PART A BID SUBMISSION

FORM A: BID (See B7)

		(See B7)		
1.	Project Title	SUPPLY & DELIVERY OF IN BACKHOES	NDUSTRIAL TRACTOR LOAD	ERS AND
2.	Bidder	Name of Bidder		
		Street		
	(Mailing address if different)	City	Province	Postal Code
	(Mailing address if different)	Street or P.O. Box		
		City	Province	Postal Code
	(0)	The Bidder is:		
	(Choose one)	a sole proprietor a partnership		
		a corporation carrying on business under the	ahove name	
		carrying on business under the	above name.	
3.	Contact Person	The Bidder hereby authorizes the Bidder for purposes of the	the following contact person to Bid.	represent
		Contact Person	Title	
		Telephone Number	Facsimile Number	
4.	Definitions		the Contract shall have the ral Conditions and D3 unless t	
5.	Offer		perform the Work in accordance anadian funds, set out on Form	
6.	Commencement of the Work		rk shall commence until he is in the commencement of the Work	

7.	Contract	The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid Submission.
8.	Addenda	The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract: No Dated
9.	Time	This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline.
10.	Signatures	In witness whereof the Bidder or the Bidder's authorized official or officials have signed this
		(Print here name and official capacity of individual whose signature appears above

Name of Bidder

FORM B: PRICES (See B8)

SUPPLY AND DELIVERY OF INDUSTRIAL TRACTOR LOADERS AND BACKHOES

PLEASE NOTE: This contract will be awarded by section

Bidders may bid on <u>Section 1</u>, <u>Section 2</u> or <u>both sections</u> in this table (Form B: Prices).

UNIT PRICES When entering prices into the table below, **prices shall include** Tire tax

When entering prices into the table below, do not include

Federal and Provincial Taxes (Goods and Services Tax (GST) and Manitoba Retail Sales

Tax (PST)). These taxes shall be extra See Clause B8.1

ITEM	DESCRIPTION	SPEC. REF.	UNIT PRICE (enter a price for a quantity of one (1) only)	APPROX QUANTITY	EXTENDED AMOUNT (Unit Price X Quantity)
SI	ECTION 1 – Item(s) 1A , 1B and 1C				
1 A	80 hp, 4WD Industrial Tractor Loader with General Purpose Bucket	04-036	\$	1	\$
1 B	80 hp 4WD Industrial Tractor Loader with 4 in 1 Bucket (Clam Type)	04-036	\$	4	\$
1 C	Parts And Service Manuals or Cd Rom, for Industrial Tractor Loaders	04-036	\$	4	\$
SI	ECTION 2 – Item(s) 2A, 2B, 2C and	2D			
2 A	80 hp, 4WD Industrial Tractor Loader with Backhoe - less loader bucket	04-038	\$	1	\$
2 B	4-IN-1 BUCKET (CLAM TYPE) for Industrial Tractor Loader with Backhoe	04-038	\$	1	\$
2 C	SNOW BUCKET for Industrial Tractor Loader with Backhoe	04-038	\$	1	\$
2 D	Parts And Service Manuals or Cd Rom, for Industrial Tractor Loaders	04-038	\$	1	\$
(in V	TOTAL BID	PRICE (i	n FIGURES) - \$ _		

FORM N1: DETAILED SPECIFICATIONS 04 – 036 80 H.P., 4WD INDUSTRIAL TRACTOR LOADER

1.0 DESCRIPTION OF EQUIPMENT AND PERFORMANCE

- 1.1 These specifications describe the supply and delivery of a minimum
 - 80 hp (60 kW), Rubber Tired, Four Wheel Drive Industrial Tractor Loader
 - with equipment and features as specified herein.
- 1.2 The <u>tractor and all other items/components</u> shall be the manufacturer's latest models. The tractor shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the tractor (including attachments) in successful operation shall be furnished as though specifically mentioned in these specifications. The complete tractor and attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.3 Shall be capable of consistent top performance for boulevard, walkway and parkland maintenance, snow removal work and other miscellaneous functions during the summer and winter environment which is normal to the City of Winnipeg.

2.0 ELIGIBLE MODELS

2.1 Shall be one of the following eligible manufacturer's models:

Case 570 – M XT Turbo

New Holland LV – 80 Turbo

Cat 416 - D

- 2.2 The City will only accept equipment from the eligible manufactures outlined in Clause 2.1. In the event that the manufacturers cannot provide the exact models listed, the City <u>will consider</u> newer or upgraded models which have performance characteristics that equal or exceed the eligible models listed and meet the required specifications in this document.
- 2.3 In addition to qualification as an eligible model, bids must be responsive under the specification section of this contract.
- 2.4 State make and model of <u>INDUSTRIAL TRACTOR</u> being bid.

3.0 OTHER SPECIFICATIONS AND STANDARDS

- 3.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 The <u>tractor and all its components</u> shall comply with all C.M.V.S.S. and Manitoba Highway Traffic Act regulations and requirements

4.0 SERVICE FACILITY

4.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility <u>located within 10 km of the boundaries of the City of Winnipeg.</u> The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to **B9.1**, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

7.7

Throttle - hand operated with foot override.

- 4.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Repair Facility. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2004: \$65.00/hour).
- 4.3 <u>Location of the service facility located within 10 km of the boundaries of the City of Winnipeg.</u>

	The	e Bidder shall choose and fill in one of the Clauses listed below 4.3 a) OF	R 4.3 b)
4.3	.a)	Bidder's own facility location. State the location of the service facility below.	
4.3	. b)	Bidder elects to have warranty work be performed by the City of Winnipeg Repair Facility.	
5.0	INS	TRUCTIONS FOR COMPLETION OF SPECIFICATIONS	
5.1	stat	items in these specifications must be answered indicating compliance or non-cote "yes" for compliance or state deviation, or give reply where requested to do sarly stated and fully detailed. Alternatives will be considered subject to evaluation	Deviations shall be
5.2	Bide	ders are not required to bid on all items in this contract.	
5.3	Eac	ch bidder is required to fill in every blank. Failure to do so may be used as a b	asis for rejection of bid.
6.0	DIM	MENSIONS & WEIGHTS (As Bid)	
6.1		erating weight (SAE) <u>without attachments</u> - approx. 11,000 lbs	
6.2	Ove	erall width, less front bucket - state.	
6.3	Ove	erall height (to top of cab) - state.	
6.4	Ove	erall length - state	
6.5	Wh	eelbase - state	
6.6	Tur	rning radius - state curb clearance with brakes applied.	
7.0	ENC	<u>GINE</u>	
7.1	Тур	pe - diesel fuelled, liquid cooled.	
7.2	Net	horsepower as per SAE J1349 B - 80 hp (60 kW) minimum. State.	
7.3	Fue	el shut-off - electric solenoid type.	
7.4	Fue	el filter and water separator - required.	
7.5	Oil f	filter - full flow, spin-on type.	
7.6		cleaner - dry cartridge type with restriction indicator. Indicator to be unted inside of cab	

7.8	Exhaust - mufflered, vertical discharge with bend and 40° cut-off (rain cap unacceptable).	
7.9	Coolant - ethylene glycol based, protected to -35°F (-37°C).	_
7.10	Engine block heater - immersion type.	
7.11	Chaf screen - required.	
7.12	Cold weather starting aid - ether <u>not</u> acceptable. State type.	
7.13	Engine protection system - shall provide visual and audible warning of principal machine systems including engine oil pressure and coolant temperature.	
8.0	TRANSMISSION	
8.1	Type - four(4) speed power shuttle with torque converter	
8.2	Shifting - fully synchronized.	
8.2.	2. a) Speeds, forward - four (4) minimum.	
8.2.	2. b) Speeds, reverse - four (4) minimum.	
8.3	Powershift direction reverser.	
9.0	AXLES & BRAKES	
9.1	Front axle - driven type four wheel drive (4WD), with guarded drive shaft.	
9.2	Brakes - wet disk type with individual pedals for simultaneous or independent operation.	
9.3	Parking brake - foot or hand operated.	
10.0	TIRES & RIMS	
10.1	Front - minimum 12 x 16.5 tires with matching rims. State size.	
10.1	.1. a) Ply rating - 8 ply minimum.	
10.1	.1. b) Tread - lug type.	
10.2	Rear - minimum 19.5 x 24 tires with matching rims. State size.	
10.2	.2. a) Ply rating - 10 ply minimum.	
10.2	.2. b) Tread - R4, industrial.	
10.3	Spare Tire and Rim - one (1) front and one (1) rear, identical to tires and rims being bid.	
10.4	Front fenders - required.	
11.0	FRONT END LOADER	
11.1	Lift capacity, full height - minimum 6,400 lb. (2,903 kg). State.	
11.2	Dump clearance as bid (bucket @ 45°) - 102 in. minimum. State.	

11.3	Cont	trols - single lever with clutch disconnect button, return-to-dig and float.	
11.3	3. a)	Self-levelling bucket with level indicator.	
11.3	3. b)	Front bucket level indicator to be mounted in a location that is easily visible to the operator during the course of normal operation. The operator must be able to see the bucket level indicator without having to lean or change body position.	
11.4	Load	der safety prop bar.	
Note: s	ee Se	ections 16.0 and 17.0 for loader buckets	
12.0	<u>OPEI</u>	RATOR (CAB) COMPARTMENT	
12.1		I be the manufacture's OEM cab. e: after market cabs will not be accepted)	
12.2		e - roll over protective structure complete with pressurized cab, OSHA fied or equal.	
12.	2 a)	Cab layout shall provide a comfortable seated position for a 95th percentile male.	
12.3	Cab	interior dome light - required.	
12.4	Floor	r covering - rubber, required throughout.	
12.5	Floor	r mats - required.	
12.6	Insul	lation and headliner - required for sound suppression.	
12.7		- cushioned, adjustable bucket type with cloth upholstery, mechanical r suspension and retractable seat belt.	
12.8	Ride	control w/ nitrogen accumulator - OEM factory installed.	
12.9	Wind	dows - tinted safety glass with appropriate markings for all panes.	
12.	9 a)	All windows shall be opening type where available.	
12.10	Door key.	rs - one (1) each side with spring assisted strut, lockable with common	
12.11	Interi	ior rear view mirror.	
12.12	Exte	rior rear view mirrors two (2). One mounted on each side of cab.	
12.13	Wind	dshield wipers - required front and rear.	
12.	13 a)	Windshield washer(s) - front and rear mounted.	
12.14	Heat	ter/defroster - heavy duty, hot water type with two-speed fan.	
12.	14 a)	Heater capacity - approx. 35,000 BTU.	
12.	14 b)	Defroster - capable of keeping all windows clear.	
12.15		onditioning - required, factory installed. Roof mounted air conditioning will not be accepted.	

The City of Winnipeg Bid Submission Bid Opportunity No. 437-2004 Page 8 of 21 12.16 Steps - open grate type. 12.17 Toolbox - lockable, state location. 12.18 Instrumentation: 12.18 a) Coolant temperature gauge and alarm. 12.18 b) Engine oil pressure gauge or warning light and alarm. 12.18 c) Transmission oil temperature gauge or warning light. 12.18 d) Hourmeter. 12.18 e) Tachometer. 12.18 f) Fuel gauge. 12.18 g) Charging system gauge or warning light. 12.19 Noise level, interior - maximum 80 dB(A), measured in accordance with SAE J336, state noise level. 12.20 Operator (cab) compartments, which have hydraulic lines that enter the compartment, shall not be accepted. 13.0 **ELECTRICAL & LIGHTING** 13.1 Type - 12 volt, negative ground electrical system. 13.2 Electric starter. 13.3 Keyed starter switch c/w three (3) sets of keys. 13.4 Batteries - dual, minimum 1050 CCA combined capacity. 13.5 Alternator - state output. 13.6 Combination stop and tail lights - two (2). 13.7 Signal lights with warning flashers - two (2) front and two (2) rear. 13.7 a) Warning flashers shall be operable with the key removed. 13.8 Headlights - two (2). 13.9 Work lights - two (2) front and four (4) rear. Adjustable, located immediately below cab roof. 13.9 a) Independent on/off switch for each pair of work lights, dash mounted, wired through ignition. 13.10 Radio - AM/FM.

13.11 Horn - operable from driving position and from backhoe position.

labelled by a permanent type, engraved style label.

13.12 Mini Light Bar - Grote 76813, roof mounted. Light shall be activated by a dash-mounted switch, wired through the ignition. The switch shall be

13.	12 a) Light bar guard - ramped, bolt-on metal guard, designed to permit servicing of the light bar without being removed.	
13.13	Back-up alarm - Star Model 62-097 or factory installed back-up alarm, mounted at rear of unit, located to be protected from damage.	
13.14	Wiring for all locally installed equipment shall be colour coded, loomed and properly secured.	
13.	14 a) All joining of wires and electrical connectors shall be soldered and sealed with heat shrink tubing.	
13.	14 b) All joining of wires and shall be performed with the same colour coded wire that is being used.	
14.0	MISCELLANEOUS	
14.1	Rear counterbalance - approx. 3,000 lbs., factory installed, required to provide proper machine balance and roading characteristics, state weight of counterbalance.	
	Note: Fluid filled tires or wheel weights are not acceptable.	
14.2	Drawbar - state type.	
14.3	Fuel tank capacity – minimum 119 litres. State capacity.	
14.4	Fuel tank shall be fully fuelled upon delivery.	
14.5	Replaceable moulded front rubber bumpers, mounted on the front exterior of unit on each side of the radiator.	
14.6	Slow Moving Vehicle Sign - Grote 71152 or equal, rear mounted in a visible location. Exact location to be determined at time of installation.	
15.0	OPERATOR MANUALS	
15.1	The operator manuals shall be in English and shall be supplied with the equipment when delivered.	
15.2	The operator manuals shall cover the complete machine including the engine and all related attachments.	
15.3	Payment for the equipment to the Contractor shall be dependent upon receipt of the operator manuals <u>and not</u> before.	
15.4	The Contractor shall provide the operator manuals at a quantity of one (1) per unit, which shall be included in the cost of the unit.	
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16.0	ITEM 1A - INDUSTRIAL TRACTOR LOADER OFFERED IN CLAUSE 2.4 plus GENERAL PURPOSE BUCKET	
		_
16.1	Attachment method - pin on coupler bucket type.	
16.2	Loader bucket - flat bottom, general purpose type, with bolt-on cutting edge.	

16.3	SAE heaped capacity - minimum 1.0 yd ³ (0.77 m ³).	
16.4	Width to exceed machine width at rear tires.	
16.5	Wear plates - required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place.	
		= 1
17.0	ITEM 1B - INDUSTRIAL TRACTOR LOADER OFFERED IN CLAUSE 2.4 plus 4-IN-1 BUCKET (CLAM TYPE)	
		_
17.1	Attachment method - pin on coupler bucket type.	
17.2	Type - 82 in. width approx. with bolt-on cutting edge(s).	
17.2.1	Replaceable bolt-on cutting edges - three (3) per clam bucket, i.e., a cutting edge shall be provided for all three edges of the bucket.	
17.3	Required with all auxiliary hydraulic lines and hoses, and in-cab controls.	
18.0	ITEM 1C - PARTS and SERVICE MANUALS / CD ROM (preferred) -	¬
	for INDUSTRIAL TRACTOR LOADERS	
18.1	The parts and service manuals / CD rom shall be in English and shall be supplied with the equipment when delivered.	
18.1	 State whether parts and service information is in text manual <u>or</u> CD rom format. 	
18.2	The parts and service manuals or CD rom shall cover the complete machine including the engine and all related attachments.	
18.3	Payment for the equipment to the Contractor shall be dependent upon receipt of the parts and service manuals or CD rom and not before.	
19.0	TRAINING	
19.1	The Contractor shall be required to provide training (at the Contractor's expense) for the City of Winnipeg maintenance and operating personnel. The training shall be divided into two separate sessions, one for maintenance personnel and one for operating personnel.	
	The duration of the sessions shall be as long as required for adequate familiarization and orientation of the equipment to the satisfaction of the Contract Administrator. The training shall be conducted in Winnipeg at a time and location designated by the Contract Administrator.	
	Note: Pricing should be based on one (1) working days for maintenance personnel and one (1) working days for operating personnel. The first payment of the contract on the equipment will not be issued until successful completion of training has been conducted to the satisfaction of the Contract Administrator.	

20.0	PERFORMANCE RELIABILITY
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20.0	PERFORMANCE RELIABILITY	
20.1	The responsibility for the design of the complete equipment, it's performance and reliability shall rest upon the Contractor.	
20.2	The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the equipment inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, or assembly.	
	Ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.	
20.3	Where the equipment develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.	
21.0	WARRANTY	
21.1	The warranty requirements shall be a minimum of two (2) years or 2000 hours, parts and labour inclusive, "bumper to bumper" on the complete 80 hp INDUSTRIAL TRACTORS and attachments .	
	The warranty shall not include regular maintenance items such as bolt on cutting edges, filters, oils, belts etc., or any item deemed as a consumable that is subject to everyday wear and tear, during the regular operation of the unit.	
21.2	The Contractor shall warrant the tractor, and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace, without cost to the City, any article that has become defective and not proven to have been caused by negligence on the part of the user within two (2) years or 2000 hours, from the date the equipment is put into service by the City of Winnipeg.	
21.3	The Contractor shall warrant all attachments, and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace, without cost to the City, any article that has become defective and not proven to have been caused by negligence on the part of the user within one (1) year from the date the equipment is put into service by the City of Winnipeg.	
21.4	The Contractor's Winnipeg dealer/representative or service facility, shall make available all replacement parts <u>and</u> have completed all warranty repairs on any tractor within <u>seven(7)</u> <u>business days.</u>	
21.5	In the event that the Contractor cannot provide delivery on the repaired tractor within the stated period above (Clause 21.4), the Contractor will supply a tractor of equal or greater operational capability, until such time as the repaired tractor is returned, at no cost to the City.	

FORM N2: DETAILED SPECIFICATIONS 04 - 038

80 H.P., 4WD INDUSTRIAL TRACTOR LOADER WITH BACKHOE

1.0 <u>DESCRIPTION OF EQUIPMENT AND PERFORMANCE</u>

- 1.1 These specifications describe the supply and delivery of a minimum
 - 80 H.P. (60 kW), Rubber Tired, Four Wheel Drive Industrial Tractor Loader with Backhoe with equipment and features as specified herein.
- 1.2 The <u>tractor loader backhoe and all other items/components</u> shall be the manufacturer's latest models. The tractor loader backhoe shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the tractor loader backhoe (including attachments) in successful operation shall be furnished as though specifically mentioned in these specifications. The complete tractor loader backhoe and attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.3 Shall be capable of consistent top performance for construction work and on excavations during the summer and winter environment which is normal to the City of Winnipeg

2.0 ELIGIBLE MODELS

2.1 Shall be one of the following eligible manufacture's models:

Case 580 - M Turbo

JCB 214 – E

John Deere 310 - SG

Cat 420 - D

- 2.2 The City will only accept equipment from the eligible manufactures outlined in Clause 2.1. In the event that the manufacturers cannot provide the exact models listed, the City <u>will consider</u> newer or upgraded models which have performance characteristics that equal or exceed the eligible models listed and meet the required specifications in this document.
- 2.3 In addition to qualification as an eligible model, bids must be responsive under the specification section of this contract.

2.4 ITEM 2A - INDUSTRIAL TRACTOR LOADER WITH BACKHOE (less front bucket)

State make and model of INDUSTRIAL TRACTOR LOADER WITH BACKHOE being bid.

3.0 OTHER SPECIFICATIONS AND STANDARDS

- 3.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 The <u>tractor loader backhoe and all its components</u> shall comply with all C.M.V.S.S. and Manitoba Highway Traffic Act regulations and requirements.

4.0 **SERVICE FACILITY**

- 4.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility <u>located within 10 km of the boundaries of the City of Winnipeg.</u> The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to **B9.1**, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.
- 4.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Repair Facility. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2004: \$65.00/hour).
- 4.3 <u>Location of the service facility located within 10 km of the boundaries of the City of Winnipeg.</u>

The Bidder shall choose and fill in one of the Clauses listed below. --- 4.3 a) OR 4.3 b)

	The blader shall choose and hill in one of the clades listed below.	<u> 7.5 b)</u>
4.3	a) Bidder's own facility location. State the location of the service facility below	
4.3	b) Bidder elects to have warranty work be performed by the City of Winnipeg Repair Facility.	
5.0	INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS	
5.1	All items in these specifications must be answered indicating compliance or non-constate "yes" for compliance or state deviation, or give reply where requested to do clearly stated and fully detailed. Alternatives will be considered subject to evaluate	so. Deviations shall be
5.2	Bidders are not required to bid on all items in this contract.	
5.3	Each bidder is required to fill in every blank. Failure to do so may be used as a	basis for rejection of bid.
6.0	DIMENSIONS & WEIGHTS (As Bid)	
6.1	Operating weight (SAE) <u>without attachments</u> - approx. 15,000 lbs. (6,803 kg), State weight.	
6.2	Overall width, less front bucket - state.	
6.3	Overall height (to top of cab) - state.	
6.4	Overall length - state.	
6.5	Wheelbase - state.	
6.6	Turning radius - state curb clearance with brakes applied.	
6.7	Ground clearance - 11 in. (279 mm) minimum.	
7.0	<u>ENGINE</u>	
7.1	Type - diesel fuelled, liquid cooled.	
7.2	Net horsepower as per SAE J1349 B - 80 hp (60 kW) minimum. State.	

7.3	Net torque – 220 lb-ft (285Nm) minimum. State.	
7.4	Fuel shut-off - electric solenoid type.	
7.5	Fuel filter and water separator – required.	
7.6	Oil filter - full flow, spin-on type.	
7.7	Air cleaner - dry cartridge type with restriction indicator. Indicator to be mounted inside of cab.	
7.8	Throttle - hand operated with foot override.	
7.9	Exhaust - mufflered, vertical discharge with bend and 40° cut-off (rain cap unacceptable).	
7.10	Coolant - ethylene glycol based, protected to -35°F (-37°C).	
7.11	Engine block heater - immersion type.	
7.12	Chaf screen – required.	
7.13	Cold weather starting aid - ether <u>not</u> acceptable. State type.	
7.14	Engine protection system - shall provide visual and audible warning of principal machine systems including engine oil pressure and coolant temperature.	
8.0	TRANSMISSION	
8.1	Type - four(4) speed power shuttle with torque converter	
8.1 8.2	Type - four(4) speed power shuttle with torque converter Shifting - fully synchronized.	
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8.2	Shifting - fully synchronized. a) Speeds, forward - four (4) minimum.	
8.2 8.2.	Shifting - fully synchronized. a) Speeds, forward - four (4) minimum.	
8.2 8.2. 8.2.	Shifting - fully synchronized. a) Speeds, forward - four (4) minimum. b) Speeds, reverse - four (4) minimum.	
8.2 8.2. 8.2. 8.3	Shifting - fully synchronized. a) Speeds, forward - four (4) minimum. b) Speeds, reverse - four (4) minimum. Powershift direction reverser.	
8.2. 8.2. 8.3 9.0	Shifting - fully synchronized. a) Speeds, forward - four (4) minimum. b) Speeds, reverse - four (4) minimum. Powershift direction reverser. AXLES & BRAKES	
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1.3			Bid Submission Page 15 of 21	
10.2	2. b)	Tread - R4, industrial.		
10.3		e Tire and Rim - one (1) front and one (1) rear, identical to tires rims being bid.		
10.4	Front	fenders - required.		
11.0	FRONT END LOADER			
11.1	Lift ca	pacity, full height - minimum 5,400 lb. (2,449 kg). State capacity.		
11.2	Dump clearance as bid (bucket @ 45°) - 102 in. minimum. State clearance.			
11.3	Contro	ols - single lever with clutch disconnect button, return-to-dig and float.		
11.3	3. a)	Self-levelling bucket with level indicator.		
11.3	3. b)	Front bucket level indicator to be mounted in a location that is easily visible to the operator during the course of normal operation. The operator must be able to see the bucket level indicator without having to lean or change body position.		
11.4	Loade	er safety prop bar.		
11.5	Attach being	nment method – Quick-coupler hydraulic type. State make and model bid.		
Note: see Sections 17.0 and 18.0 for loader buckets				
12.0	12.0 BACKHOE			
12.1	Туре	 centre pivot with extendable dipperstick (extend-a-hoe). 		
12.1	l.a)	Maximum digging depth – minimum 17 ft. 10 in. (5.44 m). State digging depth.		
12.2		ing force, bucket cylinder (SAE), with 24 in. (610mm) bucket – num 10,000 lbs. (4,535 kg). State force.		
12.2	2. a)	Digging force, crowd cylinder (SAE), with dipperstick retracted – minimum 6,600 lbs. (2,993 kg). State force.		
12.3		Controls (excavator type) - two lever, variable controls, electric-over- aulic (foot swing not acceptable). Joystick type, mounted beside ator.		
12.4	Quicl being	k coupler attachment bracket - mechanical type, state make and model g bid.		

12.4. b) Attachment bracket shall permit bucket changes and bucket position changes without the use of any tools.

Attachment bracket shall permit use of two (2) bucket positions or

Digging bucket - 24 in. (610mm) heavy duty digging bucket with replaceable pin-on teeth, complete with required attachment pin(s).

12.4. a)

190° rotation bucket.

12.6	Landscaping/ditching bucket - 40 in. (1016 mm) nominal. Hydraulic tilt type (articulating) w/flat bottom. State size.	
12.7	Stabilizer pads – reversible, flip-over type pads.	
12.8	Front counterweight – supplied as required to provide proper machine balance and roading characteristics.	
12.9	Replaceable bushings and grease fittings at all backhoe pivot points, cylinder rod and closed ends, and bucket links.	
12.10	Boom lock – required. State type.	
13.0	OPERATOR (CAB) COMPARTMENT	
13.1	Shall be the manufacture's OEM cab (after market cabs will not be accepted).	
13.2	Type - roll over protective structure complete with pressurized cab, OSHA certified or equal.	
13.2.	2. a) Cab layout shall provide a comfortable seated position for a 95th percentile male in both the loader and backhoe operating positions.	
13.3	Cab interior dome light - required.	
13.4	Floor covering - rubber, required throughout.	
13.5	Floor mats - required.	
13.6	Insulation and headliner - required for sound suppression.	
13.7	Seat - cushioned, adjustable bucket type with cloth upholstery, air suspension and retractable seat belt.	
13.8	Ride control w/ nitrogen accumulator - OEM factory installed.	
13.9	Windows - tinted safety glass with appropriate markings for all panes.	
13.9.	9. a) All windows shall be opening type where available.	
13.10	Doors - one (1) each side with spring assisted strut, lockable with common key.	
13.11	Interior rear view mirror.	
13.12	Exterior rear view mirrors two (2). One mounted on each side of cab.	
13.13 Windshield wipers - required front and rear.		
13.13	3. a) Windshield washer(s) - front and rear mounted.	
13.14	Heater/defroster - heavy duty, hot water type with two-speed fan.	
13.14	4. a) Heater capacity - approx. 35,000 BTU.	
13.14	4. b) Defroster - capable of keeping all windows clear.	
13.15	Air conditioning - required, factory installed. Roof mounted air conditioning units will not be accepted.	

13.16 Steps - open grate type. 13.17 Toolbox - lockable, state location. 13.18 Instrumentation: 13.18. a) Coolant temperature gauge and alarm. 13.18. b) Engine oil pressure gauge or warning light and alarm. 13.18. c) Transmission oil temperature gauge or warning light. 13.18. d) Hourmeter. 13.18. e) Tachometer. 13.18. f) Fuel gauge. 13.18. g) Charging system gauge or warning light. 13.19 Noise level, interior - maximum 80 dB(A), measured in accordance with SAE J336. State noise level. Operator (cab) compartments, which have hydraulic lines that enter the 13.20 compartment, shall not be accepted. 14.0 **ELECTRICAL & LIGHTING** 14.1 Type - 12 volt, negative ground electrical system. 14.2 Electric starter. 14.3 Keyed starter switch c/w three (3) sets of keys. 14.4 Batteries - dual, minimum 1050 CCA combined capacity. 14.5 Alternator - state output. 14.6 Combination stop and tail lights - two (2). 14.7 Signal lights with warning flashers - two (2) front and two (2) rear. Warning flashers shall be operable with the key removed. 14.7. a) 14.8 Headlights - two (2). 14.9 Work lights - two (2) front and four (4) rear, adjustable, located immediately below cab roof. 14.9. a) Independent on/off switch for each pair of work lights, dash mounted, wired through ignition. 14.10 Radio - AM/FM. 14.11 Horn - operable from driving position and from backhoe position. 14.12 Mini Light Bar - Grote 76813, roof mounted. Light shall be activated by a dash-mounted switch, wired through the ignition. The switch shall be

labelled by a permanent type, engraved style label.

14.1	2. a)	Light bar guard - ramped, bolt-on metal guard, designed to permit servicing of the light bar without being removed.	
14.13		k-up alarm - Star Model 62-097 or factory installed back-up alarm, inted at rear of unit, located to be protected from damage.	
14.14		ng for all locally installed equipment shall be colour coded, loomed properly secured.	
14.1	4. a)	All joining of wires and electrical connectors shall be soldered and sealed with heat shrink tubing.	
14.1	4. b)	All joining of wires and shall be performed with the same colour coded wire that is being used.	
15.0	MISC	<u>CELLANEOUS</u>	
15.1	Fuel	tank capacity – minimum 119 litres. State capacity.	
15.2	Fuel	tank shall be fully fuelled upon delivery.	
15.3		laceable moulded front rubber bumpers, mounted on the front exterior nit on each side of the radiator.	
15.4		w Moving Vehicle Sign - Grote 71152 or equal. Rear mounted in a sole location. Exact location to be determined at time of installation.	
16.0	<u>OPER</u>	RATOR MANUALS	
16.5		operator manuals shall be in English and shall be supplied with the pment when delivered.	
16.6		operator manuals shall cover the complete machine including the ne and all related attachments.	
16.7		ment for the equipment to the Contractor shall be dependent upon ipt of the operator manuals and not before.	
16.8		Contractor shall provide the operator manuals at a quantity of (1) per unit, which shall be included in the cost of the unit.	
17.0	ITEM	2B – 4-IN-1 BUCKET (CLAM TYPE) - for Industrial Tractor Loader Backh	oe (Clause 2.4)
17.5	Clam	n bucket – 4 in 1 bucket.	
17.6	Attac	chment method – mechanical quick-coupler.	
17.7		laceable bolt-on cutting edges - three per clam bucket, i.e., a cutting e shall be provided for all three edges of bucket.	_
17.8	Widtl	th to exceed machine width at rear tires. State width.	
17.9	Hydr	uired with all auxiliary hydraulic lines and hoses, and in-cab controls. raulic lines for the ditching bucket should be neatly routed and ected from damage.	

17.10	Wear plate(s) – required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place.
18.0	ITEM 2C - SNOW BUCKET- for Industrial Tractor Loader Backhoe (Clause 2.4)
18.5	Snow bucket – SAE heaped capacity minimum 2.00 yd ³ (1.54 m ³). State size.
18.6	Attachment Method – mechanical quick-coupler.
18.7	Width to exceed machine width at rear tires.
18.8	Wear plate(s) – required to prevent bucket heel from rubbing on ground with bolt-on cutting edge in place.
19.0	ITEM 2D - PARTS and SERVICE MANUALS / CD ROM (preferred) - for Industrial Tractor Loader with backhoe (Clause 2.4)
19.5	The parts and service manuals / CD rom shall be in English and shall be supplied with the equipment when delivered.
19.5	i. a) State whether parts and service information is in text manual or CD rom format.
19.6	The parts and service manuals or CD rom shall cover the complete machine including the engine and all related attachments.
19.7	Payment for the equipment to the Contractor shall be dependent upon receipt of the parts and service manuals or CD rom and not before.
21.0	TRAINING
21.1	The Contractor shall be required to provide training (at the Contractor's expense) for the City of Winnipeg maintenance and operating personnel. The training shall be divided into two separate sessions, one for maintenance personnel and one for operating personnel.
	The duration of the sessions shall be as long as required for adequate familiarization and orientation of the equipment to the satisfaction of the Contract Administrator. The training shall be conducted in Winnipeg at a time and location designated by the Contract Administrator.
	Note: Pricing should be based on one (1) working days for maintenance personnel and one (1) working days for operating personnel. The first payment of the contract on the equipment will not be issued until successful

completion of training has been conducted to the satisfaction of the Contract

Administrator.

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22.1	The responsibility for the design of the complete equipment, it's performance and reliability shall rest upon the Contractor.	
22.2	The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the equipment inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, or assembly.	
	Ordinary service adjustments are not included, or considered under the scope of <u>"repeated failures"</u> , as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.	
22.3	Where the equipment develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.	
23.0	WARRANTY	
23.1	The warranty requirements shall be a minimum of two (2) years or 2000 hours, parts and labour inclusive, "bumper to bumper" on the complete 80 hp INDUSTRIAL TRACTORS WITH BACKHOES and attachments.	
	The warranty shall not include regular maintenance items such as bolt on cutting edges, filters, oils, belts etc., or any item deemed as a consumable that is subject to everyday wear and tear, during the regular operation of the unit.	
23.2	The Contractor shall warrant the tractor, and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace, without cost to the City, any article that has become defective and not proven to have been caused by negligence on the part of the user within two (2) years or 2000 hours, from the date the equipment is put into service by the City of Winnipeg.	
23.3	The Contractor shall warrant all attachments, and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace, without cost to the City, any article that has become defective and not proven to have been caused by negligence on the part of the user within one (1) year from the date the equipment is put into service by the City of Winnipeg.	
23.4	The Contractor's Winnipeg dealer/representative or service facility, shall make available all replacement parts <u>and</u> have completed all warranty repairs on any tractor within <u>seven(7)</u> business days.	
23.5	In the event that the Contractor cannot provide delivery on the repaired tractor loader backhoe, within the stated period above (Clause 23.4), the Contractor will supply a tractor of equal or greater operational capability, until such time as the repaired tractor is returned, at no cost to the City.	

FORM O: QUESTIONNAIRE

1.0	from the date of official notification of award of Contract. (See D5.1)
	<u>Section 1 (Items 1A , 1B and 1C)</u> weeks.
	Section 2 (Items 2A , 2B , 2c and 2D)weeks.
2.0	LIST any significant features that will be supplied standard on the unit being offered, but were not specifically mentioned in the Detailed Specifications:
3.0	LIST three current users of the offered model:
4.0	Does the equipment being offered meet or exceed the minimum requirements of the Detailed Specifications?
5.0	LIST any deviations that might be considered less than equal to the Detailed Specifications: