4.

FORM A: BID (See B8)

1.	Contract Title	SUPPLY AND DELIVERY C RAIL	F A WHEELED EXCAVATOR WIT	H HI-
2.	Bidder			
		Name of Bidder		
		Usual Business Name of Bidder as	it appears on Invoice (if different from above)
		Street		
		City	Province	Postal Code
		Email Address of Bidder		
		Facsimile Number		
	(Mailing address if different)	Street or P.O. Box		
		City	Province	Postal Code
		GST Registration Number (if applic	able)	
		The Bidder is:		
	(Choose one)	a sole proprietor		
		a partnership		
		a corporation		
		carrying on business under t	he above name.	
3.	Contact Person	The Bidder hereby authorize the Bidder for purposes of th	es the following contact person to le Bid.	represent
		Contact Person	Title	
		Telephone Number	Facsimile Number	
		Email Address		

Definitions All capitalized terms used in the Contract Documents shall have the meanings ascribed to them in the General Conditions and D3.

- 5. Offer The Bidder hereby offers to perform the Work in accordance with the Contract for the price(s), in Canadian funds, set out on Form B: Prices, appended hereto.
- 6. Commencement of the Work The Bidder agrees that no Work shall commence until he/she is in receipt of a notice of award from the Award Authority authorizing the commencement of the Work.
- 7. Contract By submitting a bid in response to this Tender, the Bidder certifies that it has read, understands, and agrees to the terms and conditions of this Tender and that the Tender, 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.
- 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.Indigenous Self-
DeclarationThe City is requesting that Bidders identify if their business is at least
51% owned by one or more Indigenous persons of Canada.

YES, 51% or more Indigenous ownership

NO, it is not

This information is being gathered for statistical purposes only and will not be used for purposes of evaluation.

11. Signatures The Bidder or the Bidder's authorized official or officials have signed this

_____ Day of _____, 20_____,

Signature of Bidder or Bidder's Authorized Official or Officials

(Print here name and official capacity of individual whose signature appears above)

(Print here name and official capacity of individual whose signature appears above)

FORM B: PRICES (See B9)

SUPPLY AND DELIVERY OF A WHEELED EXCAVATOR WITH HI-RAIL

ITEM NO.	PRICES DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Wheeled Excavator	19019	Each	1	
1a.	Hi-Rail Assembly	19019	Each	1	
1b.	Tilt Ditching Bucket	19019	Each	1	
1c.	Digging Bucket	19019	Each	1	
1d.	Thumb	19019	Each	1	
1e.	Tamper	19019	Each	1	
				i	
			Nam	e of Bidder	

FORM N: DETAILED SPECIFICATIONS 19019

WHEELED EXCAVATOR WITH HI-RAIL

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe a <u>Wheeled Excavator with Hi-Rail</u> and other equipment and features as specified herein.
- 1.2 The <u>Wheeled Excavator with Hi-Rail</u> shall be a new 2019 model year or newer.
- 1.3 The <u>Wheeled Excavator with Hi-Rail</u> and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated 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.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

2.0 OTHER SPECIFICATIONS AND STANDARDS

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 <u>Where applicable</u>, the <u>Wheeled Excavator with Hi-Rail</u> shall comply with the applicable regulations:

Transport Canada, National Safety Mark, NSM: http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm

Manitoba Safety and Health Regulation, Parts 12, 16, 22: <u>http://web2.gov.mb.ca/laws/regs/current/217.06.pdf</u>

Canadian Motor Vehicle Safety Standards C.M.V.S.S.: <u>http://laws-lois.justice.gc.ca/eng/regulations/C.R.C., c._1038/section-sched3.html</u>

Manitoba Highway Traffic Act regulations and requirements including, but not limited to, a Manitoba Government Inspection with Safety Sticker: <u>http://web2.gov.mb.ca/laws/regs/index.php?act=h60</u>

Canadian Standards Association, CSA: http://www.csagroup.org/

Under Writers of Canada, U/L: <u>http://www.ulc.ca/</u>

Society of Automotive Engineers, SAE: http://www.sae.org/

City of Winnipeg Lighting Visibility Standard: <u>http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf</u>

Manitoba Building Code: https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=31/2011 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

3.0 SERVICE FACILITY

3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. 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.

4.0 <u>REFERENCES</u>

4.1 If available, please provide five (5) references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

5.0 MAKE & MODEL

5.1 State year, make and model being bid:

6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.
- 6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specification is used, the City will also consider deviations and/or equivalents.

6.3 EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID

7.0 PERFORMANCE RELIABILITY

- 7.1 The responsibility for the design of the <u>Wheeled Excavator with Hi-Rail</u> its performance and reliability shall rest upon the Contractor.
- 7.2 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 vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or 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.
- 7.3 Where the <u>Wheeled Excavator with Hi-Rail</u> develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

7.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment. Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C).

8.0 <u>FUEL</u>

8.1 <u>Where applicable</u>, all equipment must be fully fueled upon delivery (no exceptions).

9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

- 9.1 The manufacturer of the <u>Wheeled Excavator with Hi-Rail</u> shall have five (5) years continuous experience manufacturing <u>Wheeled Excavator with Hi-Rail</u>.
- 9.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.
- 9.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining <u>Wheeled Excavator with Hi-Rail</u> of the type being offered.

10.0 SPECIFICATIONS:

Requirement:

The City of Winnipeg requires one (1) Wheeled Excavator with Hi-Rail meeting the following specifications:

- Model year: 2019 or newer
- Machine Operating Weight of approximately 40,000 45,000 lbs.
- One-Piece Boom
- HP: 150 175 HP
- High flow hydraulics to operate all attachments
- 30-foot reach
- 13,500 lbs. Lift Capacity over Front at Ground Level 20 ft. (6.1 m) Reach
- 8000 lbs. Lift Capacity over Side at Ground Level 20 ft. (6.1 m) Reach
- Front dozer blade with rear outriggers
- Hi-Rail installed

Background:

The Excavator will be used year-round in all types of terrain and extreme weather conditions

The Excavator will be used for:

- Brush cutting
- Drainage improvements
- Railway improvements

The following attachments will be required:

- Hi-Rail
- Tilt Ditching Bucket
- Digging Bucket
- Brush Cutter
- Thumb
- BTE 2-Motor Tamper
- BTE Extendable Tie Talon
- R60 Rototilt complete with PG-65 Coupler

Note:

The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)

Make and Model

- 10.1 Make State:
- 10.2 Model State:
- 10.3 Model Year State:

Independent Travel System

10.4 Independent Travel:

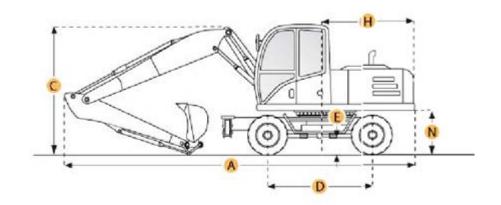
Excavator to be equipped with an Independent Travel System or equivalent, which allows the machine to move, lift and swing simultaneously without experiencing a loss of power.

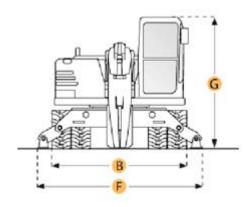
State: How the Excavator will achieve this requirement if not already stated in these specifications

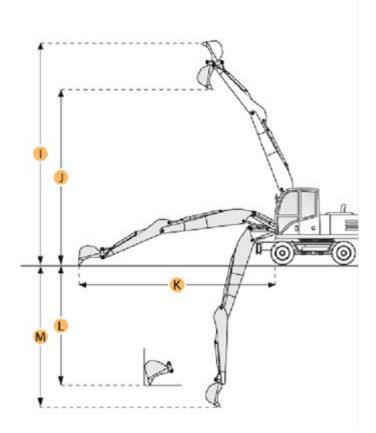
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Working Ranges

Use the diagrams for specifications 10.5 to 10.18







10.5	Dimension A: Overall Length	State:	
10.6	Dimension B: Overall Width	Approximately 8 ft. 4 in.	
		State:	
10.7	Dimension C: Overall Height	Approximately 10 ft. 3 in.	
10.8	Dimension D: Wheelbase	Approximately 8 ft. 8 in. State:	
10.9	Dimension E: Ground Clearance	Approximately 360 mm (1 ft. 2 in.)	
		State:	
10.10	Dimension F: Overall Width – Outriggers Down	Approximately 3700 mm (12 ft. 2 in.) State:	
10.11	Dimension G: Height to Top of Cab	Approximately 3080 mm (10 ft. 1 in.) State:	
10.12	Dimension H: Tail Swing Radius	Approximately 2440 mm (8 ft.)	
		State:	
10.13	Dimension I: Cutting Height	State:	
10.14	Dimension J: Dump Height	State:	
10.15	Dimension K: Reach Along	Approximately 30 ft.	
	Ground	State:	

10.16	Dimension L: Vertical Wall Dig Depth	State:	
10.17	Dimension M: Digging Depth	State:	
10.18	Dimension N: Upper Structure Clearance	State:	
10.19	Boom Length	Approximately 5350 mm (17 ft. 6 in.) State:	
10.20	Dipper (Arm, Stick) Length	Approximately 2500 mm (8 ft. 2 in.) State:	
	Performance		
10.21	Operating Weight	Approximately 40,000 – 45,000 lbs. State:	
10.22	Arm Force	Approximately 20,000 lbf. (89 kN) State:	
10.23	Digging Force	Approximately 22,000 lbf. (98 kN) State:	
10.24	Lift Capacity over Front at Ground Level 20 ft. (6.1 m) Reach.	Approximately 13,500 lbs. (5900 kg) State:	
	Neddi.	The above lifting capacities are in compliance with SAE J/ISO 10567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load.	
10.25	Lift Capacity over Side at Ground Level 20 ft. (6.1 m) Reach	Approximately 8000 lbs. (3630 kg) State:	
	Reach	The above lifting capacities are in compliance with SAE J/ISO 10567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load.	
	Engine		
10.26	Engine	Diesel State: Make: Model:	
10.27	Emission Rating	Tier 4 Final Emission Compliant	
10.28	Diesel Exhaust Fluid (DEF) System	State:	
10.29	DEF Tank and Lines	Heating elements or equivalent system designed to thaw the DEF and keep it from freezing while the machine is in operation	
10.30	Horsepower (SAE Net Power)	Approximately 150 - 175 hp State:	

10.31	Cylinders	4 Cylinders State:	
10.32	Displacement	State:	
10.33	Torque	State:	
10.34	Auto Idle Feature	To reduce engine speed when hydraulics are not in use to reduce fuel consumption and noise State:	
10.35	Work Modes	State: number of work modes available	
10.36	Water Separator	Factory Installed State:	
10.37	Cold Weather Package	 All weather fluids Low temperature hydraulic oil Extended life coolant Block heater and cord Cold aid starts i.e. glow plugs Heavy duty maintenance free batteries State: 	
10.38	Starter	24V starter motor State:	
10.39	Coolant	Extended life, protected to -40°C State:	
10.40	Lubrication Pressure System	Full flow State:	
10.41	Oil Filter	Spin-on and removable State:	
10.42	Fuel Filter	 Removable Spin–on With water separator State: 	
10.43	Air Filter	 Heavy Duty Two (2) stage dry air filter Replaceable elements Automatic ejector Restriction indicator located in cab State: 	
10.44	Hydraulic Fan	 Factory installed Time adjustable State: 	

Brakes

	Dianoo		
10.45	General	 On all four (4) wheels Wet disc Hydraulic State: 	
10.46	Parking Brake	State:	
10.47	Propel Brakes	Hydraulically operated State:	
10.48	Swing Brakes	Hydraulically operated with 100% brake hold to upper structure when engine is off State:	
10.49	Travel Motor	3 modes 1. Inching 2. Slow 3. Fast	
10.50	Brake Accumulators	State:	
	Controls		
10.51	Controls	 Pilot operated controls for: Boom Dipper (Arm, Stick) Bucket Swing Travel 	
10.52	Control Pattern	 ISO or SAE Changeable State: type 	
	Capacities		
10.53	Fuel Tank	State: capacity	
10.54	Diesel Exhaust Fluid Tank	State: capacity	
10.55	Cooling System	State: capacity	
10.56	Hydraulic Oil Tank	Approximately 100 – 200 L (26.4 – 52.8 US Gal) State: largest capacity tank that is available	
10.57	Hydraulic System Capacity	Approximately 180 – 340 L (47.5 – 90 US Gal) State: capacity	

	Electrical		
10.58	Alternator	Approximately 80 amps State: rating	
10.59	Batteries	 Qty two (2) 12V Heavy duty cold weather rated Maintenance Free Approximately 900 CCA State: CCA 	
10.60	Voltage	24V	
10.61	Battery Disconnect Switch	 Protected from the elements Lockable with pad lock	
	Gauges, Instruments and Alarn	ns	
10.62	Message System	Display all standard gauge and alarm information including: • Emergency stop • Fuel level and low fuel • DEF low level indicator • Coolant temperature and low coolant • Battery level • Air filter condition • Low oil pressure • Oil gauge • Engine overheat • Hydraulic system overheat • Alternator • Electrical faults • Engine hour meter • RPM • Service information • On-board diagnostics	
10.63	Monitor	 Approximately 7 in. colour monitor Full screen or split screen capabilities Shows all camera feeds Acts as the message system display 	
10.64	Hydraulic Oil Sensor	 Electric low-level sensor Mounted inside tank, activating a light and buzzer located inside the cab. The alarm shall be activated when oil level is low 	
10.65	Overload Warning	An overload warning device to warn operators when a too heavy load has been lifted State: method	

10.66	Outrigger Warning System	Warning light and buzz system shall be installed on the dash and shall be actuated when outriggers are not in the fully stowed position State: method	
10.67	Back-Up Alarm	 Approximately 97 – 112 dB Protected from damage State: rating 	
10.68	Back-Up Camera	Protected from damage State:	
10.69	Side View Camera	 If equipped Protected from damage State: 	
10.70	Horn	Electric State:	
	Hydraulic System		
10.71	 Hydraulic system including <u>high f</u> attachments which are described Ditching bucket Digging bucket Brush Cutter Thumb BTE 2-Motor Tamper BTE Extendable Tie Talon R6 Rototilt complete with PG65 		
10.72	Summation System	Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity State:	
10.73	Boom Priority	Gives priority to the boom operation for faster raising when loading of deep excavation State:	
10.74	Arm Priority	Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging State:	
10.75	Slew Priority	Supplies priority to the slew operation for faster slew simultaneous operations State:	
10.76	Regeneration System	Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity State:	

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10.77	Holding valves	Boom and arm holding valves prevent th digging equipment from creeping State:	ne
10.78	Main Pumps	 Two (2) - variable displacement axial piston pumps Maximum Flow Rating of approximate 200 L/min (52.8 gpm) 	
		State: Minimum Flow State: Maximum Flow	
10.79	Pilot Pump	 Two (2) Gear pumps: One (1) for pilot One (1) for Steering and Brakes State: Maximum flow State: Pressure setting 	
10.80	Hydraulic Motors	Travel State: type	
		Slew State : type	
10.81	Power Boost	Hydraulic system to have a momentary boost pressure control to boost hydrauli pressure for short period of time State:	c
10.82	Dedicated Swing Pump	Separate swing pump Variable displacement State:	
10.83	Swing Priority System	Arm and swing systems State:	
10.84	System Operating Pressure	State: Implement circuits State: Travel circuits State: Swing circuits	
10.85	Auxiliary Hydraulics	State: flow	
		Note: must be able to combine and prioritize pump flow to operate the brush cutter and other attachments	ı
10.86	Auxiliary Hydraulic Circuit	 Qty two (2) additional circuits Capability to add additional auxiliary hydraulic circuits 	
		State:	
10.87	Priority Flow Valve	Required in order to operate cutter head and other rotary equipment	ds
10.88	Medium Pressure Hydraulic Lines	Required State:	

10.89	High Pressure Hydraulic Lines	Required State:	
10.90	Auxiliary Lines	To be supplied to end of Dipper (Arm, Stick) State:	
10.91	Multi-Functional Valve	Allows the operator to select pre-set tool parameters (hydraulic flow and pressure), eliminating the need to re-set these hydraulic parameters each time a tool is changed State:	
10.92	Sensitivity	Adjustable hydraulic sensitivity State:	
10.93	Accumulator	Provide pilot pressure to lower attachments in case of engine shut down State:	
10.94	Hydraulic Oil Cooler	State:	
10.95	Oil Filtration	State:	
10.96	Sight Gauge	Hydraulic tank State:	
10.97	Safety	Hydraulic safety system designed to lock- out any of the booms during transport State:	
	Hydraulic Cylinders		
10.98	Boom	State: Qty Bore Rod Diameter Stroke	
10.99	Dipper (Arm, Stick)	State: Qty Bore Rod Diameter Stroke	
10.100	Bucket	State: Qty Bore Rod Diameter Stroke	

Lighting

10.101	LED Work Lights	 High Intensity LED Works Lights located front and rear Qty four (4) Work lights shall have lighting guards State: 	
10.102	Beacon	 SAE Class 1 Amber LED beacon Mounted for 360-degree visibility Dash mounted on/off switch wired through ignition Beacon to be protected by a ramped guard State: 	
10.103	Turn	LED State:	
10.104	Brake	LED State:	
10.105	Hazard	LED State:	
	Operator Cab		
10.106	Type-ROPS	 Integrated Fully enclosed All weather Pressurized Roll-Over Protective Structure State: 	
10.107	Visibility	Floor to ceiling glass for operator visibility State:	
10.108	Climate Control	Air conditioning, heater and defroster with adjustable fan speeds State:	
10.109	Seat	 Adjustable bucket type with arm rests Cushioned Heavy duty cloth upholstery Air Suspension seat Retractable seat belt State: 	
10.110	Steering Column	Tiltable and telescopic for easy entry and exit and comfortable operating State:	
10.111	Ride Control	Factory installed State:	

10.112	All Windows	Tinted safety glass with appropriate markings for all panes and opening type where applicable State:	
10.113	Ignition Keys	State: qty available	
10.114	Doors	State:	
10.115	Interior Rear-View Mirror	Adjustable State:	
10.116	Exterior Mirrors	Two exterior mirrors mounted on either side of cab State:	
10.117	Windshield Wipers with Washer	Intermittent State:	
10.118	Steps	State:	
10.119	Lighting	 Instrument panel lights Cab dome light with switch State: 	
10.120	Radio	AM/FM Complete with: Bluetooth® Technology - For use with cellular phones, "hands-free" capable, voice command activated through vehicle's radio circuit State:	
10.121	Radio Installation Provision	12 volt, 20Amp independent circuit available at a spare circuit breaker, suitable for installation of a 2-way mobile radio State:	
10.122	12V Port	State:	
10.123	Cab Mounts	Integrated fluid and spring suspension mounts to reduce noise, vibration and operator fatigue State:	
10.124	Noise Suppression	State: cab sound levels - dBA	
10.125	Vandalism Protection	 A lock or locked cover shall be provided to protect the instrument panel, cab doors, engine side panels, hydraulic oil reservoir cap, fuel cap and radiator cap All locks to be keyed alike State: 	
10.126	Toolbox	Lockable State:	

10.127	Grab Handles	For cab entry and exit State:	
	Outriggers		
10.128	Dozer Blade	 Front Independently controlled State: Width: Height: Lift above ground: Below ground level: 	
10.129	Outriggers	 Rear Independently controlled State: 	
	Swing Mechanism		
10.130	Swing Speed	Approximately 12 rpm State:	
10.131	Swing Torque	Approximately 30,000 lbft. State:	
10.132	Swing Rotation	360 degree State:	
	Tires		
10.133	Туре	10.00-20 Dual pneumatic State:	
	Transmission		
10.134	Туре	AWD 2-Gear Power-shift State:	
10.135	Number of Forward Gears	Two (2) State:	
10.136	Number of Reverse Gears	Two (2) State:	
10.137	Creeper Mode	State:	
10.138	Creeper Speed	State:	
10.139	Gradeability	Approximately 60% State:	
10.140	Drawbar Pull	State:	

Undercarriage

10.141	Travel Speed	Approximately 35 km/h (21.7 mph) State:	
10.142	Steering Angle	Approximately 35 degrees State :	
10.143	Turning Radius	Approximately 6550 mm (21 ft. 6 in.) State:	
10.144	Oscillating Front Axles	State:	
10.145	Oscillation Angle	Approximately 9 degrees State :	
10.146	Front Axle Oscillation Lock	Lockable State:	

Lubrication

10.147 Grease Zerks

Due to operator safety requirements and convenience:

- All manual grease zerks shall be accessible to the operator (Excluding driveline)
- Hard to access and/or near a heat sources, a remote block with hydraulic lines shall be mounted to accommodate manual lubrication
- Remote block to be fitted with hydraulic lines with an approximately maximum working pressure of 5000 psi using #4 JIC fittings

State: quantity and locations

ATTACHMENTS

Note: Attachments to be priced only as indicated on Form B: Prices

Hi-Rail

10.148	Hi-Rail Make	State:	
10.149	Hi-Rail Model	State:	
10.150	Hi-Rail Style	State:	
10.151	Rail Travel Speed	State:	
10.152	Suspension	State:	
10.153	Guide Wheels	Steel State:	
10.154	Safety Pins Locks	State:	
10.155	Raise / Lower Operation	State:	
10.156	Track Gauge	56.5 in. State:	
10.157	Track Signal Insulation	State:	

10.158	Steering Wheel Lock	State:	
10.159	De-Rail Guards	State:	
10.160	Front Rail Sweeps	State:	
10.161	Hydraulic Power Pack	State:	
10.162	Electrical Controls	State:	
10.163	Brakes	State:	
	General (Attachments)		
10.164	Compatibility	All attachments shall be compatible with the proposed machine	
10.165	Interference	The Thumb shall not to interfere with the operation of the Rototilt and Couplers	
10.166	Quick Change System	 System does not require the operator to leave the cab Compatible with all attachments 	
	Attachments		
10.167	Tilt Ditching Bucket	 Approximately 60 inches Tilt approximately 30 - 45 degrees each way 3-way taper to eliminate binding Hydraulic tilt/twist wrist universal quick coupler State: 	
10.168	Digging Bucket	36 inch State:	
10.169	Thumb	 Hydraulic operated Progressive link Thumb not to interfere with the operation of the Rototilt and couplers State: 	

10.170 Tamper

- BTE 2-Motor Tamper
- Model Number BTE-302790
- Rotation 270 deg
- Tilt 40 degree either side



State:

- make: _____
- model: _____

State Optional Pricing for:

- 10.171 R6 Rototilt complete with PG65-200 Coupler
- R6 Rototilt Tiltrotator complete with PG65-200 coupler
- High flow circuitry
- Large heavy-duty pins
- Compatible with both the Tamper and Extendable Tie Talon

State: Rototilt

- make: _____
- model: _____

State: Coupler

- make: _____
- model: _____
- Tie Talon• BTE Extendable Tie Talon
 - Model No. 302285-450
 - Required for safe, effective tie insertion or extraction

State:

- make: _____
- model: _____
- warranty: _____

10.172 Extendable Tie Talon

\$

\$_____

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\$_____

10.173 Brush Cutter

Brush Wolf 72X-HD or equivalent

- Rotary type
- Designed for Excavators
- Cut width of approximately 72 in.
- Cutting capacity of approximately 10 in. diameter
- Heavy Duty
- Low Flow
- Include case drain
- State:
- make and model: ______
- cut width: _____
- cutting capacity: ______
- hydraulic flow required: _____
- warranty: _____

11.0 WARRANTY:

11.1 All warranty information shall be detailed and include all exclusions.

The Contractor shall provide all published warranty information upon delivery of the equipment

Bidder shall state all warranty information

11.2	Basic	State:	
11.3	Powertrain	State:	<u> </u>
11.4	Structural	State:	
11.5	Electrical	State:	
11.6	Hydraulics	State:	
11.7	Hi-Rail	State:	
11.8	Tamper	State:	
11.9	R6 Rototilt	State:	

12.0 DELIVERY:

12.1 **Delivery Point:**

The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.V.I.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB.

12.2 Delivery Time:

Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days.

State: earliest delivery time from date of award: _____

12.3 **Delivery Contact:**

The Contractor shall contact the Contract Administrator prior to delivery of the equipment.

12.4 **P.D.I:**

A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list

13.0 **MANUALS**:

13.1 Operator's Manual:

Two (2) per unit shall be supplied with the units when delivered

14.0 **PARTS/LABOUR PRICING:**

- 14.1 Bidder to provide City of Winnipeg Parts Discount % Pricing from retail parts pricing. **State percentage discount**
- 14.2 Bidder to provide City of Winnipeg Labor Discount % Pricing from Retail shop labor rate. **State percentage discount**

15.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT:**

- 15.1 In order to assure minimum downtime of the Equipment in future service, the Contractor must provide one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, transmission, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing and first transmission service.
- 15.2 The Contractor must provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during Preventative Maintenance servicing.

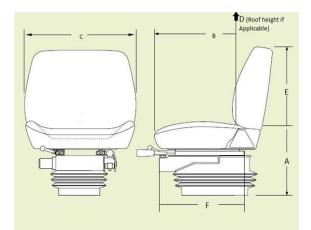
16.0 **ERGONOMIC SPECIFICATIONS**

Entry/ Exit

16.1	First step entry height	State: height of first step in inches	
16.2	First handhold entry height	State: first handhold entry height in inches	
16.3	Access to equipment	State: door opening height in inches	
16.4	Access to equipment	State: door opening width in inches	
16.5	Designed to prevent slipping	Anti-slip steps/handholds (Y or N)?	

<u>Seat</u>

16.6 Use diagram to answer questions.



- 16.7 Sitting Height Range (from floor (where feet rest) (A))
- 16.8 Seat Length/Depth (B)
- 16.9 Seat Width (C)
- 16.10 Cab Height (from seat to roof (if applicable) (D))
- 16.11 Back Rest Height (E)
- 16.12 Seat Travel Range (F)
- 16.13 Lumbar Support
- 16.14 Head Rest
- 16.15 Seat is made of breathable material

- State: seat height range in inches
- State: seat length/depth in inchesState: seat width in inchesState: cab height range in inches
 - State: back rest height in inches State: seat travel in inches
 - Is lumbar support provided (Y or N)?
 - Is head rest provided (Y or N)?

 - State: type of seat material

Operation

16.16	Reaching Distance (to usual work)	State: reaching distance in inches	
16.17	Maximum Reaching Distance	State: maximum reach distance in inches	
16.18	Adjustable Pedals (accelerator/brake/clutch)	Are pedals adjustable (Y or N)?	
16.19	Adjustable Steering Wheel	Is steering wheel adjustable (Y or N)?	
16.20	Adjustable Shoulder Belt	Is belt adjustable and anchored (Y or N)?	
	<u>Cargo Area</u>		
16.21	Lid opens to provide adequate space	Adequate space provided (Y or N)?	
16.22	Loading Height	State: trunk height in inches	
	Environment		
16.23	Operator compartment is insulated from equipment noise (while operating)	State: dB inside cab while operating	
16.24	Operator insulated from equipment vibration	Is operator insulated from vibration (Y or N)?	
16.25	Heating/Cooling Systems	State: cab temperature range	
16.26	Cab Lighting	State: lumens inside cab	
	Maintenance/ Inspection		
16.27	Lift Assistance (when necessary)	Is lift assistance provided (Y or N)?	
16.28	Easy Access (to compartment doors)	Is easy access provided (Y or N)?	
16.29	Include any other relevant erg adjustment	onomic specifications and applicable range of	