

TENDER FOR ONE (1) TANDEM PLOW TRUCK CONTRACT #2018-PW-009

TENDERS RECEIVED BY:

The Corporation of Tay Valley Township 217 Harper Road, Perth, Ontario K7H 3C6

Attention: Amanda Mabo, Clerk

Telephone: 613-267-5353 ext. 130

Toll Free: 1-800-810-0161 Fax: 613-264-8516

E-mail: <u>clerk@tayvalleytwp.ca</u>
Website: <u>www.tayvalleytwp.ca</u>

PART "A" - INFORMATION TO BIDDERS

1. Tender Form

Sealed Tenders, clearly marked as to the contents, on the forms supplied by the Corporation of Tay Valley Township ("the Township"), will be received, by the undersigned or his/her designated representative, at the Municipal Office, 217 Harper Road, Perth, Ontario, until **1:00 p.m.**, local time, as determined by the clock located on the computer in the reception area of the Municipal Office, on **Thursday, July 19**th, **2018 for One (1) Tandem Plow Truck.**

Tenders received after closing time will not be considered.

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One copy of the **completed Form of Tender**, Part "D", on the forms provided, shall be submitted. All information shall be shown in the tender in the spaces provided, including the signature of the Bidder with his/her address and telephone number.

Tender Forms must be properly signed and witnessed, or signed, witnessed and sealed if the bidder is a Corporation. Tenders must be submitted, using the Tender Label – Form 5 (to be affixed on your Tender Envelope).

The Tender must be legible, written in ink or typewritten, where stipulated, with the unit price for every item and other entries clearly shown. Tenders which are incomplete, conditional or obscure or which contain erasures or alterations not properly initialed, or irregularities of any kind, may be rejected. Submissions must not be restricted by a statement added to The Corporation of Tay Valley's Form or by a covering letter, or by alterations to the form supplied, unless otherwise provided in Part "A" - Information to Bidders.

Tenders received by fax or email will be disqualified.

PART "A" - INFORMATION TO BIDDERS

2. Clarification of Documents

Any clarification of the Township's documents required by the Bidder, prior to submission, shall be requested through the Township. Any such clarifications so given shall not, in any way, alter the Township's documents and the Bidder and the Township agree that in no case shall oral arrangements be considered. No officer, agent or employee of the Township is authorized to alter, orally, any portion of these documents. During the period prior to submissions, alterations will be issued to Bidders as written Addenda. In the submission, the Bidder shall list all Addenda that were considered when the submission was prepared.

All questions shall be directed, in writing (by email) to the Clerk.

All questions/discrepancies identified must be sent to the Township at least three (3) business days prior to the submission due date.

Copies of all questions and answers and any addenda will be posted on the website no later than two (2) business days prior to the submission due date.

3. Contract Documents and Order of Precedence

The contract documents shall consist of all the pages of the Tender documents, issued by the Township, and the Company's submission. Do not remove any pages from the Township's Form.

These documents, and portions thereof, take precedence in the order in which they are named above, notwithstanding the chronological order in which they are issued or executed.

The intent of the Contract is that the Company shall supply equipment and materials or services complete and suitable for the Township's intended use.

None of the conditions contained in the Bidders standard or general conditions of sale shall be of any effect unless explicitly agreed to by the Township and set forth or specifically referred to therein.

4. Addenda

Bidders may be advised by addenda, of required additions, deletions or alterations in the requirements of the Tender documents. All such changes shall become an integral part of the Tender documents and shall be allowed for in arriving at the total submission price.

PART "A" - INFORMATION TO BIDDERS

5. Harmonized Sales Tax

Harmonized Sales Tax (H.S.T.), or any other applicable taxes, will be paid **in addition** to the tendered price.

6. Health and Safety

The Bidder assumes full responsibility for conforming with all legislation regarding the safety of his/her employees and the public on this Contract and all notices required to comply with the legislation.

Accordingly, the Bidder shall:

- (a) Demonstrate establishment and maintenance of a health and safety program with objectives and standards consistent with applicable legislation.
- (b) Provide a copy of your Company's Health and Safety Policy, dated not later than **2018**, to be submitted with the Tender.
- (c) Provide a copy of the applicable WSIB Certificate of Clearance or equivalent (if the Bidder is from outside Ontario), to be submitted with the Tender.

Upon request, at any time, from the awarding to the completion of the Contract, submit proof of fulfillment of the above noted.

7. Accessibility

The Bidder shall provide a declaration with the Tender that they are compliant with the Accessibility for Ontarians with Disabilities Act and its Regulations. An example of a declaration is attached in Appendix "A".

8. Bidder's Checklist

To assist Bidders with completing a response to this Tender, a Tender Checklist is included in Part D.

9. Withdrawal

A Submission may be withdrawn at any time prior to the closing date and time at the Bidder's discretion. Withdrawal notification must be in written form, signed and must be submitted to the Clerk. No fax, telephone calls or emails will be accepted. After the official closing date and time, all Submissions received shall be irrevocable.

PART "A" - INFORMATION TO BIDDERS

10. Public Opening

All submissions will be opened at the Municipal Office, 217 Harper Road, Perth, Ontario, on the same day and time as the closing date.

11. Tender Results

The names of the Bidders and total bid prices will only be made available at the Tender Opening. After the Tender Opening, requests may be submitted to the Township for the results and only the names of the Bidders and total bid prices, as read out at the Tender Opening, will be given in the reply. Bid results will be posted on the Township's Website at www.tayvalleytwp.ca within 48 hours of the Tender Opening.

12. Bid Acceptance

It shall be the policy of the Township that in any procurement of goods, services, facilities or construction invitations to submit a tender to the Township, the Township reserves the right to reject an offer to supply goods and/or services or Tenders presented in response to the Township's procurement processes where the Township determines, in its sole and unfettered discretion, that the entity making the offer has performed poorly on any Township contract during the previous five-year period. Township Council may remove a Company's name from consideration for a contract under this Policy, for a period of up to five (5) years, on the basis of documented poor performance or non-performance on a Township Contract.

Unless otherwise specified in these Tender documents, this Tender constitutes an irrevocable offer to provide the goods and/or services described herein for a period of ninety (90) calendar days from the closing date of the receipt of Tenders.

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 perform the work by the specified delivery date.

The acceptance of any Submission is subject to appropriate funding acceptable to the Township.

The placing in the mail or delivery of a notice of award to the Company address, given in the Submission, shall constitute notice of acceptance of the Contract.

Bidders may submit multiple bids in the event that the Bidder is providing different options and specifications.

PART "A" - INFORMATION TO BIDDERS

13. Insurance

The successful Company shall provide the following insurance:

Commercial General Liability Insurance

The General Liability policy shall be underwritten by an insurer licensed to conduct business in the Province of Ontario and include but not be limited to the following:

- a) Third party bodily injury, personal injury and property damage, to an inclusive limit of not less than \$2,000,000 per occurrence.
- b) The Township shall be added as an additional insured.
- c) The policy shall contain a provision for cross liability and a severability of interest clause.
- d) The policy shall contain a provision for contractual liability oral and written
- e) The policy shall provide the Township with 30 days' notice of cancellation or nonrenewal.
- f) Non-owned Automobile Coverage for a limit of not less than \$2,000,000 including contractual non-owned coverage.
- g) Contingent Employer's Liability.
- h) Broad Form Property Damage.

Motor Truck Cargo Insurance

The Company shall obtain & keep in force for the duration of this contract Motor Truck Cargo Insurance on an All Risks basis, in an amount sufficient to cover the full replacement cost of the equipment being provided under the contract while that equipment is being delivered to the Township, including during loading and unloading from the conveying vehicle(s).

Other Requirements

The Company acknowledges that he/she is an independent Contractor and shall, indemnify, protect and save harmless The Corporation of Tay Valley Township, its agents and employees from any and all damages, liabilities and claims of whatsoever nature arising out of the furnishing by the Company, its agents or employees of the materials and/or performing of the services covered by this Contract.

The Company remains responsible for maintaining the required insurance even if the certificates are never exchanged and/or requested.

The Contractor shall obtain and keep in force for the duration of this contract automobile insurance under a standard Automobile Policy with limits no less than \$2,000,000 in respect of each owned or leased licensed vehicle.

PART "A" - INFORMATION TO BIDDERS

14. Failure to Enter into an Agreement

In addition to all of the Township's other remedies, if a selected Bidder fails to execute the accepted agreement or satisfy any other applicable conditions within ten (10) days of notice of selection, the Township may, in their sole and absolute discretion and without incurring any liability, approve an extension (should agreement changes be requested), rescind the selection of that Bidder and proceed with the selection of another Bidder.

15. Assignment

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

If the Township agrees to the assignment of the Contract, all Assignment Agreements will be prepared, at the sole cost of the Company, and under no circumstances will the Township be responsible for these costs.

16. Laws and Regulations

The Company shall comply with relevant, federal, provincial and municipal statutes, regulations and by-laws pertaining to the work and its performance. The Company shall be responsible for ensuring similar compliance by its suppliers and subcontractors.

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

17. Default by Company

If the Company commits any act of bankruptcy or if a receiver is appointed on account of its insolvency or in respect of any of its property or if the Company makes a general assignment for the benefit of its creditor, then, in any such case, the Township may, without notice; terminate the Contract.

If the Company fails to comply with any request, instruction or order of the Township or fails to pay its accounts or fails to comply with or persistently disregard statutes, regulations, by-laws or directives or relevant authorities relating to the work or fails to prosecute the work with skill and diligence or assigns or sublets the Contract without the Township's written consent or 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, then, in any such case, the Township may, upon expiration of ten (10) days from the date of written notice to the Company, terminate the Contract.

PART "A" - INFORMATION TO BIDDERS

Any termination of the Contract by the Township, as aforesaid, 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 of the work in progress and finish the work by whatever means the Township may deem appropriate under the circumstances.
- Withhold any further payments to the Company until its liability to the Township can be ascertained.
- Recover from the Company 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, any balance to be paid by the Company to the Township).

18. Contract Cancellation

The Township shall have the right, which may be exercised from time to time, to cancel any uncompleted or unperformed portion of the work or part thereof. In the event of such cancellation, the Township and the Company shall negotiate a settlement.

The Township shall not be liable to the Company for loss of anticipated profit on the cancelled portions of the work.

19. Responsibility

The Township shall not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any Bidder prior to, subsequent to, or by reason of the acceptance or the non-acceptance of a Tender save as provided in the Contract. The Township reserves the right to reject any or all Tenders and to waive formalities as the interest of the Township may require without stating reasons, therefore, and the lowest or any Tender will not necessarily be accepted.

20. Liquidated Damages

Liquidated damages shall be paid by the contractor if the delivery called for in the Tender is not completed within the time set out in the Tender, or by an amended date approved by the Township. The Contractor agrees to pay the Township liquidated damages at a sum of 2% of the total tender price per calendar day, for each day's delay in delivery.

PART "A" - INFORMATION TO BIDDERS

21. Payments

The Company shall invoice the Township, "Tay Valley Township", upon delivery. The Township shall pay said ninety percent (90%) of the invoice within thirty (30) days of receipt of the invoice (date of delivery).

Payment by the Township, of the ten (10%) percent holdback, shall be made ninety (90) days from the date of delivery.

The Township shall have the right to withhold, from any sum otherwise payable to the Company, such amount as may be sufficient to remedy any defect or deficiency in the work, pending correction of the same.

22. Municipal Freedom of Information

Any personal information collected by or on behalf of the Township under this Tender is subject to the *Municipal Freedom of Information and Protection of Privacy Act*. The information provided to the Township may be used to confirm certain information provided in the submissions for this project. The person submitting this Tender consents to such collection and use of the information. The person submitting this Tender acknowledges the Tender is a public document and that the information contained in the Tender may become public and consents to the release of that information. By responding to this Request for Tender, respondents waive any challenge to the Township decision in this regard. Any questions regarding the collection, use, or disclosure of the information should be directed to the Clerk of the Township.

PART "B" -GENERAL CONDITIONS

- 1. The unit shall be a new, 2018 model year or newer.
- 2. The unit shall be delivered **on or before November 1, 2018.** The unit shall be delivered to the Glen Tay Garage, 217 Harper Road Perth, Ontario and if the unit is not received on or before the date indicated by the bidder on the tender form, the Township reserves the right to initiate "Liquidated Damages Clause 20 Part "A" Information to Bidders".
- 3. The following specifications are prepared with the intention of providing a basis for securing competitive bids. Notwithstanding certain detail, equipment of similar design and construction will receive consideration if, in the opinion of the Tay Valley Township, it is considered to be suitable for the intended application and generally conforms to performance requirements. All bids on equipment not fully meeting the specifications shall be accompanied by a statement fully outlining any departures from the specifications and fully describing the equipment offered.
- 4. Bidders must also provide the appropriate information where "Specify" is noted.

PART "C" - SPECIAL CONDITIONS

- 1. This specification covers the supply of One (1) **Tandem Plow Truck** used in the maintenance of highways and municipal roads.
- 2. This specification covers only the major details of the units. It is the supplier's responsibility to deliver fully equipped units with compatible components to provide dependable efficient service.
- 3. No wiring is to be cut or spliced without written approval from the Original Equipment Manufacturer (OEM) or the Corporation of Tay Valley Township.
- 4. No frame or structure is to be cut, welded or drilled without written approval from the OEM or the Corporation of Tay Valley Township.
- 5. All wiring to be spliced must be soldered and covered with shrink tube.
- 6. All aftermarket installation, service and operators' manuals as well as warranty certificates must be forwarded to the Corporation of Tay Valley Township.
- 7. A copy of the owners, parts, service, operators (2 copies), shop manuals (including complete wiring diagrams) and CDs will be forwarded to the Corporation of Tay Valley Township.
- 8. All warranty certificates and the vehicle line tickets must be forwarded to the Corporation of Tay Valley Township.
- 9. A complete list of all oils and filters must be forwarded to the Corporation of Tay Valley Township.
- 10. Dealer will license the unit until December 31st, 2019. Do not include in the tender price, invoice separately.
- 11. The Unit will be delivered as complete working units to 217 Harper Road, Perth Ontario K7H 3C6.
- 12. Dealer will have the units MTO certified.
- 13. Warranty and in service date will start the day the unit are delivered to 217 Harper Road, Perth Ontario K7H 3C6.

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	n or Corporation, other than the one whose signature or the cers and seal is or are attached below, has any interest in this osed to be taken.		
comparison of figures or arrang	IER DECLARE that this Tender is made without any connections, knowledge, son of figures or arrangement with any other company, firm or person making a Tender ame work and is in all respects fair and without collusion or fraud.		
is or will become interested, dir performance of the Contract, o	FURTHER DECLARE that no member of the Township Council, or any Officer of the Township or will become interested, directly or indirectly, as a contracting party or otherwise, in the erformance of the Contract, or in the supplies, work or business to which it relates or any portion the profits thereof, or any such supplies to be used therein or in any of the monies to be erived therefrom.		
I FURTHER DECLARE that se	everal matters stated in the said Tenders are in all respects true.		
I FURTHER DECLARE that this offer is to continue open to acceptance until the formal contract is executed by the successful Company for the said Tender OR for a period of ninety (90) days after the closing date, whichever first occurs and that the Township may, at any time, within that period, without notice, accept this Submission whether any other Submission has been previously accepted.			
I FURTHER DECLARE that the awarding of the contract based on this Tender by the Township shall be an acceptance of this Tender.			
received, and that all changes prices submitted. I do hereby to furnish all necessary labour, me provide, furnish, deliver, place to complete the work, herein despecial provisions and to accept	ddendum/Addenda No, inclusive, has/have been specified in the Addendum/Addenda have been included in the tender and offer to enter into a Contract, to do all of the work and achinery, tools, apparatus and other means of construction, and t and erect all materials mentioned and described or implied therein escribed, in strict accordance with the plans, specifications and pt in full payment therefore, the sums calculated in accordance with second to the contract of th		
Witness	Signature		
Witness	Signature Name of Company		

PART "D" - FORM OF TENDER

SPECIFICATIONS AND CONFIRMATION FOR TANDEM TRUCK

TENDERED UNITS MUST COMPLY WITH THE FOLLOWING SPECIFICATIONS IN ALL ASPECTS. ALTERNATIVE COMPONENTS, WHICH MEET THE REQUIREMENT OF THIS SPECIFICATION BUT ARE NOT IDENTIFIED IN THE SPECIFICATION, MUST BE APPROVED BY THE TOWNSHIP PRIOR TO TENDER CLOSING.

The following Specifications are designed to generally describe the features required. The Supplier is advised that some features are not standard equipment or normal options. Please indicate exceptions in the space provided.

1. GENERAL	
This specification covers a tandem truck, cab and chassis, for one 2018 Model or newer, supplied with all standard equipment.	Mandatory
Vehicle must be supplied with suitable components to comply with the following specification in all aspects.	Mandatory
One hard copy manual for all equipment, including spare parts manual.	Mandatory
Hard copy truck manual and a CD.	Mandatory
Truck shall be white in colour and the box shall be black in colour.	Mandatory
Two (2) sets of keys cut and ready to use.	Mandatory

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PART "D" - FORM OF TENDER

NO.	ITEM	DESCRIPTION OF SPECIFICATION	CONFIRM
2.	Weight Ratings:	Gross Vehicle Weight Rating 68,000 lbs minimum.	☐ Yes ☐No Specify:
		Gross Axle Weight Rating) front – 22,000 lbs. minimum.	☐ Yes ☐No Specify:
		Gross Axle Weight Rating rear – 46,000 lbs. minimum.	☐ Yes ☐No Specify:
		The allowable Gross Vehicle Weight Rating as supplied shall show on a metal or Mylar tag.	☐ Yes ☐No
3.	Axels:	Front axle 22,000 lbs. minimum capacity. Front axle shall be set back design. Cast steel hubs shall be supplied.	☐ Yes ☐No Model: Capacity:
		Rear tandem axle 46,000 lbs. minimum capacity, dual drive with interaxle differential and driver controlled interaxle differential lockout. Cast steel hubs shall be supplied.	☐ Yes ☐No Model: Capacity:
		Rear tandem axles shall be single speed with minimum spread of 54".	☐ Yes ☐No Specify:
		A four (4) wheel lock-up system operated from the cab shall be supplied.	☐ Yes ☐No
4.	Brakes:	Service brakes – full air brakes, "S" cam drum type shall be supplied. Wedge type brake systems not accepted.	☐ Yes ☐No Specify:
		Front brakes size – 16.5" X 6" drum type minimum, shall be supplied.	☐ Yes ☐No Specify:
		Rear brakes size – 16.5" X 7" minimum, drum type shall be supplied.	☐ Yes ☐No Specify:
		Front and rear dust shields shall be supplied.	☐ Yes ☐No
		Rear axles shall have four (4) MGM Brake Chamber Part #TR3030LP3TSHD parking brake chambers being driver applied and released.	☐ Yes ☐No Specify:

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PART "D" - FORM OF TENDER

		Meritor automatic slack adjusters shall be supplied on all axles with greaseable clevis pins.	☐ Yes ☐No Specify:
		Automatic drain valve with heater to drain moisture from the wet air tank, mounted in a safe manner. All other air tanks must have a type of manual drain cock installed.	☐ Yes ☐No
		Bendix AD-9 air dryer with heater shall be supplied.	Yes No
		Air compressor – 18.7 cfm minimum, complete with all necessary tanks, gauges and safety valves shall be supplied and installed.	Yes No Specify CFM:
		Brake stroke indicators shall be installed on all brake chambers.	☐ Yes ☐No
		Shall have low air pressure – light and buzzer in cab.	☐ Yes ☐No
		Shall have tractor package installed with air lines plumbed to the rear of the truck. Colour coded glad hands will be installed and shall include dirt protection ends with swing away style.	☐ Yes ☐No
5.	Frame:	Section modulus shall be 26.8" minimum.	☐ Yes ☐No Specify:
		Frame yield strength shall be 120,000 psi minimum.	Yes No
		RBM shall be 3,200,000 lbs in. minimum.	☐ Yes ☐No Specify:
		Specify frame dimensions (depth X width X thickness).	☐ Yes ☐No Specify:
		Mounting of snow plow cheek plates shall be possible.	☐ Yes ☐No
		Provision shall be supplied to prevent diamond shaping of the frame. The frame shall be bridged or a cross member shall be supplied within ten inches 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, and shall conform to MTO drawings A-7-491 and	☐ Yes ☐No

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		A-7-492.	
		Chassis frame and front extensions must be full frame with section modulus and yield strength for mounting snowplow control system.	☐ Yes ☐No
6.	Suspension:	Wheelbase shall be approximately 204".	☐ Yes ☐No Specify:
		Cab to axle shall be approximately 139".	☐ Yes ☐No Specify:
		Front shall have heavy duty shock absorbers installed.	☐ Yes ☐No
		Front springs shall be tapered leaf with a minimum capacity of 11,500 lbs each at the ground. Front right hand spring shall have an AEON 5000 lb rubber block helper spring kit.	☐ Yes ☐No Specify:
		Rear suspension shall be Hendrickson Haulmax HMX460 or approved equivalent.	☐ Yes ☐No Specify:
7.	Wheels and Tires:	Dual rear wheels shall be supplied.	☐ Yes ☐No
		Two (2) front first line, steel belted radial tubeless tires 425/65R-22.5 load range "L", shall be supplied.	☐ Yes ☐No Specify Size: Load Range:
		Eight (8) rear, first line, steel belted radial tubeless tires 11R-22.5 load range "H", shall be supplied.	Yes No Specify Size: Load Range:
		Front acceptable tires are as follows: Michelin XZY. Michelin XDS2 – if possible.	☐ Yes ☐No
		Rear acceptable tires are as follows: Michelin XDS2 – no exceptions.	☐ Yes ☐No
		Accuride aluminum extreme duty rims with hub pilot wheels and wheel nut torque indicators shall be supplied and installed, or approved equivalent.	☐ Yes ☐No Specify:
		Two (2) wheel rims 22.5" X 12.25" shall be supplied.	☐ Yes ☐No Specify:

Initials

		Eight (8) wheel rims 22.5" X 8.25" shall be supplied.	☐ Yes ☐No Specify:
		The rims must have a load capacity and pressure rating equal to or exceeding the ratings of the tires.	☐ Yes ☐No Front Rating:
			Rear Rating:
		Accuride wheel guards shall be installed between mating surfaces of wheels.	☐ Yes ☐No Specify:
		Drop centre rims shall be supplied.	☐ Yes ☐No
8.	Engine:	Diesel, water cooled, inline, four stroke, wet sleeved, six cylinder, governed at 2100 rpm.	☐ Yes ☐No Specify:
		Shall have a peak HP of 450 minimum.	☐ Yes ☐No Specify:
		Engine displacement shall have a minimum of 12.8L.	☐ Yes ☐No Specify:
		Minimum torque shall be 1,650 lbs/ft.	☐ Yes ☐No Specify:
		Shall be equipped with a 3-stage engine compression brake.	☐ Yes ☐No
		Shall be equipped with a 3-stage engine compression brake.	☐ Yes ☐No
		Splashguards shall be supplied to protect engine compartment from road spray.	☐ Yes ☐No
	NOTE:	Required engine ratings must be set at the time of engine manufacturing. Engines with locally altered ratings are not acceptable.	
9.	Transmission:	Transmission shall be a Manual Eaton Fuller, 13 Speed or approved equivalent. Automatic Transmission may also be	☐ Yes ☐No Specify:
		considered.	
10.	Transmission Equipment:	Vehicle interface wiring connector with PDM and no blunt cuts at back of cab shall be supplied.	☐ Yes ☐No
		Electronic transmission customer access connector mounted back of cab shall be supplied.	☐ Yes ☐No

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		PTO mounting on left hand side of transmission.	☐ Yes ☐No
		All magnetic plugs in engine drain, transmission drain, axle drains and transfer case drain shall be supplied.	☐ Yes ☐No
		Push button electronic shift control that is dash mounted shall be supplied. (Automatic Transmission Only)	☐ Yes ☐No
		Transmission prognostics enabled shall be supplied and installed.	☐ Yes ☐No
		Water to oil transmission cooler in radiator end tank shall be supplied and installed.	☐ Yes ☐No
		Transmission oil check and fill with electronic oil level check shall be supplied and installed.	☐ Yes ☐No
11.	Engine Equipment:	Alternator shall have a minimum capacity of 160 Amps.	☐ Yes ☐No Specify:
		Three (3) Group 31 Maintenance free, stud post batteries shall be provided.	☐ Yes ☐No
		The cold cranking amp rating shall be 2700 amps combined 12 Volt, 3 batteries minimum.	☐ Yes ☐No Specify:
		Fully sealed and enclosed battery disconnect within 48" of battery box or inside cab shall be supplied.	☐ Yes ☐No
		High temperature and low oil pressure engine protection alarm bell or buzz device shall be installed. Automatic engine shut down is not acceptable.	☐ Yes ☐No
		Heavy duty, two (2) stage, dry type air cleaner with summer/winter intake air routing selectable from the cab shall be supplied and installed.	☐ Yes ☐No
		A heavy duty, fuel water separator, with heater and sight glass, shall be supplied and installed.	☐ Yes ☐No
		Engine hood shall be forward tilting with adequate side panels with easy access to check all fluid levels without tilting the hood. The engine air intake shall be from the left side only if no	☐ Yes ☐No

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PART "D" - FORM OF TENDER

		summer/winter air intake is supplied and installed.	
		Engine block heater shall be supplied and installed.	☐ Yes ☐No
		A three stage engine compression "Jake Brake" system shall be supplied.	☐ Yes ☐No
		Oil filter will be of full flow type.	☐ Yes ☐No
		Shall have a 97 dba back up alarm.	☐ Yes ☐No
		Shall have cruise control with high idle option.	☐ Yes ☐No
		Shall have an automatic temperature controlled on/off type clutch fan.	☐ Yes ☐No
12.	Cab:	Air horn and electric horn to be supplied and installed.	☐ Yes ☐No
		Conventional air-ride cab shall be supplied and installed.	☐ Yes ☐No
		Tilt steering shall be supplied and installed.	☐ Yes ☐No
		Driver seat shall be an air suspension set in charcoal grey or dark grey.	☐ Yes ☐No
		The driver seat shall be a "premium" style similar to the "National Seating Premium Series" seat.	☐ Yes ☐No
		12 Volt accessory point to be supplied.	☐ Yes ☐No
		The passenger seat shall be a mid-back non-suspension seat or equivalent.	☐ Yes ☐No
		Pivoting arm rests shall be supplied.	☐ Yes ☐No
		Dual sun visors shall be supplied.	☐ Yes ☐No
		Air conditioning shall be supplied.	☐ Yes ☐No
		Tachometer shall be supplied.	Yes No
		An hour meter, either an electronic type or with anti-vibration mount mounted inside the cab shall be supplied.	☐ Yes ☐No Specify:
		Manufactures removable rubber floor mats shall be supplied.	☐ Yes ☐No
		Mirrors – two outside 7" X 16" West Coast stainless type mirrors, complete with built in heaters and clearance lights shall be supplied, as well as driver and passenger side convex. Complete with electric remote position control.	☐ Yes ☐No

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		Externally mounted grab bars on each side to assist entry/exit to the cab shall be supplied.	☐ Yes ☐No
		Supplementary cab insulation to suppress engine noise shall be supplied.	☐ Yes ☐No
		AM/FM blue tooth capable radio (electronic) with clock shall be supplied.	☐ Yes ☐No
		Power operated driver's side and passenger side windows, with a switch accessible by the driver and passenger.	☐ Yes ☐No
		Lower and intermediate footsteps on both sides shall be supplied.	☐ Yes ☐No
		Windshield to be heated.	☐ Yes ☐No
		Tinted Safety glass doors and rear window.	☐ Yes ☐No
12	Fuel Tank:	A terminal panel shall be incorporated into the wiring system to access the following wiring circuits and to add additional lighting for the body installation: Left and right turn Parking lights Back-up lights Independent brake light LED spot light back up lights on separate switch Plow and wing lights & all modules/multiplex computers.	Yes: Specify Location:
13.	Fuel Tank:	A 300 litre aluminum fuel tank shall be supplied on the left side.	Yes No Specify:
		The minimum clearance from the ground shall be 12".	YesNo Specify:
		Fuel tank shall not extend beyond the cab more than 6" or interfere with the installation of box equipment or spinner.	☐ Yes ☐No
14.	Lights:	Halogen head lights shall be supplied.	☐ Yes ☐No
		All clearance lights, signal lights and stop lights shall be LED type.	☐ Yes ☐No
		Every lamp, reflex reflector and conspicuity treatment must be permanently attached and must comply	☐ Yes ☐No

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		with all applicable requirements as prescribed by the FMVSS/CMVSS 108.	
15.	Paint:	The cab shall be painted WHITE.	☐ Yes ☐ No
16.	Attachments:	Operator's manual and line ticket shall be supplied.	☐ Yes ☐No
		Engine, transmission and axles shall have synthetic fluid.	☐ Yes ☐No
		All drain plugs shall be of magnetic type.	☐ Yes ☐No
		A plastic license plate light and plate holder shall be supplied to prevent dissimilar metal electrolysis.	☐ Yes ☐No
		Any cables or hoses that pass through the floor or walls of the cab shall be guarded with a rubber grommet and sealed with a rubber diaphragm or caulking.	☐ Yes ☐No
		ALL Trouble Shooting, Service, Maintenance and Electrical Service manuals shall be supplied in hardcopy and electronic (CD) format.	☐ Yes ☐No
		Fire extinguisher, first aid kit and a flare/triangle kit shall be supplied.	☐ Yes ☐No
		A Groenveld Automatic Greasing System on all fixed lubrication points for the entire unit shall be supplied – no exception.	☐ Yes ☐No
		Vehicles shall meet or surpass the mandatory requirements of the "Canada Motor Vehicle Safety Regulations" (SOR 84-812) amended and must bear the National Safety Mark outlined in those regulations.	☐ Yes ☐No
17.	Warranty:	The entire unit shall be covered by the standard comprehensive manufacturer's warranty, minimum one (1) year a description of which shall be included with the tender documents.	☐ Yes ☐No
		Plus, five (5) year/160,000 km extended warranty on engine, transmission, axles front and rear, cooling system, starter/alternator and chassis wiring shall be included.	☐ Yes ☐No

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		The entire unit shall be guaranteed against defective paint/materials and workmanship for a period of two (2) years after the unit is put into service.	☐ Yes ☐No
		The supplier shall provide warranty service at either the Tay Valley Township Municipal Garage and/or on the roadside. All costs associated with delivering the supplied unit to the supplier's repair facility shall be borne by the supplier, during the warranty period.	☐ Yes ☐No
18.	Preventative Maintenance Compulsory Vehicle Inspection (PMCVI) Sticker:	The vehicle shall be supplied with a valid PMCVI sticker.	☐ Yes ☐No
Dump	Body and Spread	ler Specifications	
		"4 Season" Side Tilt Type Combination Dump Body/Spreader. MG MODEL QS-1014_HD or approved equivalent.	☐ Yes ☐No Make: Model:
1.	Dump Body:	Inside length of body shall be 14 ft.	☐ Yes ☐No
		Outside length of body shall be 15'5" maximum.	☐ Yes ☐No
		Inside width to be 86" minimum.	☐ Yes ☐No
		Outside width to be 96" maximum.	☐ Yes ☐No
		Side height shall be 42" minimum.	Yes No
		Tailgate height shall be 58" minimum.	Yes No
		A double acting air operated tailgate made from 3/16" thick, Hardox 450, shock and abrasion resistant, 205,000 psi yield strength steel and reinforced with 4 vertical and 2 horizontal material shedding braces.	☐ Yes ☐No
		10" Hardwood sideboards painted black.	☐ Yes ☐No
		License plate bracket and light shall be installed on tailgate – exact location to be determined by the Township.	☐ Yes ☐No

PART "D" - FORM OF TENDER

5 1 1	Body sides, front panel and tailgate shall be manufactured from 3/16" thick, Hardox 450, shock and abrasion resistant, 205,000 psi yield strength steel – no exception.	☐ Yes	□No
a	Floor made of Hardox 450 1/4" shock and abrasion resistant 205,000 PSI steel with 3" channel cross members.	☐ Yes Specify:	□No
r	The floor and the right side of the body moves as one unit and tips to the left to feed the conveyor.	☐ Yes	□No
	A conveyor with a front chute is nstalled on the left side of the floor.	☐ Yes	□No
, F	A conveyor cover with hinges and grease fittings will be provided for protection when the body is used for conventional hauling.	☐ Yes	□No
	The cover will be made of Hardox 450 1/4".	Yes Specify:	□No
i f	An adjustable manual discharge gate is installed at the left front side of the body for the purpose of controlling the amount of material to the spinner.	☐ Yes	□No
i I	The floor and left side shall rotate on 1½", stainless steel bolt-on hinges. Hinges must be stainless steel for corrosion protection – no other material including hard induction chrome hinges will be acceptable.	☐ Yes	□No
	All bushings in the floor hinges shall have grease fittings.	☐ Yes	□No
	The design of the hinge prevents any accumulation of material which could cause stress in this critical area - manufacturers of this type of body, other than the pre-approved MG model QS-100-HD, must provide data proving material will not accumulate in floor hinge area.	☐ Yes	□No
	The sides and the floor are joined together by a Hardox 450 3/16" plate.	Yes Specify:	□No
	The right side is mounted integrally with the lifting floor and a SOLID CURBSIDE	☐ Yes	□No

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		OUTER WALL is built for added strength, security and support.	
		This is a critical section as it protects the side tilt floor section as well as the rear and front corners against loading damages – side tilt bodies with only 1 right side wall that lifts with the floor will not be acceptable.	☐ Yes ☐No
2.	Body Understructure:	The longitudinals consist of 2 -10" structural channels.	☐ Yes ☐No
		The channels are joined at the rear by a 13" apron. Two 4" x 4" tubing reinforcements are placed between the two channels at the point where the two tilt cylinders are fixed.	☐ Yes ☐No
		A 3/8" plate joins the channels at the front and is used as the attachment for the cylinder base.	☐ Yes ☐No
		Two extra 3" "C" channels on understructure for further floor reinforcement – honeycomb type floor understructure will not be acceptable.	☐ Yes ☐No
3.	Conveyor Mechanism:	The conveyor chain will be a self-cleaning, heavy duty, D88K type, and consists of 2 strands of 24,000 pound ultimate strength steel with 3/8" x 1 ½ " bar flites installed on 7-7/8" centers.	☐ Yes ☐No
		The chain shall travel in a recessed trough with a 3/16" thick QT-400 steel floor.	☐ Yes ☐No
		The overall width of the chain will be 18 3/4" maximum. The conveyor drive mechanism shall be through a hydraulic motor with 25:1 reduction worm gear.	☐ Yes ☐No
		The drive will have brass gears.	☐ Yes ☐No
		The gear-box is mounted with a 1 ½" shaft, two 8 teeth sprockets and a flange bearing.	☐ Yes ☐No
		The front drive-shaft, sprockets and gearbox assembly will be removable as one complete unit.	☐ Yes ☐No

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		At rear of conveyor chain, two bearings are mounted on a sliding system for chain tension adjustment. Two round idler wheels shall be connected through a 1½" diameter shaft.	☐ Yes ☐No
		Chain tension is adjusted by 2 grease cylinders mounted on the sliding system.	☐ Yes ☐No
		The seal must be at top of the cylinder. Seals installed at the bottom of the rod will not be acceptable.	☐ Yes ☐No
4.	Spinner Assembly:	A truck frame mounted spinner will be installed at the left front side of body.	☐ Yes ☐No
		It shall include an 18" diameter molded polyurethane spinner disc.	☐ Yes ☐No
		The spinner arrangement shall include a kemlite discharge chute, a drive shaft with hydraulic motor and mounting bracket.	☐ Yes ☐No
		The top mounted hydraulic motor shall be supplied with quick disconnect hydraulic couplings.	☐ Yes ☐No
		The top mounted hydraulic motor shall be supplied with quick disconnect hydraulic couplings.	☐ Yes ☐No
		Spinner shoot shall be steep enough so that material does not get stuck on steep hills	☐ Yes ☐No
5.	Front Lift Telescopic Hoist:	The hoist will be a front mounted 3 stage telescopic cylinder with a capacity of 30 tons which will allow the body to be raised to a 50° angle. Mailhot model CS130-5.5-3 – no exception.	☐ Yes ☐No
		A safety prop shall be installed under the body to secure the body when in the rear dump position.	☐ Yes ☐No
6.	Floor Tilt Cylinders:	The lifting floor is raised by 2 of 4" diameter (I.D.) x 22" stroke double acting cylinders minimum.	☐ Yes ☐No
		The floor in the full lift position must be a minimum of 38° to ensure complete unloading a sand or salt onto left side	☐ Yes ☐No

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		conveyor chain.	
		A body prop will be installed on the underside of the lifting floor to secure the floor and right side panel during maintenance.	☐ Yes ☐No
		A 50/50 oil flow divider will be installed in order to ensure uniform lifting of the dual cylinders under the floor. Side tilt bodies without 50/50 flow dividers will not be acceptable.	☐ Yes ☐No
		There shall be a side tilt indicator visible to driver which displays the tilting location of the floor and right side panel.	☐ Yes ☐No
		Front lift hoist and side tilt cylinders shall have a 2 year manufacturer's warranty.	☐ Yes ☐No
7.	Miscellaneous Components to be included:	Air tarp mechanism via 2 air cylinders – electric tarp systems will not be acceptable.	☐ Yes ☐No
		Fold-down type ladder with grip strut material installed front left side of body.	☐ Yes ☐No
		All body grease points, including tilting floor hinges, will be accessible through a centrally located and easily accessible grease point assembly.	☐ Yes ☐No
		A Holland model PH410RA pintle hook, complete with air cushion, rated at 100,000 MGTW minimum, shall be provided and including 2 safety chain hooks.	☐ Yes ☐No
		The hook shall be bolted to a heavy duty pintle plate at the rear of the chassis.	☐ Yes ☐No
		Body builder shall relocate chassis supplied glad hands onto pintle hook plate.	☐ Yes ☐No
		A 7 pin electric trailer plug shall be installed onto the pintle hook plate.	☐ Yes ☐No
8.	Lighting System:	Sealed clearance lights shall be provided and installed.	☐ Yes ☐No
		Sealed clearance lights shall be provided.	☐ Yes ☐No

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		A Grote blue oval LED strobe light shall be installed in the left side rear corner post.	☐ Yes ☐No
		A Grote amber oval LED strobe light shall be installed in the right side rear corner post.	☐ Yes ☐No
		Blue and amber warning lights shall be installed below tailgate on side tilt body.	☐ Yes ☐No
		Dual easily removable rear corner post light brackets shall be installed on top of each corner post at the tailgate. Each bracket shall be equipped with LED lights as follows – 4" red, 7" red and back-up lights.	☐ Yes ☐No
		Star 200B blue revolving beacon shall be installed on pedestal attached to top of oil reservoir behind cab – spare amber lens shall be provided.	☐ Yes ☐No
		One LED backup spot light shall be installed on the top corner of each post. Lights stall be controlled on their own switch.	☐ Yes ☐No
9.	Paint:	The box shall be painted BLACK .	☐ Yes ☐No
		The entire body must be shot-blasted before primer and finish paint is applied.	☐ Yes ☐No
		A 2 part epoxy type primer must be applied.	☐ Yes ☐No
		Top coat shall be Sherwin-Williams polyurethane type paint with baked on finish – no exceptions.	☐ Yes ☐No
Front	Plow	,	
		Viking model VCL36-11-45C steel full trip reversible snow plow or approved equivalent:	☐ Yes ☐No Make: Model:
1.	Plow Assembly:	The overall width shall be 11'.	☐ Yes ☐No
		The moldboard height shall be 36" maximum.	☐ Yes ☐No
		The path cleared in the bulldozing position shall be 11'. At a 35 degree angle, the path cleared shall be 10'.	☐ Yes ☐No

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Set at a 50 deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 20" minimum – no exceptions.	☐ Yes ☐No
Set at a 60 deg. attack angle, the overhang from the cutting edge to the front of the moldboard shall be 25" minimum – no exceptions.	☐ Yes ☐No
Set at a 50 deg. attack angle, the height from the ground to the front of the moldboard shall be 28" maximum – no exceptions.	☐ Yes ☐No
Set at a 60 deg. attack angle, the height from the ground to the front of the moldboard shall be 24" maximum – no exceptions.	☐ Yes ☐No
The moldboard shall be fabricated from 10 gauge steel.	☐ Yes ☐No
There shall be a minimum of 10 x 3/8" thick reinforcing ribs 100% welded to the moldboard.	☐ Yes ☐No
The safety trip mechanism shall consist of two compression coil springs incorporated into the drive frame. Upon encountering a road obstruction, the moldboard will raise vertically through the 2 compression springs. Note that reversible plows whereby the moldboard tilts forward through extension springs, will not be accepted by the Township.	☐ Yes ☐No
The two compression trip springs will be 5/8" wire, 5 1/4" O.D., and 14" free length with a total of 8 active coils.	☐ Yes ☐No
"Mushroom style" screw adjustable skid shoes shall be fitted on the drive frame.	☐ Yes ☐No
These shoes shall carry the weight of the plow when the moldboard trips.	☐ Yes ☐No
The bottom of the moldboard is to be reinforced with a ½" x 6" x 4" backer angle.	☐ Yes ☐No
A second angle 3/8" x 3" x 2" shall be welded above for added strength and	☐ Yes ☐No

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rigidity.	
The drive frame shall be of A frame and sector design.	☐ Yes ☐No
The A frame will be constructed of 3 ½" x 3 ½" x ¼" square tubing with two ¾" thick pivot plates.	☐ Yes ☐No
Sector frame constructed of 4" x 4" x 3/8" square tube.	☐ Yes ☐No
The sector angle shall provide a 30 □ radius and be constructed of ½" x 3 ½" x 2 ½" steel.	☐ Yes ☐No
To prevent wear, the sector will glide between two low friction replaceable polymer bearings bolted on the A frame.	☐ Yes ☐No
There shall be two 3" x 14" double acting hydraulic cylinders to reverse the plow to a maximum of 35 right or left.	☐ Yes ☐No
Moldboard shall be fitted with 2 shoes and scuff shoes shall be supplied on each end.	☐ Yes ☐No
A 3/4" X 8" X 14' steel cutting edge shall be supplied and bolted to the moldboard.	☐ Yes ☐No
Three 3/8" lift chains shall be provided to lift the plow to the carrying position.	☐ Yes ☐No
These chains must be as wide spread as possible in order to make the plow stable, and the plow must remain level when carried.	☐ Yes ☐No
It will be possible to perform the power angle function with the plow in both the lowered working position and the raised carrying position.	☐ Yes ☐No
Four hinge points are to be provided to connect the moldboard to the push frame, spanning a minimum distance of 80".	☐ Yes ☐No
To prevent damage to the reversing cylinders a cross-over relief valve shall be supplied.	☐ Yes ☐No
Drive frame shall be complete with an adjustable parking stand.	☐ Yes ☐No

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		All steel shall be epoxy primed prior to application of finish paint.	☐ Yes ☐No
		All paint finishes shall be top quality, rust resistant black.	☐ Yes ☐No
		Quick tack oscillating beam shall be supplied.	☐ Yes ☐No
		Carbide cutting edge shall be provided.	☐ Yes ☐No
		Moldboard to be fitted with 2 moldboard shoes and 2 curb shoes.	☐ Yes ☐No
		Fluorescent markers to be fitted on each end of the plow moldboard.	☐ Yes ☐No
		Moldboard shall be drilled to fit Black Cat Wear Parts JOMA 600	☐ Yes ☐No
Front	Plow Harness		
		Viking model VCL500HD hydraulically detachable front plow harness or approved equivalent.	☐ Yes ☐No Make: Model:
1.	Plow Harness Assembly:	Male Coupler: The male hinged swing arm and its enclosed rigid mounting bracket shall form an integral assembly and is to be fitted to the side plate (cheek plate). The assembly remains permanently with the vehicle even after the female coupler has been detached.	☐ Yes ☐No
		Side (Cheek) Plates: The side plates must be 5/8" thick and attached to the chassis side rails.	☐ Yes ☐No
		Cheek plates will be specified to suit chassis frame rails, and will extend back along the chassis frame rails as far as possible.	☐ Yes ☐No
		Cheek plates flame cut from 44W steel plate.	☐ Yes ☐No
		Fasteners attaching cheek plates to the chassis frame rails will be minimum grade 8 NC hex head bolts.	☐ Yes ☐No
		Swing Arm: The male swing arm to be rotated on a shaft, and the hub ends are to be guided by four anti-friction polymer discs in the mounting bracket.	☐ Yes ☐No
		A double acting hydraulic cylinder shall be utilized to tilt and or detach the front	☐ Yes ☐No

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harness	
The cylinder properties are as follows: Piston diameter: 2 ½" Piston rod diameter: 1 1/18" Stroke: 6"	☐ Yes ☐No
The rod is to be hard chrome plated and buffed.	☐ Yes ☐No
Hydraulic tilt forward only - These cylinders shall permit the front harness to tilt forward by disengaging the top and engaging the bottom hydraulically operated lock pins. The truck hood (cab) can then be tilted forward for easy access to the engine without completely detaching the front harness from the truck.	☐ Yes ☐No
Hydraulic detach function - by releasing both the upper and lower hydraulic locking pins, the front harness and wing post can completely hydraulically detach from the chassis.	☐ Yes ☐No
Hydraulically locking the plow harness shall be achieved through two double acting, double ended hydraulic cylinders – detachable type front harness' utilizing a single hydraulic locking pin will not be acceptable. The front harness must be able to either hydraulically tilt forward, or completely detach from the chassis – no exception.	☐ Yes ☐No
One cylinder shall provide the upper locking function and the second cylinder shall perform the lower locking function.	☐ Yes ☐No
The lock cylinder control valve shall be a double acting two spool mono block valve, installed directly on the front harness.	☐ Yes ☐No
The mono block valve shall be protected by a Poly Nema 13 waterproof enclosure – no exceptions.	☐ Yes ☐No
For safety, the lock cylinder control valve shall be mounted in a position to allow the operator visibility of the	☐ Yes ☐No

		hydraulic lock pins while performing the lock or unlock functions.	
		Two pairs of drive ears 100% welded to the front plate spaced at standard 30 ½" centres.	☐ Yes ☐No
		Three sets of plow drive bar connection holes located in drive ears – height to lower drive connections shall be 19" with plow mounted.	☐ Yes ☐No
		Quick tack hitch pockets bolted to drive ears.	☐ Yes ☐No
		Hydraulic plow lift cylinder, double acting 4" diameter with 10" stroke, cylinder rod hard induction chrome plated.	☐ Yes ☐No
		Two mounting locations in lift yoke to provide location for mounting of plow hydraulic lift cylinder – one position for winter operations and the second position for stored summer position.	☐ Yes ☐No
		Mounting plates for plow lift cylinder, lift yoke and lift yoke braces all ½ steel plate 100% welded to front plate.	☐ Yes ☐No
		Two sealed beam halogen plow lights with high and low beam and built in integral directional's with switch in cab.	☐ Yes ☐No
Wing	Harness		
1.	Cable Type Wing Harness Assembly:	Viking model VCL350SCL Cable Type Front Wing Post or approved equivalent:	☐ Yes ☐No Make: Model:
		48" front post.	☐ Yes ☐No
		The post shall be an 8" I beam @ 18.4 lbs./ft. Rated – no alternative front post construction will be permitted.	☐ Yes ☐No
		The harness assembly shall be of heavy construction to sustain snow plowing operations under severe conditions.	☐ Yes ☐No
		The design and construction of the wing post shall be in compliance with MTO ES403, or be of equivalent design. Brace "A" in a second sturdy cross	☐ Yes ☐No

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member shall replace ES403. This cross member shall be bolted to both cheek plates.	
The wing post, when mounted, shall not be higher than the wing tower.	☐ Yes ☐No
The sheave pin shall be provided with a grease fitting and an iolite bushing.	☐ Yes ☐No
A safety stop, limited slide travel shall be supplied.	☐ Yes ☐No
Lifting cable shall not be mounted to the hinge pin.	☐ Yes ☐No
An 8" grab link shall be provided with a tip over arrangement. A spring shall be included to return the wing to normal position after it has tripped.	☐ Yes ☐No
Bottom of wing post shall be approximately 11" from the ground, truck empty and shall be protected by a shoe.	☐ Yes ☐No
A 3" X 30" stroke DA cylinder shall be mounted on the inside of the front post and shall operate the front wing slide through 2 (6" diameter) sheaves and a cable.	☐ Yes ☐No
Front slide shall be provided with a tip over, arrangement. A spring shall be included to return the blade to normal position after it has tripped.	☐ Yes ☐No
Aeon 5000 lb rubber block helper spring kit shall be installed to the R.H. front chassis springs.	☐ Yes ☐No
One (1) 12" Grote convex mirror on backside of front post on an extended 10" angle iron bracket to air driver in winging mode.	☐ Yes ☐No
Two (2) 6" Grote front post spot lights on 18" extended adjustable bracket, with separate in-cab switches.	☐ Yes ☐No
Viking tube style cross member approximately 10" back of cab to assist in preventing diamond shaping of frame when winging.	☐ Yes ☐No
The rear structure shall attach directly	☐ Yes ☐No

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	behind the cab.	
	The supporting structure shall extend across both chassis side rails and along the right side to provide a distribution of the wing load under heavy duty operation.	☐ Yes ☐No
	Bottom of wing tower shall have a ground clearance of 14" minimum, truck empty.	☐ Yes ☐No
	The spacing of the holes in the slides for connecting the wing braces shall be approximately 17".	☐ Yes ☐No
	Approved size of ram controlling the rear end of wing shall be 3" diameter X 30" stroke cylinder, with a cable and sheave assembly.	☐ Yes ☐No
	Approved size of ram controlling wing brace slide shall be 3" diameter X 36" stroke and shall be double acting.	☐ Yes ☐No
	The wing tower shall be of a heavy construction and bolted to the right side of the truck chassis.	☐ Yes ☐No
	Wing tower shall be of 10" channel construction with a 25 degree offset and its mounting shall be sufficient to sustain snow plowing operations under severe conditions – 10" channel construction must be utilized for rear wing post construction – no exception.	☐ Yes ☐No
	One pipe brace 2" 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.	☐ Yes ☐No
	The rear wing tower shall be heavily braced and gusseted to the frame cheek plate.	☐ Yes ☐No
	For maximum strength two channels shall be used to form support integral with the rear post.	☐ Yes ☐No
	Two triangular stiffeners shall be incorporated into the assembly.	☐ Yes ☐No

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		Hydraulic hoses shall connect the rams of the tower with the valves in the control box. Hoses shall be two ply braided steel, SAE100R16 with swivels on both ends.	☐ Yes ☐No
		All sheave pins shall be provided with oil impregnated bronze bearings and grease fitting.	☐ Yes ☐No
		A safety chain shall be provided for securing wing when not in use.	☐ Yes ☐No
		Guide bars to contain the rear wing slide shall be welded 100% from the bottom up 2 feet.	☐ Yes ☐No
		One (1) 6" rear wing light with in cab switch shall be supplied.	☐ Yes ☐No
		Harness shall be prepped and painted Medium Gloss BLACK.	☐ Yes ☐No
12' St	eel Side Wing Mol	dboard	
		Viking model VCL144WHD-M Steel Side Wing Moldboard or approved equivalent.	☐ Yes ☐No Make: Model:
1.	Steel Side Wing Moldboard Assembly:	Overall length 12 feet.	Yes No
		Inside intake height 29" minimum.	☐ Yes ☐No
		Outside discharge height 39" minimum.	☐ Yes ☐No
		Moldboard thickness 10 gauge minimum.	☐ Yes ☐No
		Two drive ribs for connecting the wing brace shall be provided.	☐ Yes ☐No
		Two drive ribs shall be located approximately 10' 2" and 10' 8" from the nose end of the wing.	☐ Yes ☐No
		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.	☐ Yes ☐No
		Lower wing angle shall be 6" x 4" x 3/4".	☐ Yes ☐No
		The mounting of the nose end of the	

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	tipping over of the wing.	
	Two adjustable wing braces shall be supplied.	☐ Yes ☐No
	The upper brace shall be of a shock 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.	☐ Yes ☐No
	The lower brace shall incorporate a 5/8" x 6" compression spring to absorb any shock the wing encounters.	☐ Yes ☐No
	A 3" x 14 7/8" hydraulic lift cylinder shall be mounted between the upper and lower wing braces.	☐ Yes ☐No
	Upper brace – extended 90" C.C.	☐ Yes ☐No
	Collapsed 60" C.C.	☐ Yes ☐No
	Extended distances shall be measured with spring fully retracted.	☐ Yes ☐No
	Lower brace – Extended 88" C.C.	☐ Yes ☐No
	Collapsed 58" C.C.	☐ Yes ☐No
	One spare pin for adjusting the wing braces shall be supplied with each brace.	☐ Yes ☐No
	The top edge of the wing shall be boxed in and welded 100% to the ribs and the moldboard so as to avoid any pockets.	☐ Yes ☐No
	Adjustable needle valve in hydraulics back of cab to allow operator to be able to slow / speed mode functions of wing.	☐ Yes ☐No
	A High Wear Wing Blade shall be provided.	☐ Yes ☐No
	36" ORANGE fluorescent wing marker attached to rear of wing.	☐ Yes ☐No
	Conspicuity reflective on wing arm and on rear edge of wing.	☐ Yes ☐No
	Parking stand shall be attached to back side of wing.	☐ Yes ☐No
	All steel will be shot blasted, epoxy ZINC primed and finished in Medium Gloss BLACK finish.	☐ Yes ☐No
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Hydra	Hydraulic Pump Specifications			
1.	Hydraulic Pump:	Direct mounted hydraulic load sense pump in compliance with the following specification Model Danfoss S45 rear ported B flange installed on an Allison Transmission Model RDS 4500 P with clutch pack (hot shift) P.T.O. Hydraulic System.	☐ Yes ☐No	
		The pump shall be PISTON type and shall be of sufficient capacity to operate continuously one front mounted plow, one 3 function levelling wing, and combination spreader.	☐ Yes ☐No	
		P.T.O. and pump with CCCS Single proportional Uni-Grip control joystick 6-button back lighted with Panic feature installed with Floor Mounted arm rest. Equipment function names must be displayed on spreader controller screen for operator ease of seeing.	☐ Yes ☐No	
		Hydraulic tank (55 US gallons) vertically mounted behind the cab with internal 10micron return filter. A tank clean-out shall be incorporated with a magnetic drain plug, low oil sending unit, filter bypass indicator with oil sight level gauge. Must incorporate an enclosure for hydraulic valve system.	☐ Yes ☐No	
		Low level hydraulic oil indicator mounted in Joystick nose pod.	☐ Yes ☐No	
		The control valve will be supplied by spreader control manufacturer. The manifold will have a 5-year warranty on coils and cartridges. All valves will have load holding and A-B adjustable port relies. I-P68 rated connections (no exceptions) the valves shall be in a single manifold assembles as listed below. D.A. front plow lift 14 GPM A-B port relief, cylinder load holding D.A. front wing 14 GPM A-B port relief cylinder load holding	☐ Yes ☐No	

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D.A. Rear wing 14 GPM A-B port relief cylinder load holding S.A. Hoist control 35 GPM D.A. Side Dump 14 GPM A-B port relief cylinder load holding D.A. upper hitch 14 GPM A-B port relief cylinder load holding D.A. Lower hitch 14 GPM A-B port relief cylinder load holding S.A. Spinner 10 GPM S.A. Conveyor 15 GPM	
Directional valve bank assembly with load sense capability for variable. displacement pump, nominal flow 100 LPM (14 GPM) per section. The load sense signal originate from each section, the maximum flow of each section is factory adjusted though the Mako software utility for implement speeds.	☐ Yes ☐No
The hydraulic control valves will be operated by proportional electric in cab controls.	☐ Yes ☐No
The body operation shall be powered by the truck hydraulics. The spreader hydraulic block shall have IP-68 rated connections and be supplied by spreader control Manufacturer. Mounted behind the cab in an enclosure.	☐ Yes ☐No
All fittings, valves, hoses and drive shaft shall be supplied and installed by the supplier. Any additions or modifications will be the responsibility of the supplier.	☐ Yes ☐No
The hydraulic reservoir capacity shall be a minimum of 55 imp. gallons with in tank filter one shut off valve going to the pump and sufficient capacity to supply necessary oil.	☐ Yes ☐No
Sight gauge which is easily visible and readable shall be mounted on the left side wing tower behind the cab, to allow easy checking of hydraulic oil level in	☐ Yes ☐No

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		the reservoir, shall be provided. An external or internal oil filter (10 microns) shall be supplied and mounted on the return side. The restriction shall be 15 psi maximum at 0 ambient temperature.	
		All hydraulic fittings shall be JIC fittings and all detachable fittings shall be JIC threaded quick disconnect type fittings.	☐ Yes ☐No
Sprea	der Control Speci	fications	
1.	Spreader Controls:	The supply, installation and calibration of a material controller Cirus SSRx 10" with operator membrane keypad interface.	☐ Yes ☐No
		Cirus SSRx will have 3 camera inputs and will display on screen. 3 Cameras will be delivered with plow but not installed.	☐ Yes ☐No
		Cameras will be installed during Cirus spreader control training less than 3 days of plow delivery.	☐ Yes ☐No
		All connections outside the cab must be IP-68 rated connections - No Exceptions.	☐ Yes ☐No
		All spreader control cabling must have a minimum tensile strength of 2100 PSI.	☐ Yes ☐No
		Spreader Control must have 2 way communications to the Auger or Prewet system and display PPM in cab on display careen for trouble shooting.	☐ Yes ☐No
		Spreader Control System MUST be fully compatible of communicating with Major brands of GPS/AVL telematics system. (Skyhawk & DM&T).	☐ Yes ☐No
		Cirus Spreader Control will be installed on the Cirus Gofer Mount and with integrated Cirus 620 Unigrip Joystick.	☐ Yes ☐No
		HammerHead 12 Switch accessory Control from Cirus programmable control management system. Switched will be field programmed at time of installation.	☐ Yes ☐No

Hydra	ulic Controller Sp	ecifications	
1.	Hydraulic Controller:	The in-cab control system shall be a totally modular system including base unit with Mako2 [™] integrated can-bus CPU and armrest control console with Uni-Grip ® three axis (X Y & Z) proportional joystick.	☐ Yes ☐No
2.	Seat Mount or Pedestal Mount Arm Rest:	The unit shall have an adjustable armrest style console that mounts to the driver seat or a floor mounted arm rest with vertical and horizontal adjustments for multiple operators.	☐ Yes ☐No
		Arm Unit console shall have available up to six (6) warning lights and indicators.	☐ Yes ☐No
3.	Control Lever:	The control lever must be Uni-Grip [®] , a true Hall Effect joystick with three axis: (X, Y & Z) proportional control.	☐ Yes ☐No
		The lever must be able to control three (3) proportional valve functions simultaneously.	☐ Yes ☐No
		The lever will be capable of individual proportional control of up to ten (20) functions (20 PWM on 10 bi-directional valves).	☐ Yes ☐No
		The lever must have six (6) thumbactivated push buttons for the following functions: 1. Hoist 2. Plow 3. Wing 4. Panic (auto stow) 5. Sander Blast 6. Sander On/Off (Pass)	☐ Yes ☐No
4.	Control Information:	The control information must display on color display with spreader control.	☐ Yes ☐No
		Active operating mode of the Uni-Grip control (all implements installed on truck).	☐ Yes ☐No
		Diagnostic display capability for x, y & z axis of joystick.	☐ Yes ☐No
		Contrast setting for display.	Yes No

Initials

PART "D" - FORM OF TENDER

5.	Safety Trigger on Control Lever:	The control lever must have safety trigger protection for all plow control functions.	☐ Yes ☐No
6.	SafeStik ™ Joystick Protection:	The control system must include the capability to automatically recognize a failed joystick.	☐ Yes ☐No
		The control system will disable the output signals to prevent unintended motion of an attached device.	☐ Yes ☐No
7.	User settable speed control:	Mako Trim [™] for all hydraulic functions.	☐ Yes ☐No
		The Mako control system will allow the user to set the speed of each direction of motion on a PC for all hydraulic devices controlled by the joystick without modification to the hydraulic system.	☐ Yes ☐No
8.	Power Safe ™ Wiring Design:	For safety reasons, grounding or cutting any wire at any point between any valve coil and the controller must not cause any valve to actuate.	☐ Yes ☐No
		One lead from each hydraulic valve coil must be wired to a common ground point.	☐ Yes ☐No
		The system must supply pulsed +12 volt power to the other lead from each individual valve coil.	☐ Yes ☐No
9.	Cable Overview:	The system shall include IP 69 and NEMA 6 standards: connections for all "outside the cab" connections.	☐ Yes ☐No
		All connectors shall be rated as "6x" – dust proof;	☐ Yes ☐No
		All connectors shall be rated as "x9" – protected against the effects of permanent submersion in water as well as able to show no corrosion after 500 hours in a 35C salt spray.	☐ Yes ☐No

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PART "D" - FORM OF TENDER

List three municipalities in Ontario that have purchased a similar machine in the last 2 years:

1
2.
3.
List location of Manufacturers Parts Warehouse:
Distance from Tay Valley Township to nearest fixed support location:
Kilometers:
Location:

_____Initials

PART "D" - FORM OF TENDER

I/We hereby agree to supply **One (1) Tandem Plow Truck**. Complete in working condition in accordance with Parts "A", "B" and "C" of this tender for the following price:

DESCRIPTION	TOTAL PRICE Canadian \$ (LESS HST)
Supply one (1) 2018 current production Tandem Plow Truck	

The specified Tandem Plow Truck will be delivered to the Tay Valley Township Burgess Garage, 217 Harper Road, Perth, Ontario on or before **November 1**st, **2018**.

Notes:

- i) HST will be paid in addition to the tendered price
- ii) Prices must be rounded to two decimal places only

PART "D" - FORM OF TENDER

CHECKLIST

Enclosed with submission:	
1. Completed Part "D" enclosed	
2. 2018 Health and Safety Policy – Part "A" (#6)	
3. WSIB Certificate of Clearance – Part "A" (#6)	
4. Accessibility Declaration – Part "A" (#7)	
Documents upon Award of Contract:	
1. Certificate of Insurance – Part "A" (#13)	

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PART "D" - FORM OF TENDER

TENDER LABEL - FORM 5

To help identify your Tender, please cut out the label below and affix this label to the outside of your Tender Envelope:

THE CORPORATION OF TAY VALLEY TOWNSHIP TENDER FOR ONE (1) TANDEM PLOW TRUCK		
CONTRACT	#2018-PW-009	
The Corporation of Tay Valley Township 217 Harper Road, Perth, Ontario K7H 3C6		
Attention:	Amanda Mabo, Clerk	
Telephone: Toll Free: Fax: E-mail:	613-267-5353 ext. 130 1-800-810-0161 613-264-8516 clerk@tayvalleytwp.ca	
CONTRACT NUMBER: 2018-PW-009	CLOSING DATE: 1:00PM July 19 th , 2018	
YOUR COMPANY'S NAM	E AND ADDRESS:	

X Use the above label for your envelope when you submit your Tender Document.

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APPENDIX "A" - ACCESSIBILITY DECLARATION

[COMPANY LETTERHEAD]

To: The Corporation of Tay Valley Township

From: [Company Name]

[DATE]

[CONTRACT NUMBER, CONTRACT TITLE]

Re: Declaration of Compliance – Accessibility of Ontarians with Disabilities Act (AODA)

Please accept this letter as confirmation [COMPANY NAME] is in compliance with the Accessibility of Ontarians with Disabilities Act and its regulations

[SIGNATURE]
[NAME]
[POSITION]
[CONTACT INFORMATION]
[COMPANY]

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