i>CONSTRUCTION</i>			
	Body shall be one (1) piece construction for both the head board and side panels.	_____	_____	
	The front head of the body shall be completely clean and clear of any type of recesses or protrusions into the body including hoist doghouse, bulkheads, etc.	_____	_____	
	Body front panel shall be designed to slope from the cab shield rearward down to the conveyor floor at 22 degrees from vertical.	_____	_____	
	The front panel slope shall be continuous and uninterrupted for the full length from top to bottom.	_____	_____	
	Top rail of body shall be 4" x 4" x 3/8" square tubing.	_____	_____	
	All body welds shall be 100% continuous inside and outside.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Body front head shall be 3/16" "Hardox 450" hi-tensile steel.	_____	_____	
	Body sides shall be 3/16" "Hardox 450" hi-tensile steel.	_____	_____	
	Rear vertical corner posts shall be 10 gauge sheet steel, fabricated in such a way as to include provision for rear facing lighting requirements. Interior of dump body shall be lined to ease in dumping of material as well to protect box interior from damage.	_____	_____	
	Rear vertical corner-posts shall be tied to radius side panels and horizontal top rails and welded 100 percent.	_____	_____	
	Rear vertical corner-posts shall be connected to main conveyor via a rear horizontal 3" x 8" x 3/8" wall HSS tube spanning full body width.	_____	_____	
	Body construction shall include integral side fenders fabricated from a minimum 10 gauge Cor-ten A corrosion resistant material.	_____	_____	
	Two (2) chassis mounted aluminium fenders shall be supplied and installed over rear tandems.	_____	_____	
	Fenders shall be full length from front to rear of body.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	One (1) fender right side and one (1) fender left side shall be integral with body. Integral fenders shall fully enclose and protect optional chassis frame mounted on-board liquid storage tanks, each tank with a minimum capacity of 155 U.S gallons for total of 310 U.S. gallons. Tanks shall not be provided.	_____	_____	
	Fenders to raise with the box Integral fenders shall be sloped away from unit to prevent any excess material spilled during loading from building/piling up.	_____	_____	
	Dump box access ladder shall be 15" wide, two piece fold-up ladder located at the rear curb side of body.	_____	_____	
	Access ladder shall be manufactured from safety grip strut material.	_____	_____	
	Red/white 2" reflective conspicuosity tape to be installed along body fenders and across the bottom of tail gate.	_____	_____	
3.	<i>HOIST</i>			
	Shall be equipped with Mailhot Nitrided CS-130-5-3 top lift three (3) stage telescopic hoist, "C" series.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Hoist lift cylinder shall be forward mounted three (3) stage top lift telescopic.	_____	_____	
	Hoist capacity shall be 30 ton at 2,000 P.S.I.	_____	_____	
	Hoist cylinder shall be rod sealed.	_____	_____	
	Rubber hoist cap shall provide protection to hoist seals in spreader position.	_____	_____	
	Cylinder stroke shall be 130".	_____	_____	
	Dump box dump angle shall be variable to 50 degrees from horizontal.	_____	_____	
	Shall not be equipped with hoist doghouse protruding into front head of body. Hoist shall be external mounted to provide flat body front head.	_____	_____	
	Rear hinge diameter shall be 2-1/2"	_____	_____	
	Hoist control valve shall be air operated from inside cab with down position detent.	_____	_____	
	Body shall be equipped with a positive locking support brace.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Hydraulic system shall include hydraulic oil heater unit supplied and installed.	_____	_____	
4.	<i>TAILGATE</i>			
	Tailgate shall be double acting.	_____	_____	
	Tailgate height shall be 53" from conveyor floor.	_____	_____	
	Upper hinge plates shall be offset design flame cut from 1" steel plate.	_____	_____	
	Tailgate shall be rectangle shaped to allow use of asphalt or stone chip spreaders.	_____	_____	
	Construction shall be of 3/16" "Hardox 450" hi-tensile steel with 3/16" formed cross bracing.	_____	_____	
	Exterior vertical side support tubes shall be 3-1/2" x 3-1/2" x 1/4" wall HSS tubing.	_____	_____	
	Latch mechanism for the tailgate shall be air trip using two air pot chambers actuated from inside cab.	_____	_____	
	Brake chambers directly coupled to 1/2" thick flame cut latches.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Brake chambers (one right side and one left side) shall be enclosed and protected by integral body fenders.	_____	_____	
	Spreader chains and brackets shall be supplied on tailgate and rear apron. Chains shall be grade 70-coil proof 5/16" minimum.	_____	_____	
5.	<i>MAIN CONVEYOR</i>			
	The main conveyor shall be centered and recessed along the length of dump box floor.	_____	_____	
	Three-piece formed construction shall be a minimum 25" wide.	_____	_____	
	Conveyor floor shall be constructed of 1/4" "Hardox 450" hi-tensile steel.	_____	_____	
	Shall be equipped with permanent non-removable built in protective main conveyor chain link covers.	_____	_____	
	The protective covers shall run from the front to the rear of the body right and left side of the main conveyor.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The protective non-removable main conveyor link covers shall cover and protect the main conveyor chain links from damage by impact at all times in all operation modes.	_____	_____	
	Shall be equipped with a removable conveyor chain cover, in addition to the permanent non-removable main conveyor chain link covers.	_____	_____	
	The removable cover shall protect the main conveyor floor and conveyor chain cross flights from damage by impact when installed.	_____	_____	
	The removable main conveyor cover shall be manufactured from steel (High Tensile).	_____	_____	
	The removable main conveyor cover shall completely cover chain assembly.	_____	_____	
	Conveyor chain shall be self-cleaning D667 pintle type with an average tensile strength of 21,700 PSI, spaced apart 21" on centre.	_____	_____	
	1/2" x 1-1/2" cross flights shall be welded to every second link (approximately 4-1/2" spacing).	_____	_____	
	All conveyor flights shall be 100% fully welded to the chain links.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Drive and idler shafts shall be 2" diameter.	_____	_____	
	Drive and idler shafts shall be manufactured from high-resistance stress proofed SAMSON 100.	_____	_____	
	Drive and idler sprockets shall be minimum eight(8)-tooth cast steel.	_____	_____	
	All drive and idler sprockets shall be minimum C1030 cast steel.	_____	_____	
	Main conveyor drive shall be a single 25:1 high efficiency planetary drive with high torque low speed motor.	_____	_____	
	The planetary drive shall deliver 50,000 in/lbs torque intermittent with 34,960 in/lbs constant.	_____	_____	
	Specify:			
	Make: _____			
	Model: _____			
	Planetary drive close shall be coupled to main conveyor shaft.	_____	_____	
	Connection of the planetary drive shaft to the main conveyor shaft shall be accomplished via a split two piece rectangular shaped coupler assembly.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The upper and lower half of the coupler assembly shall be bolted together by four (4) 5/8" x 4-1/2" N.C. Grade 8 Hex Head bolts.	_____	_____	
	Removal of the four (4) coupling bolts shall allow simple disassembly of the planetary drive shaft from the main conveyor shaft, for ease of maintenance.	_____	_____	
	The two (2) main conveyor drive shaft flange bearings shall be bolted directly to the body long sill weldments.	_____	_____	
	Each of the two (2) body long sill weldments shall be vertical slotted. The entire conveyor drive shaft assembly shall drop out through the vertical long sill slots providing easy access and simple maintenance.	_____	_____	
	Idler end of main conveyor shall also be vertical slotted drop out design as described above.	_____	_____	
	Conveyor chain tension shall be regulated via an automatic chain tensioning system. This tensioning system will provide appropriate chain tension for the main conveyor chain at all times and under all normal operating conditions.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The fully automated chain tensioner shall eliminate the requirement for any manual chain tension adjusting mechanisms such as conventional threaded rod and nut tensioners or hydraulic grease ram tensioners.	_____	_____	
	Automated chain tensioning system shall be centrally located between main conveyor drive and idler shafts.	_____	_____	
	Access to automated conveyor chain tensioning system shall be from the side(s) of the body.	_____	_____	
	The flow control gate between main and cross conveyor shall be screw adjustable by hand crank from driver's side of dump body.	_____	_____	
	The main conveyor flow control gate shall be flush and even with the front of the body, without any type of recess.	_____	_____	
	Underside of main conveyor shall be complete with full length poly guard to prevent material spillage on to chassis components and frame rails.	_____	_____	

6. *CROSS CONVEYOR*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The cross conveyor assembly will draw material to the right side, left side, or both sides simultaneously via twin augers.	_____	_____	
	Granular feed to the cross conveyor shall adjust proportionately when a single side is selected.	_____	_____	
	Each of the two augers will have a shaft diameter of 2 3/8" machined to 1 1/4" on each end and equipped with flange bearings to suit.	_____	_____	
	Overall length of the augers will be 58" with 3/8" flights.	_____	_____	
	Auger outside dimensions will be 6" with a 6" pitch.	_____	_____	
	Augers will be direct drive from 2 hydraulic orbit motors to with a displacement of 11.9 cu in.	_____	_____	
	Connection of the augers to the orbit motors shall be via spilt couplers.	_____	_____	
	Conveyor trough to be constructed from 1'4" Cor Ten A steel.	_____	_____	
	Conveyor trough to be fitted with 1/4" polymer lining.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Safety guards to be installed on the top sides of the conveyor.	_____	_____	
	In dual spinner operation mode, both augers will turn opposite directions carrying material to the right and left spinners. Material to be divided equally, to spinners, 50% to the left spinner, 50% to the right spinner.	_____	_____	
	Left side or right side only operation, both augers will turn in the same direction and deliver 100% of the material to the selected direction.	_____	_____	
	Cross conveyor unit shall be removable design to reduce added weight in non-spreading applications.	_____	_____	
	Auger direction will be controlled by 4 way, 2 position solenoid valves in the cab.	_____	_____	
	<b>This equipment must be installed to produce a true value of the spreader control selection in relation to accurate and proper calibration and must not interfere with the hydraulic systems capacity to deliver selected amounts. In the event this can not be done accurately the Bidder must install two Dickey John devices.</b>			

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
7.	<i>SPINNER</i>			
	A polyurethane spinner shall be installed on left and right side to spread ahead of rear wheels.	_____	_____	
	Spinners are to be 18" in diameter.	_____	_____	
	The cross conveyor unit will be removable from the frame rails. A 3.0 cubic inch hydraulic motor shall drive the spinner assembly.	_____	_____	
	The spinner height shall be adjustable from 20" to 28" below the mounting surface of the body.	_____	_____	
	The spinner shall be capable of spreading evenly up to a 20' radius with a main operating range of 0' to 15' radius.	_____	_____	
	Spinner drive shall be direct drive from hydraulic orbit motors.	_____	_____	
	Spinner shafts to be on greaseable flange bearings.	_____	_____	
	Spinner assembly shall be capable of discharge rate from 100 lbs./lane mile to 2500 lbs./lane mile.	_____	_____	
	Spinner position shall be adjustable fore and aft and horizontal along chassis frame rail.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Spinner assembly shall be flip up style allowing the spinner to be carried in an on board stored raised position.	_____	_____	
	Hydraulic hoses to the spinner motor shall be complete with quick disconnect automatic sealing breakaway couplers and are to be assembled so that the male end may plug into the female end on the spinner motor and the hoist frame when the spinner assembly is disconnected.	_____	_____	
8.	<i>MATERIAL DISCHARGE</i>			
	A salt chute shall be supplied for salt windrowing operation. The salt chute shall be positioned 9" from the ground with the truck empty. The chute shall be hinged to allow for storage within the 102" legal width when not in use. Changing from one position to the other shall require no tools.	_____	_____	
9.	<i>LIGHTING</i>			
	For improved rear visibility, rear lamps, stops, tails, directional and back up lights shall be mounted in rear corner posts within 3" of the outside of the tailgate.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Blue and Amber strobes shall be mounted high on outside corner posts of box.	_____	_____	
	All rear lights shall be GROTE L.E.D. wiring shall be grote ultra blue seal.	_____	_____	
	Install 2 Star 200A strobe lights on pedestals behind the cab. Lights to be on separate switches in the cab. Lights must be visible from 360 degrees above the highest point of the cab.	_____	_____	
	Install two 6" spinner lights, one 6" wing light, one 6" cross conveyor light.	_____	_____	
	Install removable rear corner post lighting and brackets with LED lamps. Two 4" red, two 7" red and one 4" blue RH strobe light.	_____	_____	
	Three (3) in a row light cluster shall be supplied with mounting plate integral with dump hinge.	_____	_____	
	2" round red side clearance lights shall be provided in lower rear side corner posts.	_____	_____	
	6" spinner lights shall be installed.	_____	_____	
	Lights and wiring shall be completely sealed with corrosion and vapour proof lamps and junction box.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Auxiliary lighting shall plug directly into chassis OEM supplied connections. Cutting, splicing, soldering or shrink tubing of connections is not acceptable.	_____	_____	
10.	<i>MUD FLAPS</i>			
	Mud flaps shall be provided fore and aft of rear wheels, frame mounted via full width steel flat bar with 12" to 13" road clearance.	_____	_____	
11.	<i>PAINT</i>			
	The dump body shall be shot blasted and epoxy primed with 3 mils of Dupont DTM primer.	_____	_____	
	Finish paint shall be Dupont Imron "5000" polyurethane enamel. Paint shall be GLASS-SHIELD or equivalent.	_____	_____	
	Finish paint shall be WHITE and match truck cab colour.	_____	_____	
	Finish paint shall be baked on.	_____	_____	
12.	<i>ASPHALT DOOR</i>			
	Asphalt door in tailgate shall be 14" x 25" dimensions. Cantilever handle shall be offset to curb side to operate the sliding door.	_____	_____	
13.	<i>LOAD COVER</i>			

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	An 1/8" mesh tarp shall be supplied with fabricated tarp arms which are dimensions of 1-1/2" x 2-1/2" steel tubing and powered by twin air cylinders operated from within the cab.	_____	_____	
	Specify:			
	Arm Dimensions: _____			
14.	<i>SAND CONTROLS</i>			
	Closed loop ground oriented automated spreader control system shall be in compliance with detailed specifications included.	_____	_____	
	Shall be supplied with Dickey-John Control Point Ice Control System Specifications Model # CPPWM (no substitute).	_____	_____	
	Dickey-John system shall have the capability to maintain a uniform application rate of granular de-icing materials and liquid materials simultaneously (based on granular output).	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Dickey-John system shall have the capability of being used as a liquid only control and monitor boom shut off inputs. In addition the system shall have the flexibility of closed loop control of the spinner in order to maintain a desired spinner rpm or spread width.	_____	_____	
15.	<i>CONSOLE</i>			
	The control console shall have a easy to read dot matrix display of 3-3/4" x 3" that is capable of displaying a minimum of two (2) control channel application rates, ground speed, spread width, and time/date simultaneously.	_____	_____	
	Control console shall contain a microprocessor and have a minimum of three control channels:			
	<ul style="list-style-type: none"> <li>One (1) control channel for application of granular material on a pounds (kilograms) per mile (km) or area based (pounds per square foot/grams per square metre).</li> </ul>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>Second control channel for control of liquid material on a gallon (litres) per ton based on the granular application rate or gallons (litres) per mile (km) and gallons (litres) per square yard (metre).</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Third channel for controlling the spinner speed and be capable of utilizing a feedback sensor to close the loop in order to maintain a desired spinner rpm and spread width.</li> </ul>	_____	_____	
	Console shall have no more than one (1) switch on front panel which is used to cycle display screen from operate, view accumulators, select materials and turn the unit on and off.	_____	_____	
	Control console shall have sufficient memory capable of recording the following information and display as current run totals and season totals:			
	<ul style="list-style-type: none"> <li>Miles (km), tons (metric/English) and gallons (litres) spread while in automatic control mode.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Miles (km), tons (metric/English) and gallons (litres) spread while in BLAST mode.</li> </ul>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>Total miles (km) tons (metric/English) and gallons (litres) spread in automatic control mode.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Total vehicle miles (km) driven.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Liquid gallons (litres) sprayed during pre-wetting and anti icing application.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Real time spent spreading granular, spraying liquid and blasting.</li> </ul>	_____	_____	
	Control console shall also record system information which includes the following:			
	<ul style="list-style-type: none"> <li>Time and date event recording of when truck was started and turned off, type of materials spread and applications rates that were selected by operator.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Time and date event recording of when control system was operating in an error condition (application error, manual override, loss of feedback sensor).</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Time and date event recording of vehicle maximum speed alarm set point being exceeded.</li> </ul>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>Time and date event recording of when control was in automatic mode of control versus off as well as when blast function was activated.</li> </ul>	_____	_____	
	The control console shall automatically adjust the amount of granular material being applied when the closed loop spinner is in operation and the spread width knob setting is increased or decreased. This shall provide for spreading granular material in pounds per lane mile or pounds (kilograms) per square yard (metre)	_____	_____	
	Control console shall have visual display indicating when unit is operating in application rate error, unload or blast condition, manual speed and automatic manual override condition.	_____	_____	
	Console shall have a built in ground speed simulator.	_____	_____	
	Console shall have capability of being switched from English units to metric units as well as multiple languages.	_____	_____	

16. *OPERATOR REMOTE SWITCH MODULE*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	A remote switch module shall be used for operator convenience which contains switches to power liquid and granular channels on or off individually, allow liquid and granular application rates to be increased or decreased separately, a momentary push button switch used for blast, master spreader switch for off, automatic and unload of granular, liquid and spinner channels and contain twenty position rotary knob for adjustment of spinner speed.	_____	_____	
	Remote switch module shall be backlit for visibility and use during night operation.	_____	_____	
17.	<i>COMPONENTS (LESS CONSOLE)</i>			
	Granular components shall include:			
	<ul style="list-style-type: none"> <li>Drop on motor actuator to adapt to fluid controls 2FFL12 or equivalent valve.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Pulse width modulated dual control valves to control hydraulic flow to spinner a conveyor motors.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>Modulated valve drivers for adaptation to various pulse width modulated valves.</li> </ul>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>• Photoelectric conveyor feed rate sensor with 360 counts per revolution or compatible with sensored motors.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>• Vehicle speed sensor will be provided by a photoelectric sensor adapting to the vehicle speedometer cable or adapt to vehicle electronic speed sensing device.</li> </ul>	_____	_____	
	Liquid components shall include:			
	<ul style="list-style-type: none"> <li>• Flowmeter for accurate measurement of liquid sprayed</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>• Modulated valve driver (20 amps) to drive electric pump for desired volume of liquid application rate.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>• In-line ball valve control capability available in 1/2", 3/4", 1" and 2" sizes.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>• Modulated valve driver for control of pulse width modulated hydraulic valve control of hydraulic driven liquid pump.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>• Pressure transducer for pressure based liquid control system.</li> </ul>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
18.	<i>CONSOLE PROGRAMMING FEATURES</i>			
	The console shall be programmed with a detachable keyboard and will have menu driven screens to aid in programming process. The keyboard shall be removed after programming is complete which eliminates need of lock out codes or keys.	_____	_____	
	The unit shall be equipped with automatic calibration procedures for granular and liquid channels to determine the granular spreader constant of conveyor/auger and liquid sprayer constant of flowmeter.	_____	_____	
	Ground speed calibration procedure shall be in units of 1 mile or 1 kilometre.	_____	_____	
	Programmable operation shall have a frequency of pulse width modulated valves from 20 to 250 hertz.	_____	_____	
	Automatic calibration procedure shall predict the PWM offset and saturation points of valve as well as system gain and enter into the consoles memory.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall be equipped with a programmable blast timed button or on/off when blast button is press the released.	_____	_____	
	Spinner calibration procedure shall allow for open loop or closed loop operation of spinner to coordinate spread width knob position with a specific spread width for lane mile application of material.	_____	_____	
	Calibration procedures shall only be accessible with plug in programmable keyboard.	_____	_____	
	Shall be equipped with a programming mode for entering application rates and resetting accumulators.	_____	_____	
	Program independent application rates shall be for up to four (4) separate granular materials and four (4) separate liquid materials.	_____	_____	
	Application rates shall be preset for ten (10) fixed rates or to expand application rate choices, a preset minimum rate, preset maximum rate and rate change increments between.	_____	_____	
	A blast application rate shall be provided for each material for control of the blast function.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Reset shall be provided for granular current and season accumulators.	_____	_____	
	Reset shall be provided for liquid current and season accumulators.	_____	_____	
	Shall be equipped with the ability to lockout granular and liquid materials availability in the operate mode.	_____	_____	
	The console shall be programmed for use as a granular and liquid material control, a liquid only control or a granular material only control.	_____	_____	
	The operate screen shall automatically configure itself and display a five (5) segment boom shut off graph when liquid only control is selected.	_____	_____	
	All programmable features shall only be accessible with plug in keyboard.	_____	_____	
19.	<b>SYSTEM OVERRIDE</b>			
	System shall have an automatic override feature which, in the event of loss of feed rate sensor or flowmeter signal, transfers system to open loop control with a "manual" indication flashing next to the appropriate control channel.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	

System shall have a built in ground speed simulator which can be turned on only with the plug in keyboard for override of a failed ground speed sensor or operating the system while stationary without having to raise rear tires off the ground. The system shall have the capability of being programmed to allow access to manual speed for the driver.

\_\_\_\_\_

20. *GENERAL OPERATION REQUIREMENTS*

System shall have the ability to Unload/Flush both granular and liquid materials separately or simultaneously. Unload/Flush shall provide for full spreader and sprayer output. The console shall not accumulate granular or liquid quantities while in unload or flush.

\_\_\_\_\_

The system shall not initiate unload or flush unless vehicle ground speed in zero. After unload or flush is activated, the console shall allow forward movement of vehicle but for not longer than a 10 second time period. After 10 seconds console shall override unload/flush command and return to automatic control.

\_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The spinner shall stop when the spreading of granular material is stopped. Spinner shall be able to be pre-set to run or be stopped when console is in the unload mode and when ground speed is zero.	_____	_____	
	The console shall allow a programming option (blast spinner speed). This shall allow for operating the spinner at a preset speed when the blast button is pressed regardless of the current position of spread width knob on remote switch module.	_____	_____	
	The system shall allow the spread of granular material without spraying liquid material.	_____	_____	
	The system shall allow the application of liquid material without spreading granular material.	_____	_____	
	The control console shall be programmed to automatically switch between prewetting and anti icing application (gallons per ton to gallons per mile) via a switch input voltage change.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Each of the four (4) liquid materials programmed into the console memory shall be able to be set as either gallons (litres) per mile (km) or gallons (litres) per ton units. This shall allow for the liquid channel of the console to be used in a anti icing application and for prewetting of granular material without the need for reprogramming.	_____	_____	
	The console shall have a visual and audio indication of inaccurate application for both granular and liquid channels.	_____	_____	
	System shall have a programmable start up ground speed which the control will utilize until true ground speed of vehicle exceeds the start up speed value.	_____	_____	
	Control shall be able to be used for application of liquid or granular on metres square, yards square, ft square and lane miles units of measure.	_____	_____	

21. *OPTIONS*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	<p>Shall be equipped with a RS232 port control capable of being connected with hardware that allows the transmission of current operation information and accumulated data real time for the following items:</p> <ul style="list-style-type: none"> <li>• Alternate Sensor Capability</li> <li>• Hopper Level Sensor</li> <li>• Spinner RPM Sensor</li> </ul> <p>Shall be supplied with a DaRT Module data retrieval tool that downloads accumulated data from the Control Point. Data retrieval shall be accomplished by connecting a DaRT Control Point retrieval tool to the Control Point via the RS232 connection.</p> <p>Shall be equipped with wing GL300PMC guidance laser.</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	

22. *HYDRAULIC VALVE REQUIREMENTS*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall be equipped with a three (3) section Hydraulic Flow Control Valve model # ICSV3003. The Hydraulic Flow Control Valve shall to be equipped with a manual override allowing for safe manual adjustment of the oil flow during troubleshooting or electrical power failure. It shall be compatible with fixed displacement or load sense pumps.	_____	_____	
	A 10 micron return line filter shall be installed.	_____	_____	
	The pressure side of the hydraulic system shall be provided with a 10 micron high pressure absolute filter with indicator and safety bypass. This filter shall be a MPFI6TRI model.	_____	_____	
23.	<i>HYDRAULICS</i>			
	The body operation shall be powered by the existing hydraulics of the snow plow truck harness.	_____	_____	
	All fittings, valves, hoses and drive shaft shall be supplied and installed. All hoses shall be equipped with swivels on both ends.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The hydraulic reservoir shall be of sufficient capacity to supply necessary oil supply. Reservoir shall NOT interfere with the box installation.	_____	_____	
	All hydraulic hose shall be 100R16 with half bend radius of standard 100R5 hose.	_____	_____	
	All hydraulic hoses shall be protected with hose wrap for the length of each hose	_____	_____	
	A combination sight/temperature gauge to allow easy checking of the hydraulic oil level in the reservoir shall be supplied.	_____	_____	
24.	<i>PINTLE HOOK</i>			
	A Holland PH200 or equivalent pintel hook shall be installed at a measured height of 29" from ground level.	_____	_____	
	A pintle hook mounting structure shall be installed at the rear of the truck frame, of sufficient strength to support the rated capacity of the pintle hook.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Two (2) safety chain brackets shall be welded to the pintle support structure as close to the frame width as possible. These brackets must be equal to or greater than the pintle hook maximum gross trailer weight rating.	_____	_____	
25.	<i>WARRANTY AND OTHER</i>			
	All supplied and mounted equipment shall be guaranteed against defective materials and workmanship for a period of one (1) year from in-service date.	_____	_____	
	Parts, repair, electrical and hydraulic manuals specific to this unit shall be supplied for all installed equipment.	_____	_____	

**SECTION C – POWER REVERSIBLE SNOW PLOW**

1. *SPECIFY POWER REVERSIBLE SNOW PLOW:*  
  
 Shall be equipped with Viking VCL 38R12PR.  
 \_\_\_\_\_
  
2. *GENERAL*  
  
 Shall be equipped with a hydraulic ram reversible snow plow with ultra high molecular polymer moldboard and safety trip edge with torsion style trip springs.  
 \_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
3.	<i>CUTTING PATH</i>			
	In the straight ahead bulldozing position the plow shall be able to clear a 12' wide path.	_____	_____	
	The plow shall be hydraulic ram reversible from 42 degrees right to 42 degrees left allowing the plow to perform at all angles in between.	_____	_____	
	A 35 degree angle shall be set so the plow will clear a path of 9' wide.	_____	_____	
4.	<i>MOLDBOARD</i>			
	The moldboard shall be fabricated of 3/8" ultra high molecular polymer.	_____	_____	
	A 10 gauge steel backup plate shall provide reinforcement for the 3/8" polymer moldboard material.	_____	_____	
	Six (6) windows shall be cut in the steel backup plate with each open section a maximum of 19" in width.	_____	_____	
	Eight (8) vertical reinforcing ribs shall provide additional strength.	_____	_____	
	Each reinforcing rib shall be manufactured of 3/8" steel not less than 3-1/2" deep.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Each of the eight (8) vertical ribs shall be 100% welded to the 10 gauge steel backup plate for the full vertical length of the rib.	_____	_____	
	The steel backup plate shall extend a minimum of 2-1/2" to each side of the six (6) internal ribs and 2-1/2" minimum to the inside only of the end ribs.	_____	_____	
	The upper part of the moldboard shall be reinforced with a 3" x 3" x 1/2" steel angle welded continuously to the 10 gauge steel backup plate and attached to each reinforcing rib by a 3/8" gusset.	_____	_____	
	The lower base angle of the moldboard shall be 5" x 3-1/2" x 1/2" steel angle.	_____	_____	
	Braces for plow markers shall be installed at each side of the main body of the plow. Braces are to be 12" above the top of the plow and are to be constructed from 3/8" steel c/w a heavy duty 1" steel ring to support the plow marker.	_____	_____	
	Plow markers shall be installed at each side of main plow body.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Moldboard height shall be a constant 38" over the entire length of the plow except at each end of the plow where the marker braces are located.	_____	_____	
	Moldboard braces shall be of telescopic design.	_____	_____	
	Connection points of the telescopic brace to the moldboard, the drive frame to the moldboard, and the hydraulic power angling cylinders to the moldboard and the "A" frame shall be fitted with spherical bushings.	_____	_____	
	The spherical bushings shall provide free oscillation of the mouldboard plus or minus a minimum of 30 degrees on each side of its drive points.	_____	_____	
	All spherical bushings shall be grooved for lubrication and fitted with grease fittings.	_____	_____	
	The spherical bushings shall be machined from HR1020 steel with a tensile strength of 54,000 to 70,000 P.S.I. minimum.	_____	_____	
	Each spherical bushing shall be press fitted and 100% welded into its mounting plate.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Spherical bushings for the drive frame connection points shall be one (1) 1/8" outside diameter utilizing one (1) 1/8" x 5-1/2" grade 8 hex head connecting bolts.	_____	_____	
	Moldboard shall be complete with standard 1/2" x 8" SAE 90 cutting edge, two (2) wear shoes and two (2) scuff shoes.	_____	_____	
5.	<i>DRIVE FRAME</i>			
	Drive frame shall be "A" style, manufactured of 3-1/2" x 3-1/2" x 1/4" minimum square structural tube.	_____	_____	
	Drive frame stiffeners shall be 1/2" minimum.	_____	_____	
	Drive frame shall be complete with one (1) single parking leg stand.	_____	_____	
	Height shall be adjustable.	_____	_____	
	Integral heavy duty self-levelling device shall be capable of keeping the cutting edge parallel to the road surface while in the carrying position regardless of the degree of angle.	_____	_____	
	Pushpoint spacing shall be 30-1/2" center to center to suit standard push frame.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	

6. *TRIP EDGE*

A safety trip edge shall provide protection from road hazards. This mechanism shall provide a pivoting movement of the blade when hitting an obstacle.

\_\_\_\_\_

The trip edge shall be designed and manufactured as a one (1) section trip assembly. Multiple sectional trip edges with lock out bolts or pins required for conversion to a one-section trip shall not be acceptable.

\_\_\_\_\_

The trip edge shall incorporate five (5) horizontally mounted torsion springs.

\_\_\_\_\_

Torsion springs shall be 3/4" wire with 15 active coils.

\_\_\_\_\_

Each torsion spring shall be a minimum of 15" in length.

\_\_\_\_\_

The trip edge shall incorporate a steel angle 4" x 3-1/2" x 1/2" minimum. A steel trip plate shall be 3/16" x 10" minimum.

\_\_\_\_\_

7. *HYDRAULICS*

Two (2) hydraulic power angling cylinders shall be 3" base diameter by 20" stroke to provide reversing action.

\_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Hydraulic cylinder piston rods shall be hard chrome plated.	_____	_____	
	A crossover relief valve shall provide cushion impact protection.	_____	_____	
	Hydraulic hoses shall be complete with hydraulic quick disconnects.	_____	_____	
8.	<i>WARRANTY AND OTHER</i>			
	Warranty shall be minimum one (1) year parts and labour.	_____	_____	
	All steel shall be shot blasted, epoxy primed and finish paint to be electrostatically applied.	_____	_____	
	Drive frame shall be fitted with mushroom style shoes.	_____	_____	
	Drive frame shall be complete with quick-tach hitch.	_____	_____	
	Two (2) fluorescent markers shall be supplied.	_____	_____	
	Two (2) curb shoes shall be supplied.	_____	_____	
	5/8" cutting edge shall be supplied.	_____	_____	

**SECTION D – ONE-WAY SNOW PLOW**

1. *GENERAL*

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall conform with the provisions of the Ministry of Transportation except that the dimensions of this specification shall prevail when the two contradict.	_____	_____	
	Shall operate effectively and without modification with the standard snow plow truck harness and related components.	_____	_____	
	The weight of the plow shall range from 1,850 to 2,150 lbs. and shall be constructed to prevent the accumulation of holding water in any area.	_____	_____	
	The hood shall extend 18" past the vertical centre line, in a normal operating position.	_____	_____	
	Ribs shall be of one piece 100% welded both sides to the moldboard.	_____	_____	
	Entire assembly shall be painted black.	_____	_____	
2.	<i>CUTTING PATH</i>			
	12' one way plow capable of clearing a 9' wide path.	_____	_____	
3.	<i>MOLDBOARD</i>			
	Top edge of the moldboard shall be welded 100% to the ribs.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Top rail of the moldboard shall be manufactured of minimum 2 ½" x 2 ½" angle iron and welded securely to the ribs and moldboard with a continuous bead. All other welds must also be 100%.	_____	_____	
	The thickness of the moldboard and hood shall be 10 U.S.S. ga. (.1345)	_____	_____	
	Shall be pivoted to allow tilting in different positions.	_____	_____	
	Moldboard brace rod shall be adjustable for plow angles of 45 degree, 50 degree and 55 degree and must be safety cable equipped.	_____	_____	
	Height of the moldboard at the top of curve shall be as follows: Front end: 26" Rear end: 54" The overall length shall be 13'10".	_____	_____	
	Plow shall be fitted with two cast steel moldboard shoes.	_____	_____	
	Eight (8) vertical ribs, 3 ½" high by 3/8" thick. Minimum weld between the moldboard and rib shall be 100% weld each side.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Bottom rail on the moldboard shall be 5" x 3" x 1/2" angle below with a 3" x 2" x 3/8" gussets shall be welded between the two legs of the bottom angle, between each bolt hole, except for the two sets of endholes and between two holes in the middle of the moldboard. The moldboard shall be continuously welded to the bottom rails.	_____	_____	
	The moldboard shall be designed for use with a standard punched cutting edge and with a standard cast steel nose piece. The cutting edge and nose piece shall be supplied.	_____	_____	
	Moldboard shall have a total bearing area (pin diameter times web thickness times number of webs involved) or 4 1/2" square inches minimum at the point where the drive links attach.	_____	_____	
	The trip springs shall be two 14" compression type with a total of 10 coils for each spring.	_____	_____	
	The moldboard shall be formed in the shape of a smooth curve.	_____	_____	
	A sturdy eye 1/2" thickness shall be provided at the centre of gravity for handling of the moldboard.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
4.	<i>PUSHFRAME</i>			
	Male end of adjusting brace assembly shall be 2" solid steel pipe.	_____	_____	
	Female end of adjusting brace assembly shall be 2" steel tubing.	_____	_____	
	Both male and female ends shall have 5/8" mounting pins.	_____	_____	
	The female end shall be at the top to prevent the accumulation of water.	_____	_____	
	The pushframe truck attachment shall be of the "quick attach" type and shall not be coupled to the truck with pins through holes in drive bars.	_____	_____	
	Separate drive bars will not be utilized.	_____	_____	
	Point of attachment shall be pocket style utilizing a pivoting weldment complete with a horizontal piece of 1 1/4" round stock, tapered on both ends that will slide into pockets on the truck.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Trip links safety mechanism shall be incorporated into the pushframe to return the moldboard to normal plowing position automatically. Trip springs must be secured with locking nuts.	_____	_____	
	Two separate lift chains shall be used and these shall pick up on the drive frame at points approximately 48" apart.	_____	_____	
	The lifting chains must conform to current load security lifting regulations and must be link stamped accordingly.	_____	_____	
	The height of the shoes shall be adjustable a minimum vertical distance of 6 inches. Height adjustable one way snow plow shoe holder.	_____	_____	
	The pushframe shoes shall oscillate.	_____	_____	
	The horizontal distance from the discharge end of the plow blade to the discharge end of the moldboard shall be approximately 24" minimum.	_____	_____	
	The pushframe must be designed to move the moldboard down the road at a 37° operating angle.	_____	_____	

Item No.	SPECIFICATIONS	BIDDER'S		BID SPECIFY
		YES	NO	
	The main push beam on which the trip links shall operate will be a 4 x 4 x 3/8" HSS square tube.	_____	_____	
	The pushframe will use 6 x 4 x 1/4" HSS rectangular tubing for LH and RH brace tube to main swivel support plate.	_____	_____	
	Main swivel support plate will be made from 1" 44W steel plate.	_____	_____	

**SECTION E – FULL HYDRAULIC SNOW PLOW WING TOWER AND 12' SNOW LEVELING WING**

1. SPECIFY SNOW PLOW WING TOWER:

Shall be equipped with Viking VCL 350SCL.

\_\_\_\_\_

2. GENERAL

The harness assembly shall be of heavy construction to sustain snow plowing operations under severe conditions.

\_\_\_\_\_

A reservoir of adequate capacity shall be supplied but shall not interfere with the operation of the box. Valves shall be installed on outlet lines at the reservoir.

\_\_\_\_\_

Bottom of wing tower shall be protected by shoe, and shall have a ground clearance of 14" minimum, truck empty.

\_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The spacing of the holes in the slides for connecting the wing braces shall be approximately 17".	_____	_____	
	Approved size of ram controlling the front end of wing shall be 3" diameter x 30" stroke (approximately), with a cable and sheave assembly.	_____	_____	
	Approved size of ram controlling the rear end of wing shall be 3" diameter x 30" stroke (approximately) cylinder, with a cable and sheave assembly.	_____	_____	
	Approved size of ram controlling wing brace slide shall be 3" diameter x 36" stroke (approximately) and shall be double acting.	_____	_____	
	Sealed beam wing light shall be provided.	_____	_____	
	Wing tower shall be painted Black Glass Shield.	_____	_____	
	The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID SPECIFY</u>
		YES	NO	
	Wing tower shall be of 10" channel construction with a 25 degree offset and its mountings shall be sufficient to sustain snow plowing operations under severe conditions.	_____	_____	
	One (1) pipe brace 2-3/4" diameter shall connect the bottom of the wing tower and the truck chassis near the forward mount of the right rear springs to reduce the shock of the truck frame.	_____	_____	
	The rear wing tower shall be heavily braced and gusseted to the frame cheekplate.	_____	_____	
	The first channel shall be 4" x 66-1/2" 13.8 lb/ft slopping diagonal brace.	_____	_____	
	The second channel shall be 4" x 40" 13.8 lb/ft horizontal brace bolted to the chassis rails and welded to the brace box.	_____	_____	
	Two (2) triangular stiffeners shall be incorporated into the assembly.	_____	_____	
	The oil reservoir shall act as an auxiliary support post to provide additional support.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The oil reservoir shall be connected at the top to the rear post through two (2) 4" x 4" x 3/8" angles, and shall be mounted in a vertical position directly along the side of the rear post.	_____	_____	
	The bottom of the oil reservoir shall also incorporate two (2) 4" x 3" x 3/8" angles, one (1) welded to the oil reservoir and the other welded to the brace box.	_____	_____	
	Hydraulic hoses shall connect the rams of the tower with the valves in the control box. Hoses shall be two (2) ply braided steel, SAE100R2 with swivels on both ends.	_____	_____	
	All sheave pins shall be provided with oil impregnated bronze bearings and grease fitting.	_____	_____	
	A safety chain shall be provided for securing wing when not in use.	_____	_____	
	Guide bars to contain the rear wing slide shall be welded 100% from the bottom up 2'.	_____	_____	
	Parts manual shall be supplied with each unit.	_____	_____	
	Shall be supplied with one BLUE and one AMBER strobe, Star Model 200A cab shield mounted.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
3.	<i>HYDRAULIC CONTROLS</i>			
	Hydraulic Control Valves shall be stackable sectional type HCD-6 with HCD6-L20 air shift. The air shifters shall have a bronze sleeve to prevent corrosion.	_____	_____	
	The control valve shall include the following sections:			
	<ul style="list-style-type: none"> <li>• 1 D.A. Reverse Plow</li> <li>• 1 D.A. Plow Lift</li> <li>• 1 D.A. Wing Braces</li> <li>• 1 D.A. Tilt Harness</li> <li>• 1 S.A. Body Hoist</li> <li>• 1 D.A. Front of Wing</li> <li>• 1 D.A. Rear Wing Slide</li> </ul>	_____	_____	
	Snow plow controls and all accessory light switches, box tailgate control, tarp control, and P.T.O. controls shall be incorporated into a control panel mounted between seats, behind gear shift at a height of no more than 12”.	_____	_____	
	Light switch side panel shall hinge open to expose all wiring and fuse panel.	_____	_____	
	Sander control panel and air control regulator shall be mounted on this panel.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The hydraulic control valves shall be operated by proportional featherable in cab air controls.	_____	_____	
	The control panel assembly shall be of a remote design pedestal mounted and adjustable.	_____	_____	
	An oil reservoir of adequate capacity shall be supplied complete with oil filter oil level sight gauge, breather type filler cap, drain plug and oil shut off valve.	_____	_____	
	The complete valve stack assembly shall be mounted vertically on a 1/4" mounting plate, integral with the rear wing tower assembly.	_____	_____	
	The valve mounting plate shall be welded to the horizontal channel and sloping diagonal brace. The valve assembly shall be completely open and easily accessible from the driver's side of the chassis for washing and maintenance.	_____	_____	
4.	<i>FRONT WING POST AND CROSS MEMBER</i>			
	The design and construction of the wing post shall be in compliance with the MTO Standard #ES-403. It shall be independent and self-supporting hydraulically operated.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Brace "A" in MTO Standard #ES403 shall be replaced by a second sturdy crossmember. This crossmember shall be bolted to both cheekplates.	_____	_____	
	Alternate braces shall be approved.	_____	_____	
	The wing post shall be made of 8", "I" –Beam 18.4 lb. /ft. minimum.	_____	_____	
	Crossmember shall be of heavy construction to sustain snow plowing operations in severe conditions.	_____	_____	
	The wing post, when mounted, shall not be higher than the wing tower.	_____	_____	
	The sheave pin shall be provided with a grease fitting or iolite bushing.	_____	_____	
	A safety stop, limited slide travel shall be supplied.	_____	_____	
	The lifting cable shall not be mounted to the hinge pin.	_____	_____	
	A 5/8" grab link shall be located halfway between upper and lower position of bolt "D" as shown on MTO Standard #ES403.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The front wing slide shall be provided with a combination tip-over arrangement, including spring to return to the normal position after it has tripped and a locking device to lock out the trip action for high wing operations. Tripping slide shall be 7-1/2" wide.	_____	_____	
	Bottom of the wing shall be 11" from the ground, truck empty, and shall be protected by a shoe.	_____	_____	
	Crossmember shall be bolted to the wing post.	_____	_____	
	A 6" overhang shall be left on crossmembers to allow lateral movement for mounting the wing post on future trucks.	_____	_____	
	Dimension "F" shown on MTO Standard #ES403 shall be as specified for the particular size of the truck.	_____	_____	
	Guide bars for the slide shall be square and welded 100% for the bottom 18". Safety chains shall be supplied.	_____	_____	
	The wing post and crossmember shall be painted black.	_____	_____	
	A 10" convex mirror shall be mounted on the top rear of the front wing post.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
5.	<p>12' SNOW LEVELING WING</p> <p>SPECIFY 12' SNOW LEVELING WING:</p> <p>Shall be equipped with Viking VCL 144 WHD.</p>	_____	_____	
6.	<p>GENERAL</p> <p>The inside height of the wing shall be 29" minimum.</p> <p>The outside height of the wing shall be 39" minimum.</p> <p>Overall length of the wing shall be 12'.</p> <p>The thickness of the moldboard shall be 10 U.S.S. gauge (01345), minimum</p> <p>Two (2) drive ribs for connecting the wing brace shall be provided.</p> <p>The drive ribs shall be located approximately 8'-6" and 10'-10" from the nose end of the wing.</p> <p>The plate for mounting the wing to the wing post shall be 1" thick. The mounting hole shall be far enough from the edge of the plate to avoid failure in this area.</p>	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Lower wing angle shall be 6" x 4" x 3/4".	_____	_____	
	The mounting of the nose end of the wing to the wing post shall be by means of a hinge and rectangle spring, to allow tipping over the wing.	_____	_____	
	Two (2) adjustable wing braces shall be supplied.	_____	_____	
	The upper brace shall be of a stock release type, including a spring retraction. The spring shall provide adequate stability of the wing in normal operating conditions, and shall retract the wing from tip-over position.	_____	_____	
	The distance between the center of the mounting holes of the wing braces shall be as follows (Extended distances shall be measured with spring fully retracted):			
	• Upper brace – Extended 90" C.C.	_____	_____	
	• Upper brace – Collapsed 60" C.C.	_____	_____	
	• Lower brace – Extended 90" C.C.	_____	_____	

Item No.	SPECIFICATIONS	BIDDER'S		BID SPECIFY
		YES	NO	
	<ul style="list-style-type: none"> <li>Lower brace – Collapsed 60” C.C.</li> </ul>	_____	_____	
	One (1) spare pin for adjusting the wing braces shall be supplied with each brace.	_____	_____	
	The wing shall be fitted with the following:			
	<ul style="list-style-type: none"> <li>One (1) 36” fluorescent marker.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>The top edge of the wing shall be boxed in and welded continuously to the ribs and the moldboards so as to avoid any pockets.</li> </ul>	_____	_____	
	<ul style="list-style-type: none"> <li>One (1) 12’ high wear wing blade. Valley Blade #586144QHIWB</li> </ul>	_____	_____	
	One (1) high wear wing guard. Valley Blade #V45-HFR	_____	_____	
	Wing shall be painted black.	_____	_____	

**SECTION F – HYDRAULIC POWER TILT SNOW PLOW TRUCK HARNESS**

1. GENERAL

The design and construction of the truck harness shall be in compliance with MTO Standard #ES-401, or be of equivalent design approved by MTO.

\_\_\_\_\_

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The harness shall be mounted at the front end of the frame, and shall be bolted to the cheekplate.	_____	_____	
	The lifting frame shall be bolted to the push plate and shall be braced to conform to MTO standards.	_____	_____	
	Lifting ram diameter shall be 4" minimum.	_____	_____	
	Lifting ram stroke shall be 10" minimum.	_____	_____	
	The cylinder rod shall be fully chrome plated.	_____	_____	
	Lift of grab link for nose chain shall be 18" minimum.	_____	_____	
	Drive ears shall be 30-1/2" centre to centre.	_____	_____	
	Height to lower drive connection shall be 19" when mounted, truck empty.	_____	_____	
	Shall be supplied with cheekplates to match truck frame that are compatible for plow.	_____	_____	
	Three (3) grab links shall be supplied.	_____	_____	
	Two (2) sealed beams Halogen type headlamps, with high and low beam shall be supplied.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Spacing and height of headlamps shall be in compliance with MTO Standard #ES-401.	_____	_____	
	Right front helper spring shall be provided. Timbren Aeon rubber shall be used and shall be easily removable.	_____	_____	
	Two (2) new turn signals shall be installed in the location shown in MTO Standard #ES-401 and the wires from the truck turn signal shall be connected to these lights. These wires shall be well protected in looms.	_____	_____	
	The plow lights and signals shall be equipped with "Quick-Tack" ends.	_____	_____	
	All hydraulic hoses and wiring shall be adequately supported to ensure that wear and sag is completely eliminated.	_____	_____	
	The front plow harness shall tilt forward to allow the hood to tilt over centre of its pivots and stay open without the need of any additional supports.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	The harness shall be supplied with two (2) double acting hydraulic cylinders, one (1) cylinder to perform the plow lift function and a second separate cylinder used to perform the tilt function exclusively.	_____	_____	
	The tilt cylinder shall be 2-1/2" with a 6" stroke and the cylinder rod shall be fully chromed.	_____	_____	
	Hydraulic power tilt function shall be controlled by in cab featherable joystick air control.	_____	_____	
	Front plates shall be complete with quick-tack hitch pockets and pins.	_____	_____	
	The truck harness shall be painted industrial Black Glass Shield.	_____	_____	
	Parker Partek (Kevlar) hose wrap shall be installed on all hydraulic hoses where excessive wear can cause premature failure and to extend the life of hoses. Hose wrap to be installed anywhere on the truck that the above condition may exist.	_____	_____	
	Install add on bumper extensions.	_____	_____	
	A parts manual shall be supplied with each unit.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Two (2) AMBER fog lights shall be mounted on front harness.	_____	_____	
	Warranty shall be minimum one (1) year parts and labour from in-service date.	_____	_____	
2.	<i>HYDRAULIC PUMP</i>			
	The hydraulic pump supplied shall be a Tyrone VDVTP150180AFJ Tandem Dry Mode with air shift.	_____	_____	
	The first stage shall produce 23 G.P.M. at 1,800 R.P.M. and P.S.I.	_____	_____	
	The second stage shall produce 32 G.P.M. at 2,000 R.P.M.	_____	_____	
	Shall be supplied with pump mounting plate and splined drive shaft.	_____	_____	
	The pump shall be driven from the crankshaft.	_____	_____	
	The pump shall have a manufacturer's R.P.M. rating equivalent or higher than that of the truck engine at governed speed.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Shall be supplied with hydraulic hoses to connect pump. Their size shall be adequate for quick operation of all hydraulic operations and shall be <u>2 ply braided steel</u> SAE100RS, with swivels on both ends.	_____	_____	
	The drive shaft shall be supplied with spline long enough to allow telescopic retraction of the shaft in order to change fan belt without removing the pump.	_____	_____	
	The hydraulic system shall be set up so other hydraulic functions do not "rob" the sander equipment.	_____	_____	
	A parts manual shall be supplied with each unit.	_____	_____	
	A low hydraulic oil alarm system with a dash mounted light and audible buzzer shall be provided.	_____	_____	
	Front chassis axle shall be 20,000 lbs. for tandem axle chassis minimum with a 40,000 lbs. combined rear axles minimum.	_____	_____	
	Chassis frame and front extension shall be full frame with section modulus and yield strength sufficient for mounting snow control equipment.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Room to install an MTO specified frame cross member without interference from truck auxiliary mounts shall be provided back of chassis cab.	_____	_____	
	Provision for front mount hydraulic pump shall include front crank adapter and front grill and radiator clearance for pump drive shaft.	_____	_____	
	Muffler configuration and exhaust stack must be routed to avoid interference with wing harness installation.	_____	_____	
	Fuel tank protrusion behind cab shall avoid interference with sander spinner and wing harness.	_____	_____	
	Battery box location shall be under cab to avoid interference with sander spinner and wing harness. (sealed from environment)	_____	_____	
	Air dryer, air tanks, fuel and oil coolers shall be located in a position to avoid interference with sander spinner and wing harness.	_____	_____	
	Front grill shall be stationary with no hood mould running under the grill to avoid interference with hydraulic tilt front plow harness.	_____	_____	

Item No.	<u>SPECIFICATIONS</u>	<u>BIDDER'S</u>		<u>BID</u> SPECIFY
		YES	NO	
	Interior cab space and seat configuration shall provide sufficient room for floor console and pedestal stand for sander and harness controls.	_____	_____	
	Body builder's access point shall be provided at rear of frame rail for box lights.	_____	_____	
	Separate headlight wiring harness with separate switch in cab dash shall be provided for plow harness lights.	_____	_____	
	Shall allow for a review of specifications with a qualified factory representative prior to placing order.	_____	_____	
	Shall be supplied with National Safety Mark Number of Equipment installer:	_____	_____	
	Number: _____			

**A.2 BID PRICE**

The Bidder hereby offers to supply and deliver two (2) tandem axle dump trucks complete with plow and sander equipment as specified in this Document at the price named herein, in accordance with the invitation, instructions, general conditions, specifications and any special conditions, terms and conditions, stated herein:

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>TOTAL AMOUNT (excluding H.S.T.)</b>
1.	Two (2) new tandem axle dump trucks complete with plow and sander equipment in accordance with the aforementioned specifications *	\$ _____
2.	Extended Warranty Coverage (including all costs for mileage and travel time to and from the Township's site):	
	i) 3 Years	\$ _____
	ii) 5 Years	\$ _____
	iii) 7 Years	\$ _____

*\* Amount read out at the public opening*

Terms of payment (discounts for quick payment, if available – Note: Not a basis for award):

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Guaranteed delivery or completion date upon receipt of purchase order:

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**A.3 WARRANTY AND SERVICE**

The Bidder shall state the length, time and conditions of warranty, or attach a copy of the manufacturer's warranty statement to the Bid:

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The Bidder shall state how the manufacturer handles repetitive problems that occur after the warranty period:

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The Bidder shall state the capability of the dealer, in terms of qualifications, service vehicles, parts supply, etc., to repair the machine on site, so as to minimize downtime for the Township:

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Guaranteed maximum response time for repair calls: \_\_\_\_\_

Guaranteed maximum parts delivery time: \_\_\_\_\_

In such cases where the location of the successful Bidder makes it impractical to perform subsequent warranty and check-up service, it shall be the successful Bidder's responsibility to make arrangements with an authorized dealer acceptable to the Township.



**A.6 OFFER AND DECLARATIONS**

In signing this bid, we hereby offer to supply and deliver two (2) new tandem axle dump trucks complete with plow and sander equipment, as specified in the Documents for Contract No. S2012-06, for the price shown in Section A.2 above.

By submitting this bid, the undersigned hereby agrees with all the terms, conditions and specifications required by the Township in this Request for Tender, and declares that the attached bid and pricing are in conformity therewith. If its Bid is accepted, the Bidder agrees that all provisions set forth herein will become binding as a formal contract upon the fulfillment of all conditions precedent set forth herein. Furthermore, it is certified that the undersigned is/are authorized and empowered to sign and submit this Bid on behalf of the Bidder.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_  
SIGNATURE OF AUTHORIZED SIGNING OFFICER  
(AFFIX CORPORATE SEAL TO SIGNATURE)

\_\_\_\_\_  
PRINT NAME OF ABOVE SIGNING OFFICER

\_\_\_\_\_  
POSITION IN FIRM

\_\_\_\_\_  
NAME OF FIRM

\_\_\_\_\_  
SIGNATURE OF WITNESS  
(NOT REQUIRED IF CORPORATE SEAL IS USED)

## **PART B - INSTRUCTIONS TO BIDDERS**

### **CONTRACT NO. S2012-06 FOR SUPPLY AND DELIVERY OF TWO (2) TANDEM AXLE DUMP TRUCKS COMPLETE WITH PLOW AND SANDER EQUIPMENT**

#### **B.1 INTRODUCTION**

The Township has issued this Request for Tenders to solicit Bids for the supply and delivery of two (2) new tandem axle dump trucks complete with plow and sander equipment in accordance with the terms, conditions and specifications of this Document.

#### **B.2 DEFINITIONS**

Wherever the first letter of a term set out in the text of this Document is capitalized, the term shall have the meaning defined below:

**Bid** – An offer by a Bidder in response to this Document issued by the Township.

**Bidder** – The person, firm or corporation submitting a Bid to the Township.

**Closing Date and Time** – The time and date specified in Section B.5.

**Company** – The person, firm or corporation, and its successors and assigns, to whom the Township has awarded the Contract.

**Contract** – The purchase order authorizing the Company to complete the Work, purchase order alterations, the Document and addenda, and the Bid.

**Document** – This Request for Tender issued by the Township soliciting Bids to complete the Work.

**Subcontractor** – A person, firm or corporation having a contract with the Company for any part of the Work.

**Township** – The Township of Scugog, its successors and assigns.

**Work** – All labour, materials, products, articles, equipment, fixtures, services, supplies, and acts required to be done, furnished or performed by the Company, which are the subject of the Contract.

### B.3 TOWNSHIP CONTACT

The Township Contact for this Contract is Mr. Mike Donnelly, Technical Services Manager [fax (905) 985-9914, telephone (905) 985-7346 and email mdonnelly@scugog.ca]. From time to time, the Township Contact may designate an alternate.

### B.4 SUBMISSION OF BIDS

Bidders shall complete, in full, all blanks on **Part A – Bid Form** and return the completed form in a sealed envelope prior to the Closing Time and Date. The envelope shall only have the following label (or reasonable facsimile) affixed and no other marking:

Ms. Kim Coates, A.M.C.T.  
Clerk  
Township of Scugog  
181 Perry Street, P.O. Box 780  
Port Perry, ON L9L 1A7

CONTRACT NO. S2012-06 – SUPPLY AND DELIVERY OF TWO (2)  
TANDEM AXLE DUMP TRUCKS COMPLETE WITH PLOW AND SANDER  
EQUIPMENT

NAME OF BIDDER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Bids shall not be restricted or qualified by a statement added to **Part A – Bid Form** or by a covering letter, or by alterations to **Part A – Bid Form** supplied.

Bids shall be signed in ink by a designated signing officer of the Bidder. Joint Bids shall be signed and addressed by each Bidder.

Bids shall be legible, written in ink or typed. Erasures, over-writing or strikeouts shall be initialled by the person signing on behalf of the Bidder.

## **B.5 CLOSING TIME AND DATE**

Bids will be received by the Township Clerk at the above-noted address until **2:00 p.m. (local time) on Friday, February 24, 2012**. Bids received after the Closing Time and Date will not be considered and will be returned unopened.

## **B.6 CLARIFICATION AND ENQUIRY**

The Bidder shall be responsible to clarify any details in question before submitting its Bid. All official correspondence and questions regarding this Document shall be directed to the Township Contact. Inquiries must be received in writing by mail, fax or e-mail by **4:30 p.m. on Friday, February 17, 2012**.

The Township will issue any alterations to the Document as written addenda. The Proponent shall list all addenda considered in preparing the Bid on the **Part A – Bid Form**.

The Township will assume no responsibility for oral instruction or suggestion. Any information given, other than in writing, shall not in any way alter the Document. No officer, agent or employee of the Township is authorized to alter orally any part of this Document.

Should a dispute arise from the terms and conditions of any part of the Document or the Contract, regarding meaning, intent or ambiguity, the decision of the Township shall be final.

## **B.7 DELIVERY**

The Work described in the Contract shall be completed by the Company as soon as possible, and prior to the date guaranteed for delivery or completion after a Contract is received. The Company shall be responsible for arranging the Work so that delivery/completion shall be as specified in the Contract. Time shall be material and of the essence for the Contract.

A detailed delivery ticket or piece tally, showing the exact quantity of goods, materials, articles or equipment supplied, shall accompany each delivery. Receiving by any person shall not bind the Township to accept this Work, or the particulars of the delivery ticket or piece tally.

The completed Work shall be delivered F.O.B. freight pre-paid to the Township of Scugog Port Perry Depot, 1350 Reach Street, Port Perry, Ontario. If there is a freight or transportation increase prior to delivery, the additional cost shall be at the Company's expense. All equipment and accessories shall be mounted and operable at the time of delivery.

Prior to delivery, the machine and any attachments shall be serviced by the successful Bidder (dealer) in accordance with the manufacturer's standard new equipment "make-ready" recommendations (dealer pre-delivery inspection). Factory pre-delivery will not be acceptable.

## **B.8 SAMPLES**

Upon request, samples shall be submitted in accordance with instructions. Samples requested subsequent to the opening of Bids shall be delivered within three (3) working days following such request, unless additional time is granted by the Township. Samples shall be submitted free of charge and will be returned upon request at the Bidder's expense, provided they have not been destroyed by tests, or are not required for comparison purposes. Samples submitted shall be accompanied by current Material Safety Data Sheets (MSDS), where applicable.

The Township shall accept samples at its sole discretion and any such acceptance shall in no way be construed to imply relief of the Company from its obligations under the Contract.

## **B.9 SPECIFICATIONS AND ALTERNATIVES**

The purpose of the specifications in **Part A – Bid Form** is to indicate certain minimum requirements in terms of capacity, size, strength, construction and other details for the machine. The Company shall be responsible to deliver a fully equipped vehicle to provide dependable and efficient service.

Since manufacturers may change specifications from time to time, the Township reserves the right to accept minor deviations from the specifications herein, provided that the proposed Work meets or exceeds required performance, functionality and compatibility.

Throughout the product specifications defined in **Part A – Form of Bid**, where specific manufacturers' models/components/parts/accessories have

been identified without “or equivalent”, the Bidder shall supply these specified name brand products or the Bid may be rejected.

Where specific manufacturers’ models/components/parts/accessories have been identified as “or equivalent” in **Part A – Bid Form**, the Bidder(s) may propose alternative products. If an alternative is proposed, the Bidder shall submit a complete product specification of the proposed equivalent to the Township Contact at least five (5) working days prior to the Closing Time and Date. Should the Township require a product demonstration, product trial or additional supporting documentation in order to determine the acceptability of the proposed equivalent, the requesting Bidder(s) shall furnish the same by no later than three (3) working days of the Township’s request, otherwise, the proposed equivalent equipment will not be considered. Any opinion or decision regarding the use of a proposed alternative rendered by the Township shall be final.

Should the proposed equivalent be acceptable, an addendum will be issued to all Document takers advising of the addition of the alternative. The Closing Time and Date will be adjusted, if necessary, to allow additional time from the issuance of the addendum. Should the proposed equivalent be deemed unacceptable, the requesting Bidder(s) will be provided written notice by no later than two (2) working days prior to the Closing Time and Date.

## **B.10 PRICE**

Prices shall be stated on the **Part A – Bid Form**, quoted separately for each item identified, F.O.B. the delivery location specified in Section B.7, in Canadian Funds. Prices shall include all applicable duties, taxes, fees and charges attributable to the Work, with the exception of Harmonized Sales Tax (H.S.T.), which shall be noted separately. Prices shall not be subject to adjustment for any cost of the Work to the Company. Prices shall be firm for the duration of the Contract.

Payment shall be full compensation for all costs related to the Work, including operating and overhead costs to provide Work to the satisfaction of the Township. Prices shall include all incidental costs and the Company shall be deemed to be satisfied as to the full requirements of the Bid. No claims for extra Work will be entertained unless authorized in writing prior to commencement.

If the Bidder intends to manufacture or fabricate any part of the Work outside of Canada, it shall arrange its shipping procedures so that its agent or representative in Canada is the importer of record for customs purposes.

Should any additional tax, duty or any variation in any tax or duty imposed by the Government of Canada or the Province of Ontario become directly applicable to the Work subsequent to the submission of the Bid, and before the delivery of the Work covered by the Contract issued by the Township, an appropriate increase or decrease in the price of the Work shall be made to compensate for such changes as of the effective date thereof.

## **B.11 REFERENCES**

The Bidder shall provide, on applicable spaces in **Part A – Bid Form**, a minimum of two (2) references that have been supplied with similar Work as requested in this Document within the past five (5) years. The Township may disqualify Bidders, at its sole discretion, receiving adverse performance/service and/or quality ratings by references given or by other references contacted.

## **B.12 BID SECURITY**

No Bid security is required.

## **B.13 SURETY**

No surety is required.

## **B.14 WITHDRAWAL OF BID**

Bidders will be permitted to withdraw their Bids unopened after they have been deposited if such request is received in writing prior to the Closing Time and Date.

## **B.15 “NO BID”**

Invitees choosing not to Bid are requested to complete and return the **Part C – “No Bid” Form**. Completion of this form will assist the Township in determining the type of goods, services and/or projects firms are interested in bidding on in the future.

## **B.16 ACCEPTANCE OR REJECTION OF BIDS**

**The Township reserves the right to accept or reject any or all Bids in whole or in part, to waive minor irregularities or omissions, and to accept any bid considered in its best interests.** The lowest or any Bid may not necessarily be accepted.

The Bidder may be required to show, in terms of experience and facilities, evidence of its ability, as well as that of any proposed Subcontractor, to complete the Work within the specified timeframe. The Township reserves the right to reject any Bid where satisfactory evidence is not furnished.

More than one (1) Bid from an individual firm, partnership, corporation or association under the same or different names will not be considered.

Bids shall be irrevocable for 60 days after the Closing Time and Date.

The placing in the mail or delivery to the Bidder's shown address given in the Bid of a notice of award to a Bidder by the Township shall constitute notice of acceptance of Contract by the Township to the extent described in the notice of award.

## **B.17 AWARD OF CONTRACT**

The Township intends to award the Contract to the responsive and responsible Bidder whose Bid is most advantageous to the Township. Factors that will be considered in evaluating the Bids include:

- Price proposal in **Part A – Bid Form**;
- Conformity with the technical specifications in **Part A – Bid Form**;
- Delivery time;
- Fleet continuity and compatibility;
- Demonstrated ability of the Bidder and any proposed Subcontractors to complete the Work on time and in a satisfactory manner;
- Past performance and service reputation and capability of the Bidder and its staff and/or services;
- Past customer satisfaction and relationship with the Bidder and its staff and/or services; and
- Any other relevant criteria listed elsewhere in this Document.

The Township may opt to establish alternate selection criteria to protect its best interest or meet performance or operational standards.

The Township shall be the sole judge in evaluating the Bids and awarding the Contract. Contract award is subject to Township Council approval.

### **B.18 DISCLOSURE**

The price for the new machine will only be announced at the public opening. After opening the Bids, the Township will only accept written requests for the results.

### **B.19 CONTRACT**

This Document forms part of the Contract. The Contract and portions thereof take precedence in the order in which they are named, notwithstanding the chronological order in which they are issued or executed.

The intent of the Contract is that the Company shall supply Work that is fit, suitable and complete for the Township's intended use.

None of the conditions contained in the Bidder's (seller's) standard or general (printed) conditions of sale shall be of any effect unless explicitly agreed to by the Township and specified in the Contract.

### **B.20 TERMS OF PAYMENT**

Payment terms shall be net 30 days after delivery, pursuant to receipt of the Company's invoice, fulfillment of the Contract requirements and acceptance of the Work.

Payments made, including final payment, shall not relieve the Company from its obligations or liabilities under the Contract. Acceptance by the Company of the final payment shall constitute a waiver of claims by the Company against the Township, except those previously made in writing in accordance with the Contract and still unsettled. The Township reserves the right to withhold from any amount otherwise payable to the Company sufficient monies to remedy any defect or deficiency in the Work pending its correction.

## **B.21 UNPAID ACCOUNTS**

The Company shall indemnify the Township from all claims arising out of unpaid accounts relating to the Work. The Township shall have the right at any time to require satisfactory evidence that the Work in respect of which any payment has been made or is to be made by the Township is free and clear of all liens, attachments, claims, demands, charges or other encumbrances.

## **B.22 PATENTS AND COPYRIGHTS**

The Company shall, at its expense, defend all claims, actions or proceedings against the Township based on any allegations that the Work or any part thereof constitutes an infringement of any patent, copyright or other proprietary right. The Company shall pay to the Township all costs, damages, charges and expenses, including its lawyers' fees on a solicitor and his own client basis, incurred for this purpose.

The Company shall pay all royalties and patent license fees required for the Work.

If the Work or any part thereof is in any action or proceeding held to constitute an infringement, the Company shall forthwith either secure for the Township the right to continue using the Work or shall at the Company's expense, replace the infringing items with non-infringing Work or modify them so that the Work no longer infringes.

## **B.23 ASSIGNMENT AND SUBCONTRACTING**

The Company shall not assign or subcontract the Contract or any portion thereof without the prior written consent of the Township.

## **B.24 WORKPLACE SAFETY AND INSURANCE BOARD**

All of the Company's personnel must be covered by the insurance plan under the *Workplace Safety and Insurance Act, 1997*. Upon request by the Township, an original Letter of Good Standing from the Workplace Safety and Insurance Board (the Board) shall be provided prior to the commencement of Work indicating that all payments by the Company to the Board have been made. Prior to final payment, a Certificate of Clearance must be issued, if requested, indicating all payments by the Company to the Board in conjunction with the subject Contract have been made and that

the Township will not be liable to the Board for future payments in connection with the Company's fulfilment of the Contract. The Company shall provide further Certificates of Clearance or other types of certificates upon request.

## **B.25 INSURANCE**

The Company shall maintain and pay for Comprehensive General Liability insurance including premises and all operations. This insurance coverage shall be subject to limits of not less than \$5,000,000.00 inclusive per occurrence for Third Party Bodily Injury and Property Damage or such other coverage or amount as may be requested.

The policy shall include the Township as an additional named insured in respect of all operations performed by or on behalf of the Company. A certified copy of such policy or certificate shall be provided to the Township prior to commencement of the Work, if requested. The Company shall provide further certified copies upon request.

## **B.26 LIABILITY**

The Company agrees to defend, fully indemnify and save harmless the Township from all actions, suits, claims, demands, losses, costs, charges and expenses whatsoever for all damage or injury including death to any person and all damage to any property which may arise directly or indirectly by reason of a requirement of the Contract, save and except for damage caused by the negligence of the Township or its employees.

The Company agrees to defend, fully indemnify and save harmless the Township from any and all charges, fines, penalties and costs that may be incurred or paid by the Township if the Township or any of its employees are made a party to any charge under the *Occupational Health and Safety Act* in relation to any violation of the Act arising out of this Contract.

## **B.27 SAFETY**

The Company shall be responsible for being aware of all governing regulations related to employee health and safety, including the Township's Health and Safety Policy and Procedures (copy available upon request). The Company shall keep employees and Subcontractors informed of such regulations.

## **B.28 CHANGES IN THE WORK**

**The Township reserves the right to make changes to the Work without invalidating the Contract.** When a change causes an increase or decrease in the Work, the Contract amount shall be increased or decreased by the application of unit prices to the quantum of such increase or decrease, or in the absence of applicable unit prices, by an amount agreed upon between the Township and the Company. All such changes shall be in writing and approved by the Township before initiating the change in Work.

## **B.29 CORRECTION OF DEFICIENCIES**

The Work shall be subject to inspection and approval by the Township prior to acceptance. The Township will inspect the Work prior to or when delivered to determine if it has been supplied and delivered in accordance with the specifications of the Document. If deficiencies exist, the Township reserves the right to:

- Direct the Company to immediately correct deficiencies or replace the Work provided at no additional cost to the Township;
- Failing immediate action by the Company, correct the deficiencies and deduct from payment to the Company the total costs incurred; or
- Cancel the Contract where, in the opinion of the Township, it has been determined that the deficiencies are substantial and cannot be remedied through repairs or modifications to the Work supplied.

The Township will not accept any Work showing a lack of proper pre-delivery service. No invoice will be processed for payment until the Work passes safety inspection.

## **B.30 SUSPENSION OF WORK**

The Township reserves the right to suspend performance of the Work for such reasonable period of time as the Township determines is necessary and notifies the Company. Save to the extent any such suspension arises from default by the Company, the Township shall pay to the Company the reasonable extra expenses incurred by the Company arising from the suspension, provided that in no event will the Township be liable to the Company for loss of profit, interest lost or any other damages or loss

occasioned to the Company by reason of any such Work suspension. Such extra expenses shall be supported by audit, if necessary, carried out by auditors acceptable to the Township, prior to payment.

The resumption and completion of the Work after the suspension shall be governed by a schedule established by the Township.

### **B.31 CONTRACT CANCELLATION**

The Township reserves the right to cancel any uncompleted or unperformed portion of the Work or part thereof. In the event of such cancellation, the Township and the Company may negotiate a settlement. The Township shall not be liable to the Company for loss of anticipated profit on the cancelled portion(s) of the Work.

### **B.32 DEFAULT BY COMPANY**

The Township may, without notice, terminate the Contract if:

- The Company commits any act of bankruptcy;
- A receiver is appointed on account of insolvency or in respect of any of property of the Company; or
- The Company makes a general assignment for the benefit of its creditors.

The Township may, upon expiration of ten (10) days from the date of written notice to the Company, terminate the Contract for default if the Company:

- Fails to comply with any request, instruction or order of the Township;
- Fails to pay its accounts;
- Fails to comply with or persistently disregards statutes, regulations, by-laws or directives of relevant authorities relating to the Work;
- Fails to carry out the Work with skill and diligence;
- Assigns or sublets the Contract or any portion thereof without the Township's prior written consent;
- Refuses to correct defective Work; or
- Is otherwise in default in carrying out its part of any of the terms, conditions and obligations of the Contract.

Any termination of the Contract by the Township shall be without prejudice to any other rights or remedies the Township may have.

If the Township terminates the Contract, it is entitled to:

- Take possession of all Work in progress, materials and construction equipment then at the project site (at no additional charge for the retention or use of the construction equipment), and finish the Work by whatever means the Township may deem appropriate under the circumstances;
- Withhold any further payments to the Company until the Work is completed to the Township's satisfaction and the expiry of all obligations under Section B.29; and
- Recover from the Company any loss, damage and expense incurred by the Township by reason of the Company's default (which may be deducted from any monies due or becoming due to the Company, less any balance to be paid by the Company to the Township).

### **B.33 LAWS AND REGULATIONS**

Bids will be called, received, evaluated, accepted and processed in accordance with the Township's Procurement By-law No. 122-07. By submitting a Bid to complete this Work, the Bidder agrees to be bound by the terms and conditions of this by-law and any amendments thereto.

The Company shall comply with relevant Federal, Provincial and Municipal statutes, regulations and by-laws pertaining to the Work and its completion. The Company shall be responsible for ensuring similar compliance by its suppliers and Subcontractors.

The Contract shall be governed by and interpreted in accordance with the laws of the Province of Ontario.

### **B.34 MUNICIPAL FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT (MFIPPA)**

All correspondence, documentation, and information provided shall become the property of the Township, and as such, is subject to the *Municipal Freedom of Information and Protection of Privacy Act*, and may be subject to release pursuant to the Act.

### **B.35 COSTS**

The Township shall not be liable for any costs, expenses, loss or damage incurred, sustained or suffered by any Bidder, prior or subsequent to, or by reason of, the acceptance or non-acceptance by the Township of any Bid, or cancellation of the procurement process.

### **B.36 IRREGULARITIES**

The following irregularities will be dealt with as specified below:

<b>Irregularity</b>	<b>Response</b>
Late Bids	Bid will not be accepted and will be returned unopened
Envelope not sealed, properly identified or has other marking affixed	Bid will not be accepted
Bids not completed in ink or typed	Automatic rejection
Original ink signature missing from signature page	Automatic rejection
Bids qualified or restricted by an attached or added statement	Automatic rejection
Bids received on forms other than those provided in the request	Automatic rejection
Part Bids (all items not Bid)	Automatic rejection
Bids containing minor clerical errors	Two (2) working days to correct and initial errors. The Township reserves the right to waive initialling and accept Bid.
Bids with minor uninitialled changes (e.g. Bidder's address is amended by over-writing but not initialled)	Two (2) working days to initial changes. The Township reserves the right to waive initialling and accept Bid.
Unit prices have been changed but not initialled	Two (2) working days to initial changes. The Township reserves the right to waive initialling and accept Bid.

Irregularity	Response
Other mathematical errors which are not consistent with unit prices	Two (2) working days to initial corrections as made by the Township. Unit prices shall govern and the Bid will be corrected accordingly. The Township reserves the right to waive initialling and accept Bid as corrected.
Failure to return the documents as specified	Automatic rejection where complete documents specified
Isolated pages are missing	Two (2) working days to supply the missing pages where in the opinion of the Township the missing page(s) would not directly affect the Bid submitted. The Township reserves the right to waive the extra pages and accept the Bid, or to reject the Bid outright.
Bids with major mistakes in calculations	Decision on a case by case basis
Withdrawal of Bids	Request received after the Closing Time and Date not allowed
Tie Bids	<p>The Township may, depending on the situation:</p> <ul style="list-style-type: none"> <li>• Use a coin toss to select a recommended Bid;</li> <li>• Request the tied Bidders to submit new Bids; or</li> <li>• Negotiate with the tied Bidders to break the tie.</li> </ul>

**PART C - "NO BID" FORM**

**CONTRACT NO. S2012-06 FOR SUPPLY AND DELIVERY OF TWO (2)  
TANDEM AXLE DUMP TRUCKS COMPLETE WITH PLOW AND  
SANDER EQUIPMENT**

NAME OF FIRM: \_\_\_\_\_

**INSTRUCTIONS**

Please complete and return this form if you are unable or do not wish to submit a Bid on this Contract. State your reason for not submitting by marking "yes" or "no" in the applicable line or by explaining briefly in the space provided. It is not necessary to return any other documents. Just return this completed form in a sealed envelope prior to the Closing Date and Time.

- |   | Yes/No |
|---|--------|
| 1. We do not manufacture/supply this commodity                            | _____  |
| 2. We do not manufacture/supply to this specification                     | _____  |
| 3. Unable to quote competitively  | _____  |
| 4. Cannot handle due to present plant loading                             | _____  |
| 5. Quantity/job too large   | _____  |
| 6. Quantity/job too small   | _____  |
| 7. Cannot meet delivery/completion requirements                           | _____  |
| 8. Agreements with distributors/dealers do not permit us to sell directly | _____  |
| 9. Licensing restrictions   | _____  |

Other reasons or additional comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Do you wish to bid on these goods/services in the future? Yes/No