

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: 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/reg/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/reg/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 74 kW (99 hp) to 86 kW (115 hp) State: | _____ |
| 10.21 | Torque (Net) | Approximately 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 | 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 | <ul style="list-style-type: none"> • In-cab mounted outboard of driver's seat • Switch to be lockable with pad lock. <p>State: location.</p> | _____ |

Lighting

| | | | |
|-------|--------------------------------------|--|-------|
| 10.50 | Lighting | Lighting shall be D.O.T. approved including: <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Two (2) roof mounted, forward facing • Two (2) roof mounted, rear facing • Low mounted facing each side broom <p>Note: to be equipped with interior mounted cab switches</p> | _____ |
| 10.57 | Beacon | Amber LED Beacon, Class 1 High Dome at each roof corner. <p>Note:</p> <ol style="list-style-type: none"> 1. Whelen L31HAF or equivalent in accordance with B6 Substitutes 2. Wired through ignition that provide 360 degree visibility 3. Brush guard on each 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: <ul style="list-style-type: none"> • 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 | Construction | Corrosion proof Stainless Steel Note: epoxy liners not acceptable State: tank construction | _____ |
| 10.71 | Water Pumps | Twin electric diaphragm capable of running dry State: flow | _____ |
| 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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: | | _____ |
| | <ul style="list-style-type: none"> • 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 | Material | Stainless steel | _____ |
| 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 | A warning indicator to be warn operator when hopper is at capacity State: method | _____ |
| 10.106 | Hopper Movement Warning Alarm | Alarm system to warn 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 to be fully greaseable | _____ |
| | 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 | Seats | Air suspension, fully adjustable bucket seats | _____ |
| 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 | <ul style="list-style-type: none">• Lighting• Hazard warning• Beacon• Hopper raise / lower <p>State: any additional switches and functions</p> | _____ |
| 10.151 | Rocker Switches | <ul style="list-style-type: none">• To be internally illuminated so they may be readily identified without the cab dome light• Clearly identified by name and international symbol | _____ |
| 10.152 | Instrument Panel Display | Illuminated and provide status for: <ul style="list-style-type: none">• 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 <p>State: any additional displays</p> | _____ |

Misc. Equipment

| | | | |
|--------|----------------------|---|-------|
| 10.153 | Toolbox | Lockable State: location | _____ |
| 10.154 | Limb Guards | One each side of the sweeper State: | _____ |
| 10.155 | Rear Bumper - Rubber | State: type | _____ |
| 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 and 160 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 and 160 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. _____

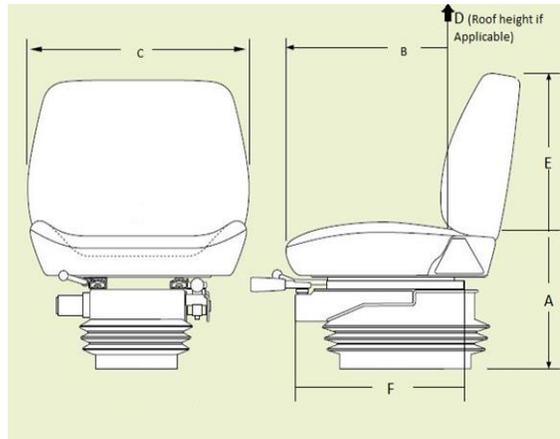
16.0 **ERGONOMIC SPECIFICATIONS**

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 | | _____ |