FORM A: BID
(See B8)

1. Contract Title — SUPPLY AND DELIVERY OF STREET SWEEPERS

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 applicable)

The Bidder is:

(Choose one)

☐ a sole proprietor

☐ a partnership

☐ a corporation

carrying on business under the above name.

3. Contact Person — The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

_____
Contact Person Title

_____
Telephone Number Facsimile Number

_____
Email Address

4. Definitions — All capitalized terms used in the Contract 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	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.
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-Declaration	The 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 STREET SWEEPERS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Street Sweeper	18026	Each	4	

_____
Name of Bidder

FORM N (R1): DETAILED SPECIFICATIONS 18026

Street Sweeper

1.0 DESCRIPTION OF EQUIPMENT

1.1 These specifications describe a **Sweeper** and other equipment and features as specified herein. Primary use of the sweeper is fulfill the City of Winnipeg's annual requirements of spring cleaning of winter sand/salt and debris from streets and bike paths in addition to regional street maintenance and construction clean-up throughout the summer months. The sweeper shall have the ability and the operator controls for operation from either side for sweeping in direction of traffic.

1.2 The **Sweeper** shall be a new 2018 model year or newer.

1.3 The **Sweeper** 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 Where applicable, the **Sweeper** shall comply with the following 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:
http://web2.gov.mb.ca/laws/regs/current/217.06.pdf

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

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

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

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

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

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

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 REFERENCES

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 shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

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 **Sweeper**, 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 **Sweeper** 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 FUEL

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

9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

9.1 The manufacturer of the **Sweeper** shall have five (5) years continuous experience manufacturing **Sweeper**.

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 **Sweeper** of the type being offered.

10.0 SPECIFICATIONS:

10.1	Vehicle Make	**State:**	_____
10.2	Vehicle Model	**State:**	_____
	Steering, Wheels and Tires		
10.3	Configuration	3-Wheel **State**: Steering Configuration – front or rear	_____
10.4	Steering Strut	Dual tires	_____
10.5	Steer Wheels and Tires	**State:** type, size and load rating	_____
10.6	Drive Wheels and Tires	**State:** type, size and load rating	_____
10.7	Spares	Two (2) spare tires and rims for each type	_____
	Sweeper Dimensions		
10.8	Wheelbase	Approximately 2946 mm (116 in.) - 3236 mm (127.4 in.) **State:**	_____
10.9	Overall Length	Approximately 4877 mm (192 in.) - 5436 mm (214 in.) **State:**	_____
10.10	Height with Cab	Approximately 2692 mm (106 in.) - 3010 mm (119 in.) **State:**	_____
10.11	Width (Outside Tires)	Approximately 2489 mm (98 in.) - 2591 mm (102 in.) **State:**	_____

10.12	Sweeping Path Two (2) Side Brooms	Approximately 3048 mm (120 in.) - 3175 mm (125 in.) **State:**	_____
10.13	Turning Radius (Curb to Curb)	**State:**	_____
10.14	Turning Radius (Wall to Wall)	**State:**	_____
10.15	Weight (Empty) Two (2) Side Brooms	Approximately 6232 kg (13,740 lbs.) – 6482 kg (14290 lbs.) **State:**	_____
	Engine		
10.16	Engine Make and Model	**State:** Make: _____ Model: _____	_____
10.17	Engine Type	4-Cylinder, Turbocharged Diesel **State:**	_____
10.18	Emission Standards	Tier 4 **State:**	_____
10.19	Displacement	Approximately 4.5 L (276 cu. in.) **State:**	_____
10.20	**Horsepower**	**Approximately 55 kW (74 hp) to 86 kW (115 hp)** **State:**	_____
10.21	**Torque (Net)**	**Approximately 304 Nm (224 ft.-lbs.) to 372 Nm (274 ft.-lbs.) @ 1400 rpm** **State:**	_____
10.22	Engine Shutdown	Low oil pressure and high water temperature shut down system	_____
	Hydrostatic Transmission		
10.23	Type	Hydrostatic	_____
10.24	Pump	Variable displacement	_____
10.25	Forward / Reverse	Single pedal or shift selector **State:** type	_____
10.26	Road Speed Control	Single pedal	_____
10.27	Speed – Forward (Variable to)	Approximately 32 km/h (20 mph) - 40 km/h (25 mph) **State:**	_____
10.28	Protection	Transmission protected by a filter with cab restriction indicator **State:** filter rating	_____

10.29	Transition	Ability to switch from Transit (Transport) Mode to Sweeping Mode	_____
10.30	Memory System	Maintain previous settings when switching between sweep and transit modes	_____
	Fuel System		
10.31	Fuel Type	Diesel	_____
10.32	Fuel Tank	Approximately 132.5 L (35 Gal) **State:** capacity	_____
10.33	Fuel and Water Separator	Fuel and Water Separator	_____
10.34	Fuel Filter	Built-in	_____
10.35	**DEF Tank**	**If equipped** **State: capacity**	_____
	Air Cleaner		
10.36	Type	Dual safety element dry type air cleaner **State:**	_____
10.37	In-Cab Restriction Indicator Light	**State:**	_____
	Braking		
10.38	Service Brake Type	Hydraulic - Drum or Multi-Disc **State:** type **Note:** enclosed to prevent any dirt from entering	_____
10.39	Parking Brake	**State:** type	_____
	Cooling System		
10.40	System	Sealed and pressurized	_____
10.41	Capacity	**State:** capacity	_____
10.42	Coolant	Extended life rated to -35 degree Celsius	_____
	Electrical System		
10.43	Battery	Approximately 900 – 925 CCA **State:**	_____
10.44	Alternator	Approximately 120 amp **State:**	_____
10.45	Diagnostics	Complete plug-in diagnostic that includes fault codes and troubleshooting	_____

10.46	Identification	All wiring shall be harnessed, solid coloured, numbered and function coded wire (i.e. “Ignition”, “Headlight”) every 4 – 12 inches	_____
10.47	Protection of Circuits	Protected with automatically self-resetting circuit breakers	_____
10.48	Protection of Wiring	All wiring shall be fully shielded for water and dust proof protection	_____
10.49	Battery Disconnect Switch	• In-cab mounted outboard of driver’s seat • Switch to be lockable with pad lock. **State:** location.	_____
	Lighting		
10.50	Lighting	Lighting shall be D.O.T. approved including: • Combination stop and tail lights • Sealed multiple headlights • High beam – low beam switch • Adjustable side broom spotlights • Illuminated gauges and instruments panel • Internally illuminated rocker switches • Self-cancelling directional signals • Hazard switch	_____
10.51	Stop / Tail / Turn Lights	LED	_____
10.52	Turn and Hazard Lights	Self-cancelling	_____
10.53	Back-Up Lights	**State:** type	_____
10.54	Gutter Broom Lights	**State:** type	_____
10.55	Rear Licence Plate Light and Bracket	**State:** type	_____
10.56	Work Lights (Spotlight, LED)	For night time operation • Two (2) roof mounted, forward facing • Two (2) roof mounted, rear facing • Low mounted facing each side broom **Note:** to be equipped with interior mounted cab switches	_____

10.57	**Beacon**	**Single Amber LED Beacon, Class 1 High Dome.** **Note:** **1. Whelen L31HAF or equivalent in accordance with B6 Substitutes** **2. Wired independent of the ignition switch so that for safety reasons the ignition key doesn't need to be left on for the beacon to function** **3. Provide 360 degree visibility** **4. Heavy-Duty Brush Guard on beacon**	_____
	Hydraulics		
10.58	Capacity	**State:** total system capacity	_____
10.59	Baffles	**State:** quantity and size	_____
10.60	Drain Plugs	**State:** quantity and size	_____
10.61	Sight Gauge	**State:** location	_____
10.62	Warning Indicator	To warn operator if the hydraulic oil in the reservoir falls below acceptable levels	_____
10.63	Temperature Indicator	In-cab indicator to warn operator if the hydraulic oil reaches high temperatures complete with shut down capabilities	_____
10.64	Contamination Prevention	The Hydraulic System must include the following filtration elements: • Tank fill neck strainer • Suction strainer • Suction filter with restriction gauge • High pressure filter complete with restriction status indicator • Water/hydraulic oil separator/filter installed in the return circuit	_____
10.65	Pressure Hydraulic Fittings	Flat-faced "O" ring or "O" ring boss type **State:** type	_____
10.66	Suction Filter	**State:** type and size	_____
10.67	Return Filter	**State:** type and size	_____
10.68	Pressure Bypass Valve	**State:** type and size	_____

Water System

10.69	Water Tank Capacity	Approximately 832 L (220 gal) – 870 L (230 gal) **State:** capacity	_____
10.70	**Water Tank Construction**	**Polyethylene** **Note: epoxy liners not acceptable** **State: construction**	_____
10.71	**Water Pump(s)**	**Capable of running dry** **State: type**	_____
10.72	Water Flow Control	On/Off and variable flow control located in-cab **State**:	_____
10.73	Disengage	Equipped with provision to disengage water spray pump while sweeping	_____
10.74	Low Water Indicator	In-cab	_____
10.75	Water Fill Gauge	Visible from normal operating position	_____
10.76	In-line Water Filter	Readily accessible	_____
10.77	Flush and Wash Down	Internal hopper/conveyor flush and wash down system	_____
10.78	Hydrant Hose	Approximately 7.6 m (25 ft.) **State:** length	_____
10.79	Hydrant Coupling	2-1/2 inch NST coupler equipped with a siphon breaker and wrench	_____
10.80	Storage Compartment	For proper storage of hose and ease of access	_____

Suspension System

10.81	System – Front & Rear	**State:**	_____

Sweeping Components and System

10.82	• Brooms and brushes to have the ability to be raised, lowered and positioned • Incorporate forward impact shock absorbers • Require minimal operator adjustment for wear • Controlled from inside the cab	_____

Main Broom

10.83	Self- adjusting for pressure and wear	Main broom will maintain correct down pressure while compensating for wear **State:**	_____
10.84	Raise and Lower	Hydraulically controlled	_____
10.85	Drive	Direct hydraulic with relief valve protection	_____

10.86	Broom Speed	Variable while independent of vehicle speed or direction	_____
10.87	Length	Approximately 1473 mm (58 in.) – 1676 mm (66 in.) **State:**	_____
10.88	Diameter	Approximately 813 mm (32 in.) – 889 mm (35 in.) **State:**	_____
10.89	Material	Polypropylene	_____
10.90	Protection	• Broom is raised automatically when sweeper is reversed. • Broom returns to its sweep position when forward direction is resumed	_____
	Side (Gutter) Brooms		
10.91	Dual Side (Gutter) Brooms	**State:**	_____
10.92	Side (Gutter) Brooms to be: • Direct hydraulic drive type • Hydraulic relief valve to protect from damage • Variable speed • Pressure adjustable • Ability to be raised or lowered • Transportation locking device • Adjustable kick-back features		_____
10.93	Side (Gutter) Broom - Diameter	Approximately 914 mm (36 in.) – 1194 mm (47 in.) **State:** size	_____
10.94	Side (Gutter) Broom - Material	Polypropylene and wire	_____
10.95	Tilt	In-cab controlled for tilting inward and outward of <u>both side brooms</u> while sweeping	
	Hopper		
10.96	Hopper Dump Configuration	**State:** Configuration – front or rear **Note:** For safety, the operator to have the ability to observe the dump target and surrounding area at all times from inside the cab	_____
10.97	Hopper Dump Control	**State:** method	_____
10.98	**Hopper Material**	**State: material and construction**	_____
10.99	Capacity (Volumetric)	Approximately 2.8 m^3 (3.6 yd^3) – 4.3 m^3 (5.6 yd^3) **State:**	_____

10.100	Capacity (Useable)	Approximately 2.3 m^3 (3.0 yd^3) – 3.4 m^3 (4.5 yd^3) **State:**	_____
10.101	Lifting Capacity	Approximately 4080 kg (9000 lbs.) – 5443 kg (12,000 lbs.) **State:**	_____
10.102	Dump Cycle	Approximately 60 sec **State:**	_____
10.103	Dump Height	**State:** range of dumping heights	_____
10.104	Dump Reach	Approximately 711 mm (28 in.) – 838 mm (33 in.) **State:**	_____
10.105	**Full Load Warning System**	**State: method to determine when hopper is at capacity**	_____
10.106	Hopper Movement Warning Alarm	Alarm system to warm the operator of any movement of the sweeper when the hopper is in a raised position **State:** method	_____
10.107	**Maintenance**	**Hopper lift and tilt mechanism** **State: method of maintenance**	_____
	Conveyor System		_____
10.108	Type	Conveyor with solid rubber belt with Chevron shaped style cleats and fine material grabbing sipes between cleats OR Elevator with a 7 or 11 flight configuration, continuously molded rubber belts and replaceable corded rubber squeegee tips **State:** type	_____
10.109	Capability	Capable of effectively sweeping debris of varying sizes (from large bulky trash 6 in. in height to fine sand) without the need to make any adjustments to the conveyor system.	_____
		Capable of evenly loading hopper to full capacity	_____
10.110	Drive	Direct hydraulic, variable with forward and reverse	_____
10.111	Protection	Hydraulic relief cartridge	_____
10.112	Speed	Variable forward and reverse	_____

10.113	Bearings	Sealed, high load capacity with dust seals	_____
10.114	General Maintenance	Lower conveyor wash down system to clean the lower conveyor roll by diverting fill water, at the hydrant pressure, through the conveyor roll area	_____
	Operator Compartment		
10.115	Cabin	Fully enclosed pressurized cabin, dust and weather sealed	_____
10.116	Insulation	Sound suppressed and insulated	_____
10.117	Cabin Filter	Approximately MERV 15 rated **State:** filter rating	_____
10.118	Filtered Air Intake	**State:**	_____
10.119	Air Conditioning, Heater and Defroster	Factory installed	_____
10.120	Windshield Washer - Electric	**State:**	_____
10.121	Windshield Wipers - Intermittent	**State:**	_____
10.122	Operator and Passenger Seats	**State:**	_____
10.123	**Seat(s)**	**Spring or Air Suspension, fully adjustable bucket seat(s)** **State: type**	_____
10.124	Seat Belts	**State:**	_____
10.125	Radio	With blue tooth capabilities and auxiliary input **State:**	_____
10.126	Dome Light	**State:**	_____
10.127	Mirrors – Rear View	**State:**	_____
10.128	Mirrors – Outside	LH and RH side, motorized and heated west coast type with convex inserts	_____
10.129	Glass	Tinted safety glass	_____
10.130	Doors	Total view glass cab doors	_____
10.131	Keyed Door Locks	**State:**	_____
10.132	~~**Windows**~~	~~**Dual pane sliding/locking windows**~~	_____
10.133	Sun Visors	**State:**	_____
10.134	Grab Handles	Located for ergonomic entry and egress **State:** location	_____
10.135	Steps	Removable cab entrance steps	_____

Controls

10.136	Operator Position Configuration	Dedicated curbside **and** streetside operator positions OR Single operator position located in the centre of the cab **State:** configuration	_____
10.137	Steering Wheel	**State:**	_____
10.138	Tilt and Telescopic Steering Column	**State:**	_____
10.139	Power Steering	**State:**	_____
10.140	Forward/Reverse/Neutral Selector	**State:**	_____
10.141	Brake Pedal	**State:**	_____
10.142	Sweep Selector	**State:**	_____
10.143	Brush Position Control	**State:**	_____
10.144	Brush Speed	**State:**	_____
10.145	Brush Pressure	**State:**	_____
10.146	Key Ignition / Start Switch	Three (3) sets of keys	_____
10.147	Horn	**State:**	_____
10.148	Headlights	**State:**	_____
10.149	Windshield Washer and Wipers	**State:**	_____
10.150	Dash Mounted Switches	• Lighting • Hazard warning • Beacon • Hopper raise / lower **State:** any additional switches and functions	_____
10.151	**Rocker Switches**	• **To be internally illuminated** • **Clearly identified by name and international symbol**	_____

10.152	Instrument Panel Display	Illuminated and provide status for: • Clock • Fuel • Engine Coolant Temperature • Engine Air Filter Restriction Indicator • Engine Temperature • Engine Oil Pressure • Engine rpm • Hour Meter • Hydraulic Filter Restriction Indicator • Hydraulic Oil Temperature • High beams • Odometer • Oil Pressure • Speedometer • Tachometer • Voltage Gauge **State:** any additional displays	_____
	Misc. Equipment		
10.153	Toolbox	Lockable **State:** location	_____
10.154	Limb Guards	One each side of the sweeper **State:**	_____
10.155	**Bumper(s)**	**State: type and location(s)**	_____
10.156	Tow Hooks	**State:** location	_____
	Paint		
10.157	All sweeper components, including but not limited to, cab, hopper, frame, body panels, engine cover panels, general bracketry to be individually 100% powered coated before vehicle assembly to protect the machine from the adversities of weather and the ravages of sweeping environments		_____
10.158	Exterior Colour	White	_____
	Safety		
10.159	360 Degree View	360 degree view around the sweeper from inside the cab through the use of windows, mirrors and cameras	_____
10.160	Stop Sweep Function	Operator Controlled or Automatically, when transmission is placed in reverse; all sweep functions to stop **State:** method	_____

10.161	Back-Up Camera and Monitor	• Display the area behind the sweeper when reversing • Display shall be selectable to allow continuous rear view at all times • Display to have an additional camera input to allow for future expansion • Camera to be equipped with infra-red lamps to allow night vision	_____
10.162	Back-Up Alarm	Factory installed **State:** dB(A)	_____
10.163	Slow Moving Vehicle Sign	Rear Mounted Truck-Lite 797 or equivalent in accordance with B6 Substitutes	_____
10.164	Fire Extinguisher	• 2.5 lbs. • High volume ABC type • Securely mounted with quick release **State:** location	_____
10.165	Flare Kit	Three (3) triangular reflectors, CVSA approved	_____
10.166	Cab Silencer Package	For minimal decibel level **State:**	_____
10.167	Interior Sound Level	**State:** dB(A), measured in accordance with SAE J336	_____

Auto Greasing System

10.168	Sweeper shall have an Automatic Greasing System installed per manufacturer's specifications. **State:** Type: _____ Make: _____ Model: _____	_____
10.169	**System:** • Parallel NLGI-2 heavy-duty automatic lubrication system only • Connected to all grease points • Outfitted with automatic low level shut-off • Capable of manual greasing via fitted zerk in line to connected component • Grease pump reservoir to be clear to visually determine grease levels • In-cab monitor showing system status such as power to system, low level, low pressure and/ or fault code display.	_____
10.170	**Pump Reservoir:** • Approximately 6kg pump reservoir and parameters preprogrammed, accommodating 500 hour service intervals. • Pump to have correct filler adapter fitting for City of Winnipeg maintenance staff to refill reservoir. • Greasing system to be pressurized using an inline pressure switch • Pump reservoir to have a Follower Plate • For safety reasons, access to refill the pump reservoir to be via remote fill line of min. 3/8" hose to accommodate a refill procedure at ground level.	_____

10.171 **Power Input:** _____

- System power connection to 12V or 24V ignition source with an accessible fuse protection and for the greasing system to shut down when the engine is turned off.
- Compressed air connection for the automatic lubrication system pump to be connected to a secondary air tank supply of the chassis compressed air system.
- Red ¼ in. DOT approved airline to be applied and fitted with an air system protection check valve into the system secondary tank.

10.172 **Grease Lines:** _____

- System mainline to be outfitted with #4 JIC crimped ends for the mainline between parallel injection system manifolds using Extreme Low temperature (example: Parker Blue Stripe) steel braided rubber hose with compatibility to accommodate max working pressure of 5000psi.
- System secondary lines to be outfitted with #4 JIC crimped ends where an extreme environment requires a hydraulic hose to be used
- ¼ in (6mm) nylon heavy wall secondary grease line or equivalent to be installed and protected from extreme environments such as heat sources, and components producing vibration.
- Thread sealant for main and secondary grease lines of each fitting to be applied.
- For diagnostic purposes, all applicable secondary grease lines to use color coded line from the injector to the connected component.

State:
Hose Manufacturer: _____
Temperature Range: _____
Hose Diameter: _____
PSI Rating: _____

10.173 **Grease Points:** _____

State: quantity of grease points: _____

State: quantity of grease points that cannot be connected to the Automatic Greasing System. _____

10.174 **Grease Fittings:** _____
All grease fittings to be readily accessible or shall be equipped with remote grease zerks

10.175 **Injector Manifolds:** _____
Mounted secure in an area away from debris impact, Special guards should be fitted for injector manifolds and hoses in areas of consistent debris impact

10.176 **Grease:** _____
NLGI-2 Heavy-Duty Grease.
Temperature range to suit the City of Winnipeg's environment.
State: temperature range

10.177 **Environmental Impact:** _____
Features to ensure the automatic lubrication system does not grease while parked will be considered, the system layout and grease injector delivery to be considered to not over-grease a connected component to void OEM warranty and/or leave excessive grease on roadway, street etc.

Full Maintenance Package - Option

10.178 • Provide quotation on a Full Maintenance Package per Manufacturers' Maintenance Guidelines and City of Winnipeg Specifications stated below _____

• Anticipated usage will be 7 months a year and160 hours/month per unit.

• Estimated hours calculated as follows:
= 7 months a year and 160 hours/month per unit
= 1120 hours per unit per year

10.179 For equipment purchased under this Contract, the Contractor shall repair or rectify any defects in workmanship, construction and materials, and shall repair or replace without additional cost to the City, any component that has become defective and not proven to have been caused by negligence on the part of the user. _____

10.180 • The street sweepers are of vital importance to the City in providing essential services and, accordingly, all repair items brought to the attention of the Contractor by the City shall be rectified within three (3) calendar days (see Specification 10.189) _____

• The City reserves the right to affect repairs to the equipment, at full cost to the Contractor, should the Contractor fail to perform in a timely manner

10.181 • Should the Contractor dispute the City's decision on repair work required (as stated in 10.180) the Contractor shall contact the Contract Administrator _____

• Details of the unit's defects or damage shall be provided to the Contract Administrator, who shall investigate the Contractor's claims

• The unit shall remain as is until the claim has been resolved

• The Contract Administrator shall have the final decision in disputes regarding repair work

• The Contractor shall have no claim against the City for any costs to rectify defects or damage where defects or damage was rectified without the consent of the Contract Administrator

10.182 The City shall be responsible for the following items for equipment purchased under this Contract: _____

• Repair of damage to the equipment where damage has proven to have been caused by negligence on the part of the City

• Repair or replacement of damaged tires due to road hazards

• Normal operating and maintenance supplies including daily and weekly maintenance such as greasing and cleaning

• Consumables including fuel, brooms, broom adjustments, dirt shoes and dirt curtains

10.183 The Contractor shall be responsible for the following items for equipment purchased under this Contract: _____

- All scheduled maintenance including (but not limited to) oil and filter changes, and regular service adjustments as recommended by the equipment and chassis manufacturers
- All repairs due to mechanical failure or malfunction
- Towing costs (if unit is immobile)
- All conveyor/elevator system repair and replacement parts
- All parts and labour costs (excluding items listed in Specification 10.180
- Tires due to normal wear
- Conveyor
- Two spare tires and rims for the sweepers, to be delivered to WFMA at 195 Tecumseh Ave

10.184 • The Contractor shall authorize the City of Winnipeg Repair Facilities to perform minor repairs and breakdowns during evenings, nights and weekends as required. _____

• The extent of the repairs shall be limited to a maximum of 4-hours per unit per breakdown

• For all other repairs, or repairs requiring more than 4-hours labour, the City shall contact the Contractor the following Business day.

• Any work performed by the City shall be charged to the Contractor at the Repair Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2018: $109.00/hour, overtime $129.00/hour)

10.185 • Downtime shall not exceed forty-eight (48) hours _____

- Downtime shall include the time that the equipment is required by the Contractor for regular scheduled servicing or for maintenance of the machines required to correct failures not proven to have been caused by negligence of the user.

10.186 The machines will be available to the Contractor for regular scheduled servicing or for maintenance during the hours of 4:00 pm – 9:00 pm Monday-Friday (most days) between April 1 and October 31 or as mutually agreed upon by the City and the Contractor _____

10.187 • On days, or during times that the equipment is not in use by the City, the City shall make the street sweepers available to the Contractor to perform maintenance and repairs described in Specifications 10.179, 10.185 and 10.186 _____

- Said days or times shall not be considered downtime

10.188
- All regular scheduled maintenance (such as oil changes, filters, etc.) shall be performed by the Contractor either at 1220 Pacific Avenue or at the Contractor's facility.
- If regular scheduled maintenance is to be performed at the Contractor's facility, the Contractor shall be responsible for pick-up and delivery of the equipment.
- Said times shall be pre-arranged by the Contractor and the City.

_____

10.189
- If a machine is unavailable for use due to warranty, repair or maintenance for more than three (3) Calendar days, the Contractor shall provide (upon request of the City) a replacement unit at no additional cost to the City.
- The replacement sweeper must be in good working order and meet the basic specifications set out in this contract or as mutually agreed upon by the Contractor and City.

_____

10.190 Bidder shall acknowledge compliance with the specifications and requirements of Specifications 10.179 to 10.189 inclusive. _____

State Yes or No: _____

10.191	One (1) Year	Full Maintenance based on estimated 1120 hours per unit after one (1) year	$_____
10.192	Two (2) Year	Full Maintenance based on estimated 2240 hours per unit after two (2) years	$_____
10.193	Three (3) Year	Full Maintenance based on estimated 3360 hours per unit after three (3) years	$_____
10.194	Four (4) Year	Full Maintenance based on estimated 4480 hours per unit after four (4) years	$_____
10.195	Five (5) Year	Full Maintenance based on estimated 5600 hours per unit after five (5) years	$_____

Guarantee Buyback

10.196
- If available, the Bidder shall provide a guaranteed buyback amount per unit for all four (4) units.
- The guaranteed buyback value the Bidder will be offering the City of Winnipeg for units describe below.
- The Bidder shall state all terms and conditions to honour the guaranteed buyback prices.
- Estimated hours calculated as follows:
  = 7 months a year and160 hours/month per unit
  = 1120 hours per unit per year

10.197	One (1) Year Buyback	Estimated 1120 hours per unit	$_____
10.198	Two (2) Year Buyback	Estimated 2240 hours per unit	$_____
10.199	Three (3) Year Buyback	Estimated 3360 hours per unit	$_____
10.200	Four (4) Year Buyback	Estimated 4480 hours per unit	$_____
10.201	Five (5) Year Buyback	Estimated 5600 hours per unit	$_____

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	Engine	**State:**	_____
11.3	Parts	**State:**	_____
11.4	Labour	**State:**	_____
11.5	Greasing System	**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:** _____

To be delivered within the approximate time frame **March 11 to 29, 2019**

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

State: earliest delivery time: _____

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:** One (1) per unit shall be supplied with the units when delivered: _____

13.2 **Service Manual:** One (1) 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, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. _____

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. _____

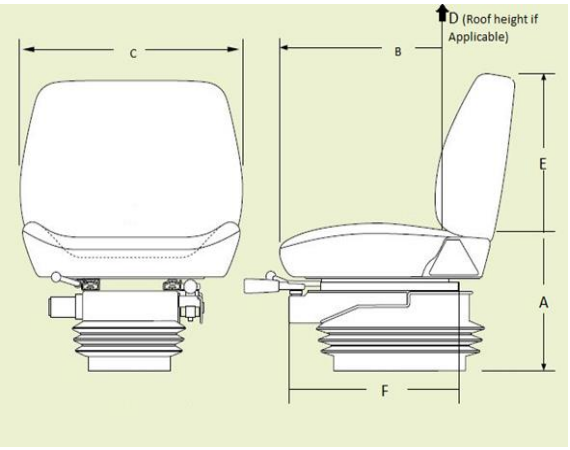
16.0 **ERGONOMIC SPECIFICATIONS**

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)?**	_____

Seat

16.6 Use diagram to answer questions.



16.7	Sitting Height Range (from floor (where feet rest) (A))	**State:** seat height range in inches	_____
16.8	Seat Length/Depth (B)	**State:** seat length/depth in inches	_____
16.9	Seat Width (C)	**State:** seat width in inches	_____
16.10	Cab Height (from seat to roof (if applicable) (D))	**State:** cab height range in inches	_____
16.11	Back Rest Height (E)	**State:** back rest height in inches	_____
16.12	Seat Travel Range (F)	**State:** seat travel in inches	_____
16.13	Lumbar Support	Is lumbar support provided **(Y or N)?**	_____
16.14	Head Rest	Is head rest provided **(Y or N)?**	_____
16.15	Seat is made of breathable material	**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)?**	_____

Cargo Area

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 ergonomic specifications and applicable range of adjustment		_____