



TENDER 2011-15

**SUPPLY OF ONE (1) NEW SINGLE AXLE TRUCK,
CAB & CHASSIS with DUMP BODY, SNOWPLOW & WING**

Viewing Purposes Only - Documents are available at 66 Charlotte Street

Tenders will be received until Tuesday March 22, 2011 at 2pm. Interested parties may submit it to: City of Port Colborne City Hall, Clerks Office, 66 Charlotte Street, Port Colborne, Ontario, L3K 3C8. **Attention:** Ashley Grigg, City Clerk. Inquiries prior to deadline shall be directed to Paul Peyton, Superintendent of Public Works and Parks, **City of Port Colborne. Tel: (905) 835-8888 or**

Fax: (905) 835-6800. Tenders shall be opened Tuesday, March 22, 2011 at 2:15pm, 2nd Floor Engineering, Al Disanto Room, City Hall.

Introduction

The Corporation of the City of Port Colborne is inviting Quotations for the supply and delivery of **Supply of One (1) New Single Axle Truck, Cab & Chassis with Dump Body, Snowplow & Wing for Public Works, Utilities Division of the City of Port Colborne.**

Sealed bids, on the prescribed Form of Tender, will be received by the Clerk's Office or his/her representative, at City Hall, 66 Charlotte St, Port Colborne, Ontario, L3K 3C8 no later than **2:00 p.m.** local time, **Tuesday, March 22, 2011.** Tender bids received after this time will be returned unopened.

Tender bids will be opened at **2:15 p.m.** local time, **Tuesday, March 22, 2011 in the Al Disanto Room, 2nd Floor Engineering, City Hall, Port Colborne.**

Any document submitted with respect to this Tender will be subject to The Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M56, as amended from time to time.

Viewing Purposes Only - Documents are available at 66 Charlotte Street

Information and Instructions

Form of Tender

Tender bids must be submitted on the attached Form of Tender and **enclosed in a sealed envelope supplied by the Bidder**. The bid must be legible, written in ink or typewritten. Any form of erasure, strikeout or over-writing must be initialed by the Bidder's authorized signing officer.

All unit prices must be clearly indicated and all extensions written in figures. The bid must not be restricted by a statement added to the Form of Tender or by covering letter, or by alterations to the Form of Tender as supplied by the City of Port Colborne unless otherwise provided herein. Bidders will be allowed to attach descriptive literature with the sole purpose of amplifying the bid.

The Form of Tender must be signed in the spaces provided on the form, with the signature of the bidder or responsible official of the firm bidding. **If a joint bid is submitted, it must be signed and addressed on behalf of each of the bidders.**

Submission of Tenders

Submissions shall not be made by e-mail or facsimile. Adjustment by e-mail, facsimile, letter or otherwise to a Tender bid already submitted is not permitted.

A bidder will be permitted to withdraw his/her Tender bid unopened after it has been deposited, if such request is received in writing by the City Clerk prior to the time specified for the opening of Tenders.

More than one Tender bid from an individual firm, partnership, corporation, or association under the same or different names will be considered. Within a Tender bid submission, bidders may bid on one or more models providing they all meet or exceed the specifications.

Collusion between Bidders will be sufficient cause for rejection of all Tender bids so affected.

Clarification, Omissions, Discrepancies

It will be the bidder's responsibility to clarify any details in question before submitting his bid.

Bidders finding discrepancies or omissions in the specifications or other documents or having any doubts concerning the meaning or intent of any part thereof should immediately request clarification from the Public Works Superintendent. Written instructions or explanations will then be sent to all bidders in the form of addenda to the Tender documents.

Bidders may inquire into and clarify any requirements of this Tender.

Responses, if not already addressed in the Tender, will be addressed in the form of addendum, if required. No oral interpretations will be effective to modify any provisions of the Tender.

Errors and Corrections

City staff may clarify any aspect of a Tender submission with the Bidder at any time after the Tender has been opened. Any such clarification will not alter the Tender and will not be constituted as a negotiation or renegotiation of the Tender.

The Corporation of the City of Port Colborne is not required to clarify any part of a Tender. Any clarification of a Tender by a bidder shall not be effective until confirmation has been delivered in writing.

Unit prices will govern and the City of Port Colborne will make all necessary corrections to any Tender which is in error through addition or extensions; the correct value prevailing.

Pricing and Terms of Payment

Prices must be in Canadian Funds, quoted separately for each item stipulated.

All prices are to be F.O.B. delivered, City Hall, 66 Charlotte Street, Port Colborne, Ontario. **Attention:** City Clerk, City of Port Colborne.

All prices Tendered are to be net and to be firm until delivery of the unit(s).

All prices Tendered are to show the 13% Harmonized Sales Tax extra unless it is noted on the Form of Tender that a unit is exempt.

Evaluation of Submissions

Intent of Specifications

It is the intent of the attached specifications to describe specific details of vehicles or equipment required against this Tender. It is the responsibility of the successful bidder to supply any equipment not described in the specifications but necessary for the satisfactory operation of the units. Any alterations or deletions to the specifications as provided will be costed and added to the bid prices prior to ranking.

The apparent silence or omission in the specifications as to any detail of the work to be done or materials to be furnished means that the best general practice shall prevail, and that material and workmanship of the best quality shall be used. The specifications shall be interpreted on this basis.

The equipment offered will be evaluated based on the following criteria:

- Ability to meet operational needs of the City of Port Colborne, Public Works
- Purchase cost
- Timely delivery of unit
- Municipal references for unit offered

- Yearly operating maintenance costs
- Parts and service availability
- Relevant documentation and information that highlight the equipment.

Demonstrations

The bidder may be required to provide a formal demonstration of the product/equipment to ensure that the product/equipment offered meets with the needs of the Corporation.

Disputes

In cases of dispute as to whether or not an item tendered or delivered meets specifications, the decision of the Superintendent, Public Works & Parks shall be final and binding on both parties.

Improper Bids

Bids which are incomplete, conditional or obscure, or which contain erasures, alterations, or additions not called for, or irregularities of any kind, may be rejected as improper. The City of Port Colborne reserves the right to waive irregularities according to provisions in the City's Procurement Policy.

Right of City of Accept or Reject Tenders

The City of Port Colborne reserves the right to accept or reject any or all Tenders for any reason whatever, and to accept any Tenders if considered to be in the best interest of and for the best value to the City of Port Colborne. The lowest or any Tender will not necessarily be accepted. Criteria including recognized environmental initiative awards (green energy) and best overall value, other than price alone may be considered when evaluating Tenders.

Should qualified bid submissions exceed the City of Port Colborne budget provisions for this Tender the City of Port Colborne reserves the right to reject or recall the Tender.

Should the City receive only one (1) qualified and duly executed bid submission on commodities/services that have known multiple source potential, the right is reserved to recall the competition.

Acceptance of Award

This Tender submission is irrevocable and open for acceptance by the Corporation of the City of Port Colborne until sixty (60) days after the closing date of this Tender.

Award of this Tender may be subject to the City of Port Colborne Council approval.

No announcement concerning the successful bidder will be made until a complete report is prepared by the Public Works Superintendent (or designate) and approved by City Council (if necessary).

The successful bidder agrees to be bound by the terms and conditions of this Tender document.

The Tender form and Tender submitted become part of the contract document. The successful bidder must accept a Purchase Order of Contract from the City of Port Colborne which will supersede all other contracts.

Supply of any vehicle or equipment by the successful bidder that does not conform to the completed Tender document as accepted by the City from the bidder or failure to deliver any item shall be just cause for the City to take appropriate action to provide satisfactory remedy.

The successful bidder will not, without the written consent of the City of Port Colborne, make any assignment or any sub contract for the execution of any product hereby quoted.

Consideration of Demonstrator Unit

The City will **not** consider an existing vehicle or equipment for this Tender.

Stated Delivery Time and Dates

Delivery dates must be stated on the Form of Tender. By specifying dates, the successful bidder agrees to be bound by those dates. Failure to meet stated delivery time(s) by the successful bidder shall be just cause for the City to take appropriate action that shall be in the best interest of the City.

The City shall exercise due diligence and fairness in seeking any remedy and shall take into consideration such factors as delays by the manufacturer and shortages of parts. However, notwithstanding these circumstances, the order may be cancelled at the option of, and without recourse to, the City of Port Colborne.

Pending full and satisfactory supply of all items described in this Tender, a hold back of the value of said deficiencies will be exercised. Failure to comply with all terms specifications, requirement, conditions and general provision of this Tender, to the satisfaction of the City of Port Colborne shall be just cause for the cancellation of the contract award. The City of Port Colborne shall then have the right to award this contract to any other bidder or to re-issue the Tender. The City of Port Colborne shall assess against the Bidder, any damages whatsoever as a result of the failure to perform.

Specifications and Bid Requirements

The City is inviting Tenders for **Supply of One (1) New Single Axle Truck, Cab & Chassis with Dump Body, Snow Plow & Wing** as described in the Form of Tender. It is the intent of the attached specifications to describe specific details of vehicle(s) required in this Tender.

It is the responsibility of the successful Bidder to supply any part or accessory not described in the specification but supplied as the manufacturer's standard equipment. All vehicles shall be delivered with all accessories installed and operating.

The specification included herein describes the type, size, design and construction of equipment which is felt necessary to meet the performance and service requirements of the City. Bidders desiring to quote on equipment which deviates from these specifications but which they believe to be equivalent, both as to individual component parts and the completely assemble units, are required to submit alternative bids on the equipment which so deviates.

The attached specification/confirmation pages form part of this Tender and must be completed and returned with the Forms of Tender. Where capacities, rating, dimensions, etc are requested, bidders must provide appropriate specific information. In all other areas, bidders must confirm "Yes" or "No".

The vehicle shall be new. All parts and all replacement parts thereof are to be **new only (not remanufactured), never used and of the latest manufacture.** Any reference to trade name or manufacturer in the specifications is for the sole purpose of designating a standard of quality or type.

Bidders are required to enclose descriptive literature with their proposal.

Safety Requirements

The vehicle supplied must meet the provisions of the Canada Motor Vehicle Safety Act and the regulations made there under, which are in effect on the date of manufacture of each vehicle. Safety stickers are required on Commercial Vehicles with a minimum GVW 4,500 Kg as required by regulations as of January, 1994.

All vehicle engines must operate to specifications and be equipped with pollution emissions controls as required by law in the Province of Ontario.

Warranty Requirements

Bidders must submit a copy of the manufacturer's standard warranty for the vehicles quoted, with the completed specification/confirmation pages and Forms of Tender.

Bidders are requested to also include details and cost of any extended warranties available on major power train components.

General Requirements

Complete descriptive literature along with engineering data and specifications covering all units bid shall be submitted with the Form of Tender. Complete shop service and repair manuals together with driver manual will be supplied for each unit supplied.

In the event that these manuals are not supplied, the City of Port Colborne will hold back \$500.00 per model pending receipt of said manuals.

All vehicle(s) quoted and supplied must have ethylene glycol anti-freeze with rust inhibitor testing a minimum of minus 35 degrees Celsius installed in the radiators.

All vehicle(s) are to be supplied painted, except where otherwise stated, a finish coat of the **manufacturer's standard white.**

A line setting ticket and/or vehicle specification sheet shall be supplied indicating component sizes, capacities, ratios, etc.

Suitable space must be available for the installation of mobile radio equipment by the City.

The space must be located such that it does not interfere with the driver space or servicing of the vehicle. It cannot be installed in the cargo space.

Form of Tender

I/We the undersigned having carefully examined the General Conditions, specifications and Form of Tender, do hereby offer and agree to supply the Motor Vehicle described herein as follows:

Supply of One (1) New Single Axle Truck, Cab & Chassis with Dump Body, Snowplow & Wing

Manufacture's Make: _____

Manufacture's Model: _____

Model Year: _____

List Price for Complete Unit: \$ _____

Less Fleet Discount: \$ _____

13% H.S.T.: \$ _____

TOTAL DELIVERED PRICE: \$ _____

****ALL PRICES TO REMAIN FIRM FOR A MINIMUM OF SIXTY (60) DAYS**

Delivery in Days from notification of award: _____

For each vehicle the following manuals are included: **Parts, Operations, Maintenance and Warranty**

TENDER SUBMITTED BY:

(Company Name)

Name and Title:

Signature: _____

Address: _____ City: _____

Telephone: _____ Fax: _____

Postal Code: _____ E-Mail _____

Specifications

In comparing tender submittals, consideration will not be confined to price only. The successful bidder will be one whose product is judged shall best serve the interests of the Municipality when price, product, safety, quality and delivery are considered. The City of Port Colborne reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A contract will be awarded to the bidder submitting the lowest responsible bid meeting the requirements of this specification.

Item	Specifications	Conform	
		YES	NO
CAB & CHASSIS GENERAL SPECIFICATIONS	The unit shall be a new 2012 model with all standard equipment plus all other equipment outlined in this specification if not standard		
MAKE & MODEL	GMC Topkick <u>not acceptable</u> Conventional Cab Set Back Front Axle Chassis Make- _____ Model- _____		
	Chassis shall be suitable for installation and operation of a front mounted plow harness snow plow wing and dump body specified in this tender document and utilize huck bolt round collar chassis fasteners		
	Air tanks, air dryer, fuel tanks and oil coolers must be located in a position to avoid interference wing harness		
VEHICLE WEIGHT AND DIMENSIONS	GVWR 43,000 lb. Chassis Weight 8500 Lb. Minimum C.A. 108" clear and usable Appropriate label will be attached to the vehicle confirming the front and rear G.A.W.R., tire and rim sizes		
FRONT AXLE	Minimum Capacity-20,000 lb. Specify: _____ Axle shall be SET BACK and supplied with all component parts compatible with each other for the maximum capacity stated.		

Item	Specifications	Conform	
		YES	NO
	Dual power steering boxes shall be provided		
FRAME	<p>The frame shall have a minimum resisting bending moment of 3,800,000 inch lbs. And a minimum section modulus of 31.72 in³</p> <p>Full "C" channel reinforced frame, 120,000 psi. heat treated alloy steel, yield strength</p> <p>Specify: R.B.M. _____</p> <p>Yield Strength _____</p> <p>Reinforcement Size _____</p> <p>S.M. _____</p>		
	<p>Frame Size 10.125" x 3.580" x 0.312" min.</p> <p>Specify: Frame Size _____</p>		
	<p>Frames under the forgoing noted size shall be of standard manufacturers design with reinforcement to meet the above specifications. Reinforcement shall be complete from end to end of main rail.</p>		
	<p>After frame shall be 65" minimum</p>		
	<p>Full integral front frame extensions minimum 12" suitable for installation of the front snow plow harness and operation of the snow plow equipment</p>		
SPRINGS	<p>Front: Multi-leaf 9072 Kg. (20,000 Lbs.) minimum capacity complete with shock absorbers</p> <p>Specify: _____ lbs.</p>		
	<p>Rear: Multi-leaf 10,432 Kg. (23,000 lbs)</p> <p>Specify: _____ lbs.</p>		
	<p>Auxiliary rear springs 4,500 lbs. each minimum</p> <p>Specify: _____ lbs.</p>		
WHEELS, TIRES, AND RIMS	<p>Hub piloted steel disc front and rear wheels with "wheel guard" separators installed between wheels and hubs</p>		
	<p>Front wheels 22.5" x 12.25" powder coated white, steel, hub piloted with steel hubs</p>		

Item	Specifications	Conform	
		YES	NO
	Rear wheels 22.5" x 8.25" powder coated white, steel, hub piloted with steel hubs		
	One spare front wheel and tire and one spare rear wheel and tire to be supplied. Spare tires to match original equipment supplied		
	Front Tires: 425/65R22.5-20 ply Goodyear G296 or Michelin equivalent tubeless radial tire Specify _____		
	Rear Tires: 11R22.5-16 ply Goodyear G622 RTD or Michelin equivalent tubeless radial tire Specify _____		
ENGINE	Electronic 4 cycle diesel, turbocharged, 2010 EPA compliant, totally rebuildable, wet sleeve design engine Specify: Make: _____ Model: _____ Gross H.P.-285HP @ 2200 RPM Specify: _____ Gross H.P.		
	Net Torque 860 lbs/ft. @ 1300 RPM Minimum Specify: Net Torque: _____ lbs/ft. @ _____ rpm		
	Maximum engine speed shall be 2600 rpm		
	Audible warning device and jeweled red light for high water temperature (max. 228F) and low oil pressure (12 lbs. psi minimum) (automatic engine shut down <u>NOT acceptable</u>)		
	Air cleaner, dual dry type with cab controlled closure valve on air intake for inside/outside winter/summer operation with dash mounted air restriction gauge		
	Heavy duty fuel/water separator		
	Magnetic drain plug		
	Engine block heater(s) compatible to engine size- capacity 1250 watts minimum		
	Single horizontal after treatment device frame mounted outside right rail under cab with vertical tailpipe and guard, after treatment device not to extend beyond back of cab, routed to avoid interference with wing tower installation and 12' wing supplied		
	2 position switch for exhaust, lighted and latching on/off type mounted in IP , inhibits DPF regeneration as long as switch is ON position		
	Provision for front mount hydraulic pump installation including crankshaft		

Item	Specifications	Conform	
		YES	NO
	adapter and clearance for driveshaft with <u>NO MODIFICATIONS</u> to radiator		
	Heavy duty radiator with de-aeration tank and non removable bug screen mounted behind grille		
	Permanent type ethylene glycol pre-charged heavy duty antifreeze -40C minimum		
	Radiator shall not have opening for PTO shaft		
TRANSMISSION	Allison 3500 RDS-P 6 speed automatic with dash mounted push button type transmission shift control with PTO provision and vehicle interface wiring		
	Transmission fluid shall be synthetic fluid		
	5 year, unlimited kilometers transmission warranty		
	Dash mounted transmission oil temperature gauge		
	Type of transmission cooler. Specify: _____		
REAR AXLE	<p>23,000 lb. single speed Meritor RS 23-160 or Dana-Spicer equivalent with driver controlled main locking differential and magnetic drain plug. Gear ratio to optimize the grade ability and performance under plowing applications with maximum GVWR loading</p> <p>Specify: Make: _____ Model: _____ Ratio: _____</p>		
	<p>Theoretical speed must not exceed 90km/h with specified equipment</p> <p>Specify: _____ km/h</p>		
	Full floating axles		
	Rear shock absorbers		
BRAKES	<p>Service Brakes: Dual air system shall be supplied with ABS antilock brake system</p>		
	<p>Front Brakes: Drum type 16.5" x 6"</p> <p>Specify: _____</p>		
	<p>Rear Brakes: Drum type 16.5" x 7"</p> <p>Specify: _____</p>		

Item	Specifications	Conform	
		YES	NO
	Front and rear brakes shall be "S" cam type. Wedge type <u>NOT</u> acceptable		
	Parking Brakes: Positive rear wheel spring loaded parking break, air reservoir and instrument panel control switch shall be supplied		
	Haldex 30/30 rear brake chambers		
	An audible signal and red light low air pressure indicator shall be supplied		
	Electric horn will sound in a repetitive manner when vehicle park brake is not set with ignition off and any door is opened		
	A manual moisture ejector with pull chain shall be supplied on primary and secondary tanks		
	A Bendix Westinghouse air dryer shall be supplied as an integral part of the air brake system		
	The air compressor shall be 13.2 CFM capacity		
	Dust shields front and rear shall be supplied		
ELECTRICAL	A 12 volt electrical system shall be provided.		
	Combined battery capacity shall be 2775 CCA minimum Specify Combined battery capacity: _____ CCA		
	Battery shall be located under cab passenger side		
	Bosch alternator 185 amp minimum with higher current output at lower engine speed, with pad mounting Specify Amperage: _____		
	Manual reset circuit breakers shall be supplied for the electrical distribution system; main panel SAE type III with trip indicators, replaces all fuses except 5 amp fuses		
	Provisions for spreader control interface		
	Chassis shall be supplied with fully multiplexed wiring supplying power to two (2) remote power modules mounted behind the drivers seat in cab		
CAB EQUIPMENT	Conventional cab with the following equipment is required		
	Self leveling air ride cab		
	Driver and passenger seat shall be high back air suspended, dark cloth upholstery with adjustable lumbar support and arm rests. National 2000 series		
	Power windows and door locks		
	Rubber floor mat		

Item	Specifications	Conform	
		YES	NO
	Horns, dual air		
	All glass shall be tinted		
	Tilt steering column only		
	Non adjustable suspended brake and accelerator pedals		
	O.E.M. installed harness complete with separate switch for front mounted plow lights		
	AM/FM Weatherband stereo radio complete with clock		
	Reversing Camera, minimum 7" Colour monitor		
	Wiring provisions, 12 volt capable of 15amps, for two way radio at centre overhead console, switched with ignition key		
	Audible back up alarm to automatically activate when vehicle is in reverse gear, 77-102 DB		
	Sun visors left and right		
	Heater, fresh air type with defroster		
	Air conditioning		
	Test exterior lamps, pre-trip inspection will cycle all exterior lamps except back up lamps, dash mounted switch		
	Windshield wipers, cowl mounted 2 speed electric with intermittent feature and winter blades		
	Windshield wiper speed control (force wipers to slowest intermittent speed when park brake is set & wipers left on for a pre-determined time)		
	Headlights will automatically turn on if wipers are turned on		
	Outside mirrors, approx. 16" x 7" breakaway type with 102" wide spacing and integral convex mirrors, all heated heads thermostatically controlled with L.E.D. clearance lights		
	Cab-mounted grab handles left exterior		
	Cab-mounted grab handles right and left interior		
	Slip resistant steps		
	Cowl Tray Lid		
	Front fender extensions rubber		

Item	Specifications	Conform	
		YES	NO
INSTRUMENT PANEL	The following instrumentation is required: rheostat controlled illumination		
	Fuel gauge to operate on all fuel tanks supplied		
	Coolant temperature gauge		
	Oil pressure gauge		
	Dash mounted air filter restriction gauge		
	Speedometer		
	Tachometer		
	Engine hour meter		
	NOTE: gauges are required, warning lights are not acceptable		
CHASSIS EQUIPMENT	The following chassis equipment is required		
	Left side under cab mounted aluminum 70 U.S.gal. minimum "d" type fuel tank shall not interfere with any plow components by extending beyond the back of cab Specify: Tank location: _____		
	Frame rails to be clear of equipment which could interfere with the mounting of a right side snow wing tower		
	Tilt fiberglass hood complete with stationary grille and butterfly access hatch for servicing		
	NOTE: Front bumper is not required		
LIGHTING	All lighting shall conform to Ontario Highway Traffic Act Standards and shall include the following:		
	Sealed beam headlights		
	Parking lights		
	Two (2) front facing directional lights		
	Two (2) LED combination tail/stop/directional lights mounted on rear of frame		
	Five (5) LED roof-mounted amber identification lights facing forward		

Item	Specifications	Conform	
		YES	NO
	Four-way flasher control for hazard markers		
	NOTE: All auxiliary lighting shall be provided with separate circuits, switches and circuit breakers		
PAINT	Outside of cab shall be manufacturer's standard white		
MISCELLANEOUS	Permanent type antifreeze protecting to -40C minimum		
	Signed manufacturer's warranty shall be supplied		
	The following manuals shall be supplied, one (1) per vehicle on disc		
	<p>All service and repair manuals covering body and chassis, fuel (EFI), electrical wiring, and power train</p> <p><u>Please List Publications</u></p> <p>_____</p> <p>_____</p> <p>_____</p>		
	Auto greasing system – Groeneveld or approved equivalent		
WARRANTY	Cab & Chassis warranty to be 2 years unlimited kilometers minimum Specify: _____		
	Engine warranty Specify: _____		
	Transmission warranty, 5 years unlimited kilometers minimum Specify: _____		
	Delivery date of the completed chassis/cab to the O.E.M. of the dump body will be _____ days from the receipt of a purchase order		
<u>SNOW CONTROL EQUIPMENT</u> GENERAL SPECIFICATIONS	The snow control equipment supplied under this specification shall be the manufacturer's latest model standard commercial product and shall have demonstrated industry acceptance by having been manufactured and sold in significant numbers to Ontario Municipalities, and shall have been proven in service for the application for at least one year prior to issuing of this tender document		
DEMONSTRATION	A demonstration of equipment bid may be required, if requested it will be the responsibility of the bidder to arrange this demonstration at the Municipalities		

Item	Specifications	Conform	
		YES	NO
	location within 5 working days of written notification, all equipment demonstrated will be the exact models offered by the bidder on this tender document.		
REFERENCES	Where references are requested in this tender document the information must be completed in full and all references supplied are to be for the models of equipment offered by the bidder in the answered specification.		
INSTALLATION	<p>The company that shall install the snow control equipment on to the truck chassis shall be currently actively engaged in the business of snow & ice control equipment installations and shall provide proof of demonstrated ability by providing the following information</p> <p>Specify:</p> <p>Registered National Safety Mark Number of Equipment Installer: _____</p> <p>Name & Address of Equipment Installer: _____ _____ _____</p> <p>List the last 5 installations completed for Ontario Municipality's, provide name of municipality, contact name & phone number</p> <p>1) _____ _____ _____</p> <p>2) _____ _____ _____</p> <p>3) _____ _____ _____</p>		

Viewing Purposes Only - Documents are available at 66 Charlotte Street

Item	Specifications	Conform	
		YES	NO
	<p>_____</p> <p>4) _____</p> <p>_____</p> <p>_____</p> <p>5) _____</p> <p>_____</p> <p>_____</p>		
REQUIREMENTS	Items noted in the specification as shall be, will be, to be, must be, maximum, minimum are mandatory requirements no deviations will be accepted		
MODIFICATIONS	Any modifications and or alterations made by the bidder to this tender document will result in disqualification of the bidders submission		
SAFETY	The design and operation must incorporate safety devices and attachments necessary to ensure that the equipment provided is capable of being operated with maximum safety		
INSPECTION	The vendee reserves the right to inspect the equipment at any stage of manufacturing and/or installation of equipment on to the truck chassis and to have any deviations corrected upon request, a final inspection will be completed by the consignee at the time of delivery.		
ADDRESS	<p>State address of facility where completed equipment will be installed on to the truck chassis</p> <p>Specify: _____</p> <p>_____</p> <p>_____</p> <p>_____</p>		
PARTS	O.E.M. spare replacement parts must be stocked in inventory by the successful bidder in sufficient quantity to provide adequate product support and to ensure		

Item	Specifications	Conform	
		YES	NO
	timely delivery of spare parts orders and if requested the bidder must be able to provide supporting documentation Specify: Address of Parts Warehouse: _____ _____		
WARRANTY	Warranty coverage will be for a minimum of one year from the date of delivery, manufacturers warranty statement will be included with the bid submission		
MANUALS	One copy of an operation, parts and service manual will be provided for each unit		
AFTER SALES	It is a requirement of this tender that the bidder maintains an after sales service facility and employees staff qualified to perform after sales service work and that the bidder is also capable of providing in field mobile field service at our location, the bidder if requested must be prepared to provide a tour of this facility.		
PREP	All steel components will be shot blasted prior to application of primer.		
PRIMER	Two coats of a high quality Epoxy Primer minimum 4 ml. dry thickness, applied to all steel components.		
PAINT	Finish body paint shall be Dupont Imron 5000 two coats 2 ml. dry thickness Specify: Make; _____ Model: _____		
	Finish paint balance of steel components medium gloss alkyd enamel on syncoat anticorrosive primer wet on wet application with 4 to 5 ml application thickness		
	There will be no bare steel-to steel contact of any components; all steel surfaces will be painted as per above specifications before final assembly		
PAINT COLOUR	Dump body to match current City of P.C. units -dark blue		
	Plow & Wing to be black		
HYDRAULIC HOSES	All hydraulic hoses will be properly routed and secured to eliminate abrasion; protective covering will be applied at all potential wear points.		
	All hydraulic hoses must be SAE 100 R16 performance rated Specify; _____		
	The bend radius will be 1/2 of the standard SAE 100R2 bend radius		
	Specify bend radius for 1/2" hydraulic hose Specify: _____		

Item	Specifications	Conform	
		YES	NO
	All hydraulic hose performance rated for negative 70°		
HYDRAULIC CYLINDERS	All hydraulic cylinders with the exception of the body hoist shall be in compliance with the specifications below		
	Working pressure rated at 3000 psi		
	Rods 1045, 100 ksi steel, chrome induction hardened Stelmi 200 HR.001		
	SAE O-Ring ports		
	Part number and date code stamped in outside of barrel		
C.A. REQUIRMENTS	<p>All equipment specified including dump body & wing harness shall fit on the truck chassis specified with a clear and usable cab to axle maximum dimension of 108" with maximum body rear overhang of 18"</p> <p>Specify: _____ C.A.</p> <p>Overhang: _____</p>		
CHAIN	<p>All lift chain; tailgate chain and safety chain will be 1/2" grade 70 proof coil plated with yellow zinc Dichromate.</p> <p>Specify: _____</p>		
HYDRAULIC QUICK DISCONNECTS	Quick disconnect hydraulic couplers for plow harness & plow functions shall be one hand connect or disconnect under full system pressure		
	<p>Safeway Flow Master series 70 quick disconnects</p> <p>Specify:</p> <p>Make: _____</p> <p>Model: _____</p>		

Item	Specifications	Conform	
		YES	NO
CROSS MEMBER	Chassis reinforcement located approximately 10" behind cab between chassis frame rails, designed to with stand forces exerted during a winging operation		
	Consisting of two cross members 8" with 3" 90o bend at top and bottom, 30" wide		
	Four frame plates two top side and two bottom side 22" long by 12" wide with 3" 90o bend		
	Frame plates 100% welded to cross members, cross members welded 100% back to back and assembly bolted to chassis frame rails with grade 8 Hex head bolts		
	All fabricated from structural steel plate 44W 65-90 KSI tensile strength, 44KSI minimum yield point		
NATIONAL SAFETY MARK	As required by law under the Motor Vehicle Safety Act the intermediate or final stage manufacturer(s) that shall install the dump body and snow plow equipment onto the incomplete truck chassis posses a valid National Safety Mark registered with Transport Canada and will affix their registered National Safety Mark sticker onto the chassis thus certifying the unit as complete.		
	Specify the name of the company that will affix the registered National Safety Mark number thus certifying the vehicle as complete and the company's registered number. Specify: _____ Company Name Specify: _____ Registered National Safety Mark Number		
	If requested by The City proof of registration with Transport Canada by the company affixing The National Safety Mark is to be supplied		
ISO REGISTRATION	Preference shall be given if the company that shall manufacture and install the snow & ice control equipment is ISO9001:2000 registered		
AIR CONTROLS	Proportional feather able air controls shall be supplied one for each of the seven valve sections		
	An air dryer lubricator and air protection valve shall be installed in the air control system.		
	The air control mounting stand will be fully adjustable and located between the driver and passenger seat within easy view and reach of either occupant.		
	Air control shall be made of brushed aluminum and the light switch console shall be an integral part of the air control console		
	All air lines and electrical wiring shall be concealed inside the vertical tube of the air control pedestal stand		

Item	Specifications	Conform									
		YES	NO								
ELECTRONICS	<p>Plow lights shall be direct plug in to the OEM chassis plow light connection or a relay and separate harness shall be installed</p> <p>There shall be no cutting of or splicing into the OEM chassis wiring harness by the installer of the snow control equipment</p> <p>All connections shall be either direct plug in to chassis OEM supplied connection or a relay board shall be installed & a entire separate circuit run</p> <p>Chassis shall be supplied with OEM installed 12 pack switches with multiplexed wiring supplying power to two (2) remote mounted power modules mounted in cab behind passenger seat</p> <p>Junction boxes located behind chassis cab in a raised position above valve stack, integral with wing harness</p>										
HYDRAULIC VALVES	Hydraulic valves will be sectional stackable										
	<p>Make Hydro Control Model HCD-6 with bronze sleeve shifters.</p> <p>Specify: Make: _____ Model: _____</p>										
	All valve sections shall be dedicated to one single function only.										
	<p>The HCD valve stack will include the following six individual working sections:</p> <table border="0" data-bbox="316 1199 1068 1339"> <tr> <td>1 D.A. Plow Lift</td> <td>1 D.A. Power Angle</td> </tr> <tr> <td>1 D.A. Tilt Front Harness</td> <td>1 D.A. Front Of Wing</td> </tr> <tr> <td>1 D.A. Rear Of Wing</td> <td>1 D.A. Wing Braces</td> </tr> <tr> <td>1 S.A. Body Hoist</td> <td></td> </tr> </table>	1 D.A. Plow Lift	1 D.A. Power Angle	1 D.A. Tilt Front Harness	1 D.A. Front Of Wing	1 D.A. Rear Of Wing	1 D.A. Wing Braces	1 S.A. Body Hoist			
1 D.A. Plow Lift	1 D.A. Power Angle										
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1 D.A. Rear Of Wing	1 D.A. Wing Braces										
1 S.A. Body Hoist											
FRONT MOUNT TANDEM DRY MODE PUMP	<p>The hydraulic pump supplied shall be a front mount tandem two stage dry mode gear pump</p> <p>Specify: Make: _____ Model: _____</p>										
	<p>First stage 24 GPM @ 2,000 RPM</p> <p>Specify: _____</p>										
	<p>Second stage 29 GPM @ 2,000 RPM</p> <p>Specify: _____</p>										

Item	Specifications	Conform	
		YES	NO
	The first stage of the pump will be dedicated to the operation of the spinner and conveyor system		
	The second stage of the pump will operate all plow/wing functions and the body hoist		
	Single stage one-section hydraulic pumps will NOT be acceptable.		
	There will be NO flow divider valves used to split oil flows between spreader and plow / wing functions.		
OIL RESERVOIR	Oil reservoir integral with rear wing harness, 30 U.S. Gal. capacity, 3/16" pickled and oiled steel, welded oil tight.. Specify: Capacity: _____ U.S. Gal.		
	Reservoir to have a weather proof screw down filler / breather cap with fine mesh screen and provisions for clean out by hand.		
	A removable magnetic trap shall be supplied.		
	The oil return port shall be fitted with a diffuser to prevent turbulence and foaming of oil on the inside of the reservoir.		
	Oil level and temperature gauge shall be supplied with this unit.		
	Hydraulic filter element for return line spin on filter assembly will be 10 micron absolute.		
	Oil shut off valve to be installed.		
	Return line filter assembly shall be inside the oil tank.		
	Low hydraulic oil indicator with warning light in cab		
DUMP BODY	These specifications describe an all season high tensile dump body. Rear discharge shall be front hoist tilt action as per conventional dump bodies.		
	Viking Model LF400 or equivalent approved by the municipality 11' unitized construction Specify: Make: _____ Model: _____		

Item	Specifications	Conform	
		YES	NO
	Total weight of the complete body assembly in ready to work condition including hoist, tarp, tailgate and all other required components not to exceed 5,450 lbs. Specify: _____		
CAPACITY	Water level capacity will be 7.5 cu., yd. Specify: _____		
DUMP BODY HEATER	The body shall be heated by exhaust gas from the truck chassis		
	Body shall include heating channels in the body longmembers and rear corner posts		
	Exhaust ports shall be supplied in the upper rear body corner posts		
	Thermo coupled heat diverter kit		
	In cab control consol and exhaust gas monitor shall automatically shut down flow to the dump body when high temperatures are reached during DPT regeneration		
	Manual ability to turn off and on from the in cab control console.		
	Height of front panel approximately 53" to match chassis cab Specify: _____		
	Height of tailgate 40 inches from floor Specify: _____		
CONSTRUCTION	Body to be constructed from one piece head sheet and side panels		
	Unitized construction with all welds 100% continuous		
	Body front panel, sides, hoist doghouse and tailgate shall all be 3/16" thick high tensile steel, 360 to 475 brinell hardness, 180,000 to 203,000 PSI Specify: _____		

Item	Specifications	Conform	
		YES	NO
	Body floor shall be 1/4" thick high tensile steel, 360 to 475 brinell hardness, 180,000 to 203,000 PSI Specify: _____		
	Longsills 1/4" thick Domex 100		
	Body sides braced with two sets of vertical braces.		
	Top rail of body will be 4 inch x 6 inch x 3/16 inch wall square tubing.		
	All body welds will be 100% continuous inside and outside. Specify: _____		
	Sides, Tailgate and Front Head all 3/16" Hardox 450 high tensile steel Specify: _____		
	Interior tapered where sides meet floor for full horizontal length		
	Rear vertical corner posts shall include provision for rear facing lighting requirements		
	Rear vertical corner-posts to be tied to radius side panels and horizontal top rails and welded 100 percent.		
	One pair of chassis frame mounted aluminium fenders over rear wheels		
	Dump box access ladder shall be 15 inches wide, two piece fold-up ladder located at the rear curb side of body		
	Access ladder will be manufactured from safety grip strut material 2" x 10" painted hardwood side boards shall be installed		
HOIST	Mailhot Nitride telescopic hoist, "C" series Model CS100-4,5-3DA with AC-4024 base and PL250 rear dump hinge Specify: Make: _____ Model: _____		
	Hoist capacity shall be 20 ton @ 2,000 P.S.I.		

Item	Specifications	Conform	
		YES	NO
	Hoist cylinder shall be rod sealed		
	Dump box dump angle shall be variable to 50 degrees from horizontal		
	Rear dump hinge diameter shall be 2 ½" inches		
	The body to be equipped with a positive locking support brace, to support the weight of the unloaded body for cleaning and maintenance		
TAILGATE	Tailgate shall be double acting and air trip		
	Tailgate shall be rectangle shaped to allow use of asphalt or stone chip spreaders.		
	Exterior vertical side support tubes to be 3 1/2" X 3 1/2" X 1/4 wall HSS tubing.		
	Air latching system shall be fitted with seven grease fittings for lubrication		
	Tailgate latches shall provide constant air pressure on the panel		
	The tailgate air trip pilot valve and air quick release valve will be enclosed in a weather tight protective enclosure with safety vent		
	Asphalt gate located in tailgate, with lever type operating mechanism		
	Spreader chains and brackets shall be supplied on tailgate and rear apron. Chains shall be grade 70-coil proof minimum.		
TEMPERATURE SENSOR	Road Watch temperature sensor model RW323 with readout		
MUD FLAPS	Mud flaps located fore and aft of rear wheels, frame mounted via full width steel flat bar		
	Mud flap brackets anti-sail design		
LOAD COVER	An air tarp shall be standard equipment with fabricated tarp arms dimensions of 1 ½" X 2 ½" steel tubing and 1/8" mesh tarp Specify: _____ Arm Dimensions		
	The load cover shall be powered by an air cylinder mounted under the body between the chassis frame rails Specify: Cylinder Stroke: _____		

Item	Specifications	Conform	
		YES	NO
	Cylinder Diameter: _____		
	Tarp actuated via in cab control		
	Tarp arms shall be offset dog leg design		
	Exhaust from air cylinders shall be exhausted into chassis cab, to prevent salt damage to the cylinders.		
	For improved rear visibility, rear lamps, stops, tails, directionals and back up lights to be mounted in rear corner posts within 3" of the outside of the tailgate.		
	One (1) Whelen LED Mini Lightbar w/ clear dome, mounted on dump body cab shield behind cab, model # RDLPPAB		
	Grote 77363 LED self flashing six inch oval amber strobe rubber grommet mounted in upper passenger side rear body corner post		
	Grote 77365 LED self flashing six inch oval blue strobe rubber grommet mounted in upper drivers side rear body corner post		
	Two (2) Grote six inch LED back up lights rubber grommet mounted in rear corner posts		
	Four (4) Grote LED six inch oval red, combination stop, tail & turn rubber grommet mounted in rear body corner posts		
	Lower Grote LED strobes one (1) 77355 blue & one (1) 77353 amber 4" oval rubber grommet mounted in stainless steel enclosure on rear chassis frame rails		
	Yellow and amber clearance lights front & rear of body left & right side LED		
	Rear 3-in a row clearance lights LED		
PINTLE HOOK	Holland model PH760 pintle hook mounted at 26" with heavy duty pintle plate		
	Two safety eyes installed on pintle plate		
	Seven wire trailer plug mounted in pintle, plate no splice connection to chassis wiring, includes relay board and separate circuit		
	Tekonsha electric trailer brake		
HYDRAULIC POWER TILT	Viking model VCL 500HD or equivalent in compliance with the following specifications and approved by the municipality Specify:		

Item	Specifications	Conform	
		YES	NO
POWER DETACH PLOW HARNESS	MAKE: _____ MODEL: _____		
	The front plow harness shall tilt forward to allow the chassis hood to tilt forward over centre of its pivots and stay open without the need of any additional supports		
	The harness tilt and return function shall be performed by the operator from inside the chassis cab via feather air over hydraulic control.		
	The plow and wing front harness to be easily and quickly attachable or detachable as one unit (cheek plate). The assembly remains permanently with the vehicle even after the female coupler has been detached		
	The front plate, lifting device, wing front post plow and wing shall all be removable or attachable as one assembly		
	Swing arm: The male swing arm to be rotated on the shaft, and the hub ends are to be guided by four anti-friction polymer discs in the mounting bracket.		
	The swing arm is to be operated by two double acting hydraulic cylinders with the following specifications:		
	Piston diameter 2 1/2"		
	Piston rod diameter 1-1/18"		
	Stroke 6"		
	The cylinder rod's shall be hard chrome plated and buffed		
	These cylinders shall permit the front harness to tilt forward by disengaging the top and engaging the bottom hydraulic operated lock pins.		
	The truck hood (cab) can be tilted forward for easy access to the engine without detaching the front harness from the truck.		
	Hydraulic locking shall be achieved by two double acting, hydraulic cylinders with chrome piston rods.		
	One cylinder shall provide upper locking and the other cylinder shall perform the lower locking function.		
	The lock cylinder control valve shall be a double acting two-spool mono block valve.		
	Lock valve located inside NEMA rated weather tight enclosure with hinged lid		
	For safety, the lock cylinder valve shall be mounted in a position to allow the operator visibility of the hydraulic lock pins while performing the lock or unlock function.		
	Two independent in cab feather joystick air controls will be pedestal mounted inside the chassis cab, one control will operate exclusively the plow lift function and the second control will operate exclusively the hydraulic power tilt function.		
	Single valves & controls operating multiple functions will not be acceptable.		

Item	Specifications	Conform	
		YES	NO
	The front plate will be one solid piece of 3/8 inch steel plate with cut out of sufficient size to allow cooling of the chassis radiator.		
	Front plate minimum 44W steel plate Specify: Minimum Yeild: _____ P.S.I. Minimum Tensile: _____ P.S.I		
	Overall height of the front plate will be 49 inches with a 5.25 inch 90° degree bend at the bottom.		
	Overall width of the front plate will be 57.5 inches at the top and 40 inches at the bottom.		
	Upper cross channel 6" by 52" 13 lbs./ft. welded to the right and left side plate		
	End plate located on upper cross channel 1/2" material 12" x 6" to provide upper mounting location for wing front post		
	Cheek plates will be specified to suite chassis frame rails, 1/2" steel plate and will extend back along the chassis frame rails as far as possible.		
	Cheek plates minimum 44W steel plate Specify: Minimum Yeild: _____ P.S.I. Minimum Tensile: _____ P.S.I		
	Fasteners attaching cheek plates to the chassis frame rails will be minimum grade 8 N.C. hex head bolts		
	Two pairs of drive ears 100% welded to the front plate spaced at standard 30 1/2" centers		
	Three sets of plow drive bar connection holes located in drive ears height to lower drive connection 19" mounted with truck empty		
	Quick-tack hitch pockets bolted to drive ears		
	Lift or grab link for nose chain shall be 18" minimum		
	Hydraulic plow lift cylinder, double acting 4" diameter with 10" stroke, cylinder rod chrome plated		
	Plow lift yoke 3/4" steel plate, braced with two 1/4" x 2" flat bar diagonal braces.		
	Two mounting locations in lift yoke to provide location for mounting of plow hydraulic lift cylinder in winter operating position and stored summer position		
	Mounting plates for plow lift cylinder lift yoke and lift yoke braces all 1/2" steel plate 100% welded to front plate.		

Item	Specifications	Conform	
		YES	NO
	Lift yoke brace mounting plates positioned to provide minimum 23.5" span.		
	Two sealed beam halogen plow lights with high and low beam and built in integral directional's		
	Right and left side plow light mounting brackets extending 7" up from top of front plate with light mounting positions on 55" centers		
	Vapor proof wiring for plow lights, with direct no splice plug in connection to OEM chassis wiring connection		
CABLE WING HARNESS	These specifications describe hydraulic high lift cable wing harness, with the ability to perform high winging shelving operations		
	Viking Model VCL350SCL or equivalent approved by the municipality Specify: Make: _____ Model: _____		
	The wing harness shall be of heavy construction to sustain snow plowing operations under severe conditions		
	Bottom of wing tower shall be protected by shoe, and shall have a ground clearance of 14" minimum, truck empty.		
	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" dia. x 30" stroke approx. with a cable and sheave assembly		
	Approved size of ram controlling the rear end of wing shall be 3" dia. x 30" stroke approx. cylinder, with a cable and sheave assembly		
	Approved size of ram controlling wing brace slide shall be 3" dia. x 36" stroke approx. and shall be double acting		
	Hydraulic cylinder piston rods shall be hard chrome plated		
	The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis		
	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 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 Cheek plate		

Item	Specifications	Conform	
		YES	NO
	For maximum strength two channels shall be used to form a triangular support integral with the rear post		
	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 triangular stiffeners shall be incorporated into the assembly		
	All sheave pins shall be provided with oil impregnated bronze bearing and grease fitting		
	A safety chain shall be provided for securing wing when not in use.		
FRONT POST	The front post shall be fabricated of 8" minimum I Beam 18.4 lbs/ft. Specify: _____		
	The 8" I beam front post shall be triple certified in compliance with G40.21 manufactured from 50W steel minimum		
	Front trip hinge with internal wire trip spring, 7" minimum width		
	Guide bars will be provided for the slide assembly running, for the full height of the wing post		
TRIP HINGE & SLIDE ASSEMBLY	Front slide to be provided, with a safety trip hinge assembly, the wing will return to the normal position after it has tripped.		
	Front slide shall be minimum 7" in width		
	Wire trip spring shall be mounted inside the trip hinge assembly		
ADDITIONAL	Two (2) 6 " Wing spot lights supplied and installed		
	Shovel holder located on outside drivers side of body front head		
	36" flexible fluorescent orange plow and wing marker rods		
	Red & White 2" reflective tape along lower body fenders and across lower tailgate		
	Convex mirror 10" mounted on front wing post		
POWER REVERSABLE SNOW PLOW	These specifications describe a hydraulic ram reversible snowplow with one way style compression safety trip mechanism		
	Viking Model VCL 36-11-45C or equivalent approved by the municipality Specify: _____		

Item	Specifications	Conform	
		YES	NO
	Make: _____ Model: _____		
	Moldboard shall be adjustable via two telescopic back brace's to achieve an attack angle of 50° or 60°		
DIMENSIONS	Overall width 11'		
	Moldboard height 36"		
	Path Cleared - Bulldozing 11'		
	Path Cleared - At 35° 9'10"		
	Set at 50° attack angle, the overhand from the cutting edge to the front of the moldboard shall be 20" minimum.		
	Set at 60° attack angle, the overhang from the cutting edge to the front of the moldboard shall be 25" minimum.		
	Set at 50° attack angle, the height from the ground to the front of the moldboard shall be 28" maximum.		
	Set at 60° attack angle, the height from the ground to the front of the moldboard shall be 24" maximum.		
MOULDBOARD	The moldboard shall be fabricated from 10 ga. steel		
	There shall be(8) 44W steel 3/8" thick reinforcing ribs 100% welded to the moldboard.		
	The bottom of the moldboard is to be reinforced with a 1/2" x 6" x 4" backer angle.		
	A second angle 3/8" x 3" x 2" shall be welded above for added strength and rigidity.		
	Moldboard shall be fitted with two standard shoes and curb runners shall be supplied on each end		
SAFETY TRIP	The safety trip shall consist of two compression coil springs incorporated in the drive frame, which will allow the moldboard to float over obstructions.		
	The two compression trip springs will be 5/8" wire, 5 1/4" O.D., 14" free length with a total of 8 active coils.		
SHOE KIT	Two adjustable self-steerable shoes shall be fitted on the drive frame.		
	These shoes shall carry the weight of the plow when the moldboard trips.		
	Shoes will be height adjustable.		
DRIVE FRAME	The drive frame shall be of A-frame and sector design.		
	The A-frame will be constructed of 3 1/2" x 3 1/2" x 1/4" square tubing with two 3/4" thick pivot plates.		
	Sector frame constructed of 4" x 4" x 3/8" square tube.		

Item	Specifications	Conform	
		YES	NO
	The sector angle shall provide a 30° radius and be constructed of ½" x 3 ½" x 2 ½" steel.		
	To prevent wear, the sector will glide between two low friction replaceable polymer bearings bolted on the A-frame.		
	Four hinge points are to be provided to connect the moldboard to the push frame, spanning a minimum distance of 80".		
	Drive frame shall be complete with an adjustable parking stand.		
POWER ANGLE CYLINDERS	There shall be two 3" x 14" double acting hydraulic cylinders to reverse the plow to a maximum of 35° right or left		
	To prevent damage to the reversing cylinders, a cross-over relief valve shall be supplied.		
	Cylinder rods chrome plated		
LIFT CHAIN	Three 3/8" 70 Proof Coil lift chains shall be provided to lift the plow to the carrying position.		
	These chains must be as wide spread as possible in order to make the plow stable, and the plow must remain level when carried.		
	It will be possible to perform the power angle function with the plow in both the lowered working position and the raised carrying position and the plow will remain level		
QUICK TACH	Fitted with oscillating beam to suite Quick-Tach hitch		
CUTTING EDGE	One standard cutting edge ½" x 8" x 132"		
SHOES	Two standard moldboard shoes		
	Two standard skid shoes		
DEFLECTOR	Full length rubber deflector ½" x 12"		
	Overall length 12 feet.		
	Inside intake height 29".		
	Outside discharge height 39".		
	Moldboard thickness 10 U.S.S. gauge minimum.		
	Two drive ribs for connecting the wing brace shall be provided		
	The drive ribs shall be located approximately 8'6" and 10'10" from the nose end of the wing.		
	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		
	Lower wing angle shall be 6" X 4" X ¾".		
	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		

Item	Specifications	Conform	
		YES	NO
	Two 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		
	Upper brace – Extended 90" C.C.		
	Collapsed 60" C.C.		
	Extended distances shall be measured with spring fully retracted		
	Lower brace – Extended 88" C.C		
	Collapsed 58" C.C.		
	One spare pin for adjusting the wing braces shall be supplied with each Brace.		
	The top edge of the wing shall be boxed in and welded 100% to the ribs And the moldboards so as to avoid all pockets		
BLADES & SHOES	Sectional carbide cutting edge 3/4" x 8" x 132"		
	Two standard moldboard shoe's		
	One curb shoe		
ADDITIONAL	Chassis must be suitable for installation of a front mounted plow harness, snow plow wing and dump body and utilize huck bolt round collar chassis fasteners		
	O.E.M. installed body builders access point must be provided at rear of cab for auxiliary body lighting		
	Air tanks, air dryer, fuel tanks and oil cooler must be located in a position to avoid interference with wing harness		

Service and Training

Vendors shall have a full parts and service facility within a reasonable distance from the Municipality. State location and distance : _____

A qualified technician shall provide complete mechanical training at the Municipality Garage. Training shall include safety, operation, maintenance and service.

Delivery

Wheel Loader shall be delivered F.O.B. Port Colborne in complete operating condition with all specified attachments, tested in operation.

Acceptance shall be subject to the inspection and approval of the Municipality.

TENDER SUBMITTED BY: _____
(Company Name)

VENDOR NAME: _____
ADDRESS: _____
CONTACT PERSON: _____ TELEPHONE NO.: _____

TENDER- DELIVER UNOPENED TO:

THE CITY OF PORT COLBORNE
CITY HALL
66 CHARLOTTE ST.
PORT COLBORNE, ONTARIO L3K 3C8

ATTENTION: ASHLEY GRIGG, CITY CLERK

TENDER FOR: Supply of One (1) New Single Axle Truck, Cab & Chassis with Dump Body, Snow Plow & Wing for the City of Port Colborne.

CLOSING DATE: Tuesday, March 22, 2011 at 2:00 pm

Viewing Purposes Only - Documents are available at 66 Charlotte Street