

FORM A: BID
(See B8)

1. Contract Title SUPPLY AND DELIVERY OF WATER SERVICES VEHICLES
COMPLETE WITH UPFITTING

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 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 thirty (30) 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 WATER SERVICES VEHICLES COMPLETE WITH UPFITTING

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Water Services Vehicle Complete with Upfitting	19005	Each	13	

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 19005

WATER SERVICES VEHICLES COMPLETE WITH UPFITTING

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe a **Water Services Vehicles Complete with Upfitting** and other equipment and features as specified herein.
- 1.2 The **Water Services Vehicles Complete with Upfitting** shall be a new 2019 model year or newer.
- 1.3 The **Water Services Vehicles Complete with Upfitting** 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 **Water Services Vehicles Complete with Upfitting** 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:
<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>

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.

2.4 The manufacturer/installer shall be a certified vehicle completer and must affix their National Safety Mark (NSM) certification sticker on each unit.

State: NSM number: _____

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 and/or equivalentents shall be clearly stated and fully detailed. Deviations and/or equivalentents 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 equivalentents.

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 **Water Services Vehicles Complete with Upfitting** 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 **Water Services Vehicles Complete with Upfitting** 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 **Water Services Vehicles Complete with Upfitting** shall have five (5) years continuous experience manufacturing **Water Services Vehicles Complete with Upfitting**.
- 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 **Water Services Vehicles Complete with Upfitting** of the type being offered.

10.0 SUB-CONTRACTORS

- 10.1 The Contractor shall assign the warranty to the City of Winnipeg to improve logistics, unnecessary downtime etc. regarding warrantable failures e.g. The City would contact the Sub-Contractor directly and resolve any issues that arise.

11.0 INTENDED USE AND APPLICATION

- 11.1 The intended use of these vehicles is 24 hour, 7 days a week operated by the City of Winnipeg Water & Waste Department. These units arrive at various designated locations for repairs to the City of Winnipeg Water infrastructure
- 11.2 The vehicle must be able to carry an estimated payload of 2000 lbs. and tow a DBH Specialized Electrical Thawing Machine weighing 6000 lbs.

12.0 **SPECIFICATIONS:**

The following definitions will be used in determining the performance requirements of the vehicle:

CARGO WEIGHT:

2000 lbs. (estimated)

CURB WEIGHT (CW):

Is the total mass of a vehicle with standard equipment, all necessary operating consumables such as motor oil, transmission oil, coolant, air conditioning refrigerant, and sometimes a full tank of fuel, while **not** loaded with passengers, cargo, etc.

GROSS VEHICLE WEIGHT RATING (GVWR):

Maximum operating weight/mass of a vehicle as specified by the manufacturer including the vehicle's chassis, body, engine, engine fluids, fuel, accessories, driver, passengers and cargo but excluding that of any trailers.

GROSS COMBINATION WEIGHT RATING (GCWR):

Maximum allowable combined mass of a road vehicle, the passengers and cargo in the tow vehicle, plus the mass of the trailer and cargo in the trailer. This rating is set by the vehicle manufacturer.

HITCH WEIGHT:

100 lbs. (estimated)

PAYLOAD CAPACITY:

Maximum weight capacity of passengers and cargo.
Calculated by subtracting the Curb Weight from the GVWR.

PEOPLE WEIGHT:

Two (2) people x 165 lbs. each = 330 lbs.

TOTAL TRAILER WEIGHT (TTW):

DBH Machine = Specialized Electrical Thawing Machine Weight = 6000 lbs*

*TWR included

TWR:

The Tongue Weight Rating (TWR) is the maximum vertical load that can be carried by the trailer hitch. 10% of the TTW = 600 lbs.

PAYLOAD WEIGHT (PW):

Cargo Weight + People Weight + Hitch Weight = 2430 lbs.

GROSS COMBINATION WEIGHT (GCW):

Total of CW + PW + TTW

PERFORMANCE CRITERIA

12.1	Curb Weight (Does <u>not</u> include passengers)	State:	_____
12.2	GCWR	State:	_____
12.3	GVWR	State:	_____

12.4	Pay Load Capacity (GVWR – Curb Weight)	Approximately 6000 lbs.	_____
		Note: • Critical in order to compensate for fluctuations in the estimated cargo weight	
		State: payload capacity	
12.5	Towing Capacity	State:	_____
12.6	Wheelbase	State:	_____
12.7	GCWR > GCW		_____
	GCWR > <u>Curb Weight</u> + <u>Payload Weight</u> + <u>Total Trailer Weight</u>		
	GCWR > _____ + <u>2430 lbs.</u> + <u>6000 lbs.</u>		
	GCWR > _____		
12.8	Is GCW <u>LESS THAN</u> GCWR	State: Yes or No	_____
	<u>UPFITTING CRITERIA</u>		
12.9	Based on the specifications in this Tender, will the cargo area support the proposed upfitting as specified in this Tender		_____
	State: Yes or No		
12.10	Cubic Volume	State:	_____
12.11	Cargo Length at Floor	State:	_____
12.12	Cargo Width at Floor	State:	_____
12.13	Cargo Width (Between Wheelhouses)	State:	_____
12.14	Interior Standing Height (Cargo Height)	Approximately 75 - 77 in with floor installed	_____
		Note: The Interior Standing Height must be of a height that does not interfere with the intended function of personnel walking and working in the centre aisle of the cargo area while wearing their PPE i.e. work boots and hard hat	
		State: height	
12.15	Exterior Height (Including all custom projections)	Note: Height restrictions in place at some facilities – Garage Door height of approximately 130 in.	_____
		State: exterior height of vehicle including all custom projections	

VEHICLE SPECIFICATIONS

12.16 Vehicle Make **State:** _____

12.17 Vehicle Model **State:** _____

Air Conditioning / Heating

12.18 Air Conditioning **State:** _____

12.19 Auxiliary Heating Auxiliary front 5 kW with timer complete with auxiliary heater fuel sending unit _____

- Acts as an engine pre-heater, warming the coolant and keeping the diesel engine warm
- Provides pre-programming for warming the engine, cab and windshield and can be set to operate automatically at a pre-determined time
- Provides warmth to the cargo area when the Espar heater is not needed

Alternators

12.20 Main Alternator **State:** _____
 • Heavy Duty
 • Approximately 220 amps
State: Amperage

12.21 2nd Alternator **State:** _____
 • Approximately 280 amps
 • wired with 2nd Battery
 • Wired separate from main alternator and battery
State:

Batteries

12.22 Main Battery **State:** _____
 Approximately 95 Ah/850 CCA.
State:

12.23 2nd Battery **State:** _____
 • Required for retrofit
 • Approximately 95 Ah/720 CCA
 • Stored in engine compartment
 • Cut-off relay
 • Battery isolator
State:

Bluetooth / Cell Phone Compatibility

12.24 Bluetooth® Technology **State:** _____
 For use with cellular phones, “hands-free” capable, voice command activated through vehicle’s radio circuit

Brakes

12.25 Brakes **State:** _____
 Power with ABS
State:

Bumper			
12.26	Bumper Step	Refer to Upfitting Section	_____
Colour			
12.27	Interior	Dark Grey or Charcoal or equivalent	_____
12.28	Exterior	White	_____
Doors			
12.29	Cargo Door	Passenger side sliding door (no window) State: dimensions	_____
12.30	Rear Cargo Doors	<ul style="list-style-type: none"> • Double wing (no windows) • 270-degree opening 	_____
12.31	Assist Handles – Exit and Entry	<ul style="list-style-type: none"> • Right and Left Rear Doors to assist operators in entering and exiting the vehicle • Steel 	_____
12.32	Assist Handles – Closing Doors	<ul style="list-style-type: none"> • Handles on each door to assist in closing doors from the inside the vehicle • Steel 	_____
Drivetrain			
12.33	Type	Rear wheel drive with electronically controlled automatic transmission. State:	_____
Driving Assistance Package			
12.34	Active Brake Assist	System senses the likelihood of a collision with a vehicle ahead and sends both a visual and audible warning followed by initiating autonomous braking	_____
12.35	Blind Spot Assist	Employ automatic braking to avoid a collision with traffic crossing the vehicle's path (e.g. vehicles or pedestrians) when reversing	_____
12.36	Electronic Stability Control (ESC)	Dynamic handling system actively intervenes to help keep the vehicle under control by automatically braking individual wheels and reducing engine power to help stabilize the vehicle if wheel spin, understeer, or oversteer is detected	_____
Engine			
12.37	Engine	Diesel	_____
12.38	Engine Size	State: Litre and Cylinders	_____

Flooring

12.39	Flooring	Bare metal floor - painted Note: <ul style="list-style-type: none">• Wood / plastic flooring not required as flooring will be installed by Upfitter• Refer to Upfitting Section for details	_____
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Fuel

12.40	Fuel Tank	State: capacity Note: Fully fuelled upon delivery	_____
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Head Lamps

12.41	Head Lamps	High and Low Beam	_____
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Interior Lights

12.42	Interior Lights	<ul style="list-style-type: none">• Dome with door switches on front, side and rear doors• LED	_____
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12.43	Overhead Control Panel	Complete with two (2) reading lamps.	_____
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Mirrors

12.44	Mirrors	<ul style="list-style-type: none">• Interior rearview• Dual heated power adjustable side exterior	_____
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Radio

12.45	Radio	AM/FM with CD player or USB port with auxiliary input	_____
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Rear Badging

12.46	Rear Badging	Not required	_____
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Seating

12.47	Suspension Seat Package	<ul style="list-style-type: none">• Driver and Passenger• Spring suspension State:	_____
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12.48	Material	Cloth or cloth with vinyl trim	_____
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Standard Equipment

12.49	12-Volt Power Point	State: quantity	_____
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12.50	Air Bags:	Front driver and passenger w/curtains State: quantity	_____
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12.51	Block Heater/Pan Heater	Cord through grille	_____
		<u>OR</u>	
		2-way removable cord	_____
		State: type	
12.52	Center Console Storage Compartment	Hinged lid	_____
12.53	Coolant	Extended Life Coolant	_____
		Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C).	
		State:	
		Freeze-Up Temperature: _____	
		Boil-Over Temperature: _____	
		Ratio of Coolant to Water: _____	
12.54	Cruise Control	State:	_____
12.55	Floor Mats - Rubber	State:	_____
12.56	Storage Compartment	Glove and/or storage compartment	_____
		State:	
12.57	Ignition Keys and Key Fobs:	If Keyed Ignition: Three (3) Keys and Two (2) Key Fobs required per vehicle	_____
		<u>OR</u>	
		If Push-to-Start Ignition: Three (3) Fobs with removable emergency key to access vehicle in case of a dead battery required per vehicle	_____
12.58	Mud Flaps	Front and Rear	_____
12.59	Power Door Locks	State:	_____
12.60	Power Windows	State:	_____
12.61	Rear View Back-Up Camera	State:	_____
12.62	Windshield Wipers	Intermittent	_____
12.63	Wiper Blades	Winter blades with heavy duty rubber boot	_____
	Steering		
12.64	Power Steering	State:	_____
12.65	Steering Column	Tilt, Height and Reach adjustable	_____
12.66	Steering Wheel	Multifunction steering wheel	_____

Tires

12.67	Tires	All Season	_____
12.68	Wheels	Standard manufacturer's wheels, without locking nuts	_____
12.69	Spare	<ul style="list-style-type: none"> • Full Size • Complete with rim and carrier State: location	_____

Towing

12.70	Provisions	Trailer plug wiring (7-pin), and related electrical provisions	_____
12.71	Receiver	Rated to pull an approximately 6000 lbs. Trailer State: capacity	_____

Transmission

12.72	Automatic	State: description	_____
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Vehicle Servicing

12.73	Scheduling of Appointments: <ul style="list-style-type: none"> • Priority next day appointments for servicing • Unscheduled work will be diagnosed within 24 hours • Same day return service for all scheduled maintenance activities • Towing included 		_____
12.74	Storage: Heated storage for vehicles equipped with boiler systems (if dropped off during working hours) to prevent water from freezing in the steamer and tanks		_____

Optional Equipment

12.75	High Idle Preset	State optional price for High Idle Preset with Programmable Special Module (PSM) State:	\$ _____
12.76	Winter Tires	State optional price for a set of Winter tires with steel rims State: make, model and size	\$ _____
12.77	Seat Covers	State optional price for heavy duty vinyl material or equivalent, charcoal grey or black, specifically designed for vehicle's seats	\$ _____

UPFITTING SPECIFICATIONS

Drawings

12.78 Contractor shall supply: _____

- Two (2) sets of three (3) view drawings showing complete upfitting for each configuration after Pre-Production meetings
- Drawings are to include all dimensions, materials, and specifications as required
- Drawings are to be revised as requested by the City
- Multiple drawing iterations may be required
- Work to commence after final drawing approval by the City of Winnipeg
- Any changes required after final approval must be approved by the City

General

12.79 Aluminum components to be manufactured using 0.100 in. aluminum 5052-H32 or equivalent, unless stated otherwise, and suited for heavy duty use. _____

Use weight reducing design and materials

Dimensions are approximate and shall be discussed and confirmed at a pre-production meeting with City personnel.

Refer to Appendix A: Design Reference Guide

Flooring

12.80 Sub-Floor 1-1/8in. laminated hardwood flooring _____

Note: Flooring to be filled and sanded as required for floor covering application.

12.81 Floor Covering _____

- Transportation Grade, Commercial Flooring
- Hard-wearing
- Slip resistant
- 2mm thickness
- Sealed and seamless joints
- Light gray
- To be "tubbed" approximately 6 in. up the walls

State: manufacturer

Note: Final colour to be determined at pre-production meeting

Walls and Ceiling

- 12.82 Insulation
- Closed Cell Spray Foam
 - R-6
 - 1 in. thickness
 - Water proof
-

State: product name and insulating material

- 12.83 Sheathing
- ¼ in. plywood
-

- 12.84 Finish
- Fiberglass Reinforced Plastic (FRP)
 - Screwed to plywood
 - Joining strips
 - Cleanable
 - Stain resistant
 - Abrasion resistant
 - White
-

Note: Single piece for each wall and ceiling

State: manufacturer and type

Batteries

- 12.85 Batteries
- Quantity two (2) AGM Group 31 Deep Cycle Auxiliary Batteries
 - Appropriate Circuit/Cables shall be installed
 - Charging Circuit from the existing under hood battery to the newly installed (2) AGM Batteries shall be installed
 - All required Outfitting electrical components shall be wired directly to the (2) AGM Batteries
 - Batteries to be secured inside the battery storage compartment with hold down clamps
-

- 12.86 Battery Storage Compartment
- Aluminum
 - Secured
 - Removable
 - Equipped with hold down clamps for batteries
 - Vented to exterior
-

- 12.87 Location
- Note:** Location to be determined at pre-production meeting
-

Towing

12.88	Brake Control Module	Brake control module	_____
12.89	Trailer Connector	SAE J560 7-Way trailer receptacle. Trailer plug connection to be designed and located to withstand the rigours of daily use Note: Type, design and location to be determined at pre-production meeting	_____
12.90	Electric Trailer Brake Connection	OEM - Complete with all hardware (including any electrical harnesses and mounting brackets) necessary for hook-up and proper operation for the intended application.	_____

Boiler System (Items # 4 and 5)

12.91	Performance	Shall be capable of consistent top performance for thawing/clearing ice, snow, or dirt year-round in conditions normal to the City of Winnipeg Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)	_____
12.92	Location	Side cargo door area per drawing Refer to Appendix A: Design Reference Guide Note: Location to be determined during at pre-production meeting	_____
12.93	Make and Model	Washex M22 Steamer Boiler State: Make: _____ Model: _____	_____
12.94	Production	300 ⁰ F (149 ⁰ C) continuous steam production	_____
12.95	BTU	380,000 BTU diesel fired heater	_____
12.96	Water Tank	33 Gallon polypropylene water tank	_____
12.97	Water Tank Protective Cover	Aluminum	_____
12.98	Pump	250 PSI 12VDC positive displacement	_____
12.99	Ignition	Ignition detection system required	_____
12.100	Steam Valve	325 ⁰ F, 225 PSI, steam valve	_____
12.101	Voltage Cord	120V cord required	_____

12.102	Dimensions	Approximately: 18"W x 48"L (including water reservoir) Steamer - 18"W x 34"L Tank - 16"W x 12"L x 49"H	_____
12.103	Hose	Steam hose- 50 ft. of ½ in. ID steam hose, pressure and temperature rated for steamer. State: hose crimp specification	_____
12.104	Hose Reel	Stainless steel, with manual rewind Refer to Appendix A: Design Reference Guide Note: Location to be determined during at pre-production meeting	_____
12.105	Drainage	Fittings required for: <ul style="list-style-type: none">• Draining the coil• Draining the water tank• Addition of antifreeze to the tank when required Note: All fittings shall be accessible to operators performing work on the equipment	_____
12.106	Venting	If venting is required, please note height restrictions are in place	_____
12.107	Protective Barrier	Supply, fabricate and install 3' x 8' x 10 gauge aluminum sheet as a barrier between the exterior wall and the Washex Steamer	_____
12.108	Fuel Pick Lines	Supply and install fuel pick lines for Washex Steamer <ul style="list-style-type: none">• Hose fuel line 5/16 in.• Oil Reservoir 3/16 in.• Hose fuel vapour 3/16 in.	_____
	Access Hole		
12.109	Access Hole	<ul style="list-style-type: none">• Three (3) in. diameter• Covered• Passenger side rear door Note: Location to be determined at pre- production meeting	_____

Bumper

- | | | | |
|--------|-------------|--|-------|
| 12.110 | Bumper Step | <ul style="list-style-type: none">• Heavy duty hitch-ready bumper step• 60" wide x 9.75" deep x 2" high• Main plank galvanized 14 gauge steel with rubber endcaps• Brackets 3/16" thick channel steel | _____ |
|--------|-------------|--|-------|

D4 Espar Heater

- | | | | |
|--------|--|--|-------|
| 12.111 | Supply and install latest version of diesel fired Espar D4 Airtronic heating unit ducted to the cargo area | | _____ |
|--------|--|--|-------|

- | | | | |
|--------|---|--|-------|
| 12.112 | <ul style="list-style-type: none">• Ducting should be sized and ported appropriately to distribute heat throughout cargo area• Temperature to be equal at front, centre and rear of cargo area | | _____ |
|--------|---|--|-------|

State: number of ducts and ports

- | | | | |
|--------|---|--|-------|
| 12.113 | Provide an enclosure for heating unit for protection from impact damage and water | | _____ |
|--------|---|--|-------|

- | | | | |
|--------|-----------------------------------|--|-------|
| 12.114 | Inside mounted and vented outside | | _____ |
|--------|-----------------------------------|--|-------|

- | | | | |
|--------|--|--|-------|
| 12.115 | Heating unit should be easily accessible | | _____ |
|--------|--|--|-------|

Note: Location to be determined at pre-production meeting

Inverter

- | | | | |
|--------|----------------|------------------------------------|-------|
| 12.116 | Make and Model | Xantrex XPower Inverter 5000 Watts | _____ |
|--------|----------------|------------------------------------|-------|

- | | | | |
|--------|-------|---|-------|
| 12.117 | Cover | Cover exposed battery terminals on the inverter to prevent arcing | _____ |
|--------|-------|---|-------|

- | | | | |
|--------|----------|---|-------|
| 12.118 | Location | Location to be determined at pre-production meeting | _____ |
|--------|----------|---|-------|

Interior Cab Partition

- | | | | |
|--------|--------------------|--|-------|
| 12.119 | Material: Aluminum | | _____ |
|--------|--------------------|--|-------|

- | | | | |
|--------|---|--|-------|
| 12.120 | Sliding door partition with locking handle. | | _____ |
|--------|---|--|-------|

- | | | | |
|--------|--------------------------------|--|-------|
| 12.121 | Includes tempered glass window | | _____ |
|--------|--------------------------------|--|-------|

- | | | | |
|--------|---|--|-------|
| 12.122 | Designed: <ul style="list-style-type: none">• To minimize openings and gaps in order to suppress noise from cargo area• Smooth operation of sliding door | | _____ |
|--------|---|--|-------|

12.123 Similar to Ranger 3068-DH _____

State:

Make: _____

Model: _____



Storage Unit (Item # 6)

12.124 Material: aluminum _____

12.125 Storage unit to be designed to accommodate: _____

- Hooks for hoses and tools facing exterior of van
- Hooks for clothing storage facing interior of van
- Approximately four (4) storage bins for misc. hardware
- Storage for long handle tools

Refer to Appendix A: Design Reference Guide

Note: Final configuration and placement of bins and hooks to be determined at a pre-production meeting

12.126 Accessibility: _____

- Accessible from inside and outside of van at cargo door
- Access to the Steamer controls based on manufacturers recommendations

12.127 Location: _____

Behind passenger seat securely attached to floor and ceiling

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting

12.128 Dimensions: _____

Approximate foot print of 18" x 12"

State:

Shelf Unit (Item # 7)

12.129 Material: aluminum _____

12.130 Approximate overall dimensions: _____

60 in. Height x 48 in. Width x 18 in. Depth

12.131 Weight capacity approximately 250 lbs. _____

- 12.132 Shelving unit contoured to fit wall of cargo area to maximize storage space. Total of 4 adjustable shelves evenly spaced starting approximately 15 in. off floor _____
- 12.133 Each shelf to have lip/containment edges. _____
- 12.134 Six (6) tall dividers per shelf. _____
- 12.135 Add ¼ in. rubber matting covering bottom of shelves. _____
- 12.136 Location: _____

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting



Workbench/Short Key Storage (Item # 10)

- 12.137 Background:
The workbench base will be used to store short 'Key' tools. Keys are manufactured from solid steel tubing approx. 1 in. diameter with a T or L shaped handle on one end and a custom fitting on the other end. Short keys range in length from 4 to 6 ft. _____
- Refer to Appendix A: Design Reference Guide**
- Note:** Location to be determined during at pre-production meeting
- 12.138 Material: aluminum and construction
Countertop 1.25 in. thick laminated plywood or hardwood reinforced/supported accordingly _____
- 12.139 Approximate overall dimensions:
36 in. Height x 72 in. Width x 18 in. Depth _____
- 12.140 Setback:
Keys to be as close to the rear of cargo area for ease of access and storage ensuring cargo doors can be closed _____
- 12.141 Approximately four (4) to six (6) in. x 36 in. reinforced aluminum vertical panels to prevent rotation of key handles _____

Note: Final dimensions to be determined at pre-production meeting

- 12.142 Total of 15 evenly spaced tilted key storage slots (maximize number of key slots) _____
Approximately 4 in. round PVC
Slot ends to be open
Key slots to be slanted towards front of van to prevent keys from sliding backwards during acceleration

Refer to Appendix A: Design Reference Guide

- 12.143 Include countertop cut out for long handled tools and barricade fronts and stands, with containment straps to prevent items from falling when vehicle is in motion _____

Refer to Appendix A: Design Reference Guide

- 12.144 Containment Edge: _____
Approximately three (3) in. high x length of workbench/key storage attached to floor to contain debris etc. into center aisle

- 12.145 Floor shelf: _____
Designed to make use of space under key storage area on floor

Note: Proposals to be considered at pre-production meeting

Workbench/Long Key Storage (Item # 9)

- 12.146 Background: _____
The workbench base will be used to store long 'Key' tools. Keys are manufactured from solid steel tubing approx. 1 in. diameter with a T or L shaped handle on one end and a custom fitting on the other end. Long keys range in length from 6 to 10 ft.

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting

- 12.147 Material: aluminum and construction _____
Countertop 1.25 in. thick laminated plywood or hardwood reinforced/supported accordingly

- 12.148 Approximate overall dimensions: _____
36 in. Height x 120 in. Width x 18 in. Depth

- 12.149 Setback: _____
Keys to be as close to the rear of cargo area for ease of access and storage ensuring cargo doors can be closed

- 12.150 Approximately four (4) to six (6) in. x 36 in. reinforced aluminum vertical panels to prevent rotation of key handles _____

Note: Final dimensions to be determined at pre-production meeting

- 12.151 Total of 15 evenly spaced tilted key storage slots (maximize number of key slots) _____
Approximately 4 in. round PVC
Slot ends to be open
Key slots to be slanted towards front of van to prevent keys from sliding backwards during acceleration

Replace one key slot with a 144" long tube that extends into shelf space while minimizing loss of shelf space.

Refer to Appendix A: Design Reference Guide
- 12.152 Include countertop cut out for long handled tools and barricade fronts and stands, with containment straps to prevent items from falling when vehicle is in motion _____

Refer to Appendix A: Design Reference Guide
- 12.153 Bench Vise: _____
5 in. Bench Vice

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting
- 12.154 Containment Edge: _____
Approximately three (3) in. high x length of workbench/key storage attached to floor to contain debris etc. into center aisle
- 12.155 Floor shelf: _____
Designed to make use of space under key storage area on floor

Note: Proposals to be considered at pre-production meeting

Barricade Hangers
- 12.156 Barricade Front _____
Design:
 - Designed to hold quantity four (4) Barricade Fronts weighing approximately 15 lbs. each and measuring approximately 102 in long x 12 in. High x 1.5 in. deep
 - Containment straps required to prevent Barricades Fronts from falling when vehicle is in motion
- 12.157 Location: _____
Above workbench/key storage

Note: Locations to be determined at pre-production meetings



Barricade Front

12.158 Barricade Stand

Design:

- Two Hooks – each hook to hold four (4) Barricade Stands
- Designed to hold barricade stands measuring approximately 36 in. Tall x 36 in. Wide x 1.5 in. deep and weighing approximately 15 lbs.
- Containment straps required to prevent Barricade Stands from falling when vehicle is in motion

12.159

Location:

Behind workbench/key storage in cut-out areas

Note: Locations to be determined at pre-production meetings



Barricade Stand

Mesh Shelf – Short (Item # 3)

12.160

Position:

Approximately 18 in. above Workbench /Short Key Storage secured to wall.

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting

12.161

Material: aluminum

12.162

Overall dimension: 3 in. Height x 48 in. Width x 6 in. Depth

12.163

Diamond shape mesh at bottom of shelf.

12.164

Weight capacity approximately 250 lbs.

Mesh Shelf – Long (Item # 8)

12.165 Position: _____
Approximately 18 in. above Workbench/Long Key Storage secured to wall

Refer to Appendix A: Design Reference Guide

Note: Location to be determined during at pre-production meeting

12.166 Material: aluminum _____

12.167 Overall dimension: 3 in. Height x 96 in. Width x 6 in. Depth _____

12.168 Diamond shape mesh at bottom of shelf. _____

12.169 Weight capacity approximately 250 lbs. _____

Jack Hammer Pedestal

12.170 Design, manufacture and install Jack Hammer Pedestal on sliding door step _____

Note: Design and location to be determined at pre-production meeting



Jack Hammer Pedestal

Interior Electrical

12.171 Code: _____
• All electrical must meet the requirements of the Canadian Electrical Code
• All electrical components shall be CSA approved

12.172 Complete 120V electrical package with CSA certified components _____

12.173 Panel located inside bulkhead behind driver with 30 amp breaker _____

Note:

1. Circuit Breaker capacity to be verified at pre-production meeting
2. Location to be determined at pre-production meeting

12.174 A second battery and alternator will be pre-installed for use by the Contractor. _____
All electrical connections made by the Contractor are to connect to this system which terminates under the driver's seat.

12.175 Recessed LED lighting in the cargo area to a rating of approximately 500 lux. _____
Additional LED task lighting is required over workbench areas.

- 12.176 Install: _____
- Qty four (4) – 120V GFI electrical outlets inside the cargo area
 - Qty one (1) - combination Duplex and USB outlet inside cargo area
 - Qty three (3) - 120V GFI external outlets.
 - CSA approved
- Note:** Locations to be determined at pre-production meeting
- Exterior Lighting**
- 12.177 Conformance: _____
- C.M.V.S.S.
 - Manitoba Highway Traffic Act.
 - City of Winnipeg Lighting Visibility Standard
<http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf>
- 12.178 Protection: _____
- All lights must be mounted in a way to protect from accidental damage
- 12.179 Traffic Advisor: _____
- Arrow head style
 - SWS 58058 Traffic Arrow complete with all mounting and electrical hardware
 - Traffic Arrow mounted at the rear of the vehicle
- State:** make and model
- 12.180 Beacon: _____
- Mini Light Bar Whelen P/N: R2LPPA4
 - Mounted front center on roof
- State:** make and model
- 12.181 Light Bar Guards: _____
- Steel round bar construction around beacon
- 12.182 Strobe Lights - Front: _____
- Qty two (2) Whelen TIR3 LED Amber lights
 - Front facing in or behind front grille
- State:** make and model
- 12.183 Strobe Lights – Front, Rear and Side: _____
- Qty six (6) Whelen C9-Series, M9-Series Amber lights
 - Mounted as follows:
 - Qty two (2) rear facing, one mounted above each door
 - Qty two (2) front facing
 - Qty one (1) side facing, driver’s side
 - Qty one (1) side facing, passenger side
- State:** make and model
- 12.184 Beacons and Strobe Lights shall be: _____
- Actuated by one switch located on the dash
 - Switch labelled “Warning Lights” with a permanent type label
 - Fused wired hot i.e., so that the lights are able to operate with the unit off and the key in the “off” position

- 12.185 Rear Work Lights:
• Qty two (2) utility lamps, Truck-Lite 8140, mounted above Rear doors
• Lights shall be wired through neutral safety switch
• Switch Panel actuated
State: make and model _____
- 12.186 Side Mounted Scene Lights:
• Qty two (2) Whelen 9SC0ENZR c/w trim ring
• Installed near roofline
• One (1) per side
• Mounted approximately top-center of each side
• Switch panel actuated on two separate switches
State: make and model _____
- 12.187 Exterior Cargo Door Light:
• Qty one (1) mounted above cargo door
State: make and model _____
- 12.188 Backup Alarm:
• SWS 99901, 97dB(A),
• Installed near rear of unit
• Located to be protected from damage
State: make and model _____
- Electrical Standards**
- 12.189 Wiring Diagrams:
A complete set of accurate wiring diagrams of the electrical system shall be provided at the time of inspection. _____
- 12.190 Identification:
• All dash mounted warning lights and switches to be identified with permanent, engraved type labels
• No labels to be located on upper surface of dash _____
- 12.191 Connection System:
• Weather Pack Sealed Connection System _____
- 12.192 Grommets:
• Rubber grommets unless otherwise specified _____
- 12.193 Harnesses:
• Harness system, properly routed and secured.
• All harnesses shall be internally grounded, no exceptions _____
- 12.194 Junction box:
• Complete with necessary compression fittings, required for all vehicle lighting harness connections
• Securely located _____
- 12.195 All Plug-In Connectors:
• All plug-in connectors shall be coated with NYK compound prior to assembly. _____
- 12.196 Wiring:
• All wiring to be colour coded, loomed and properly secured. _____

- 12.197 Electrical Connectors: _____
- All electrical connectors to be crimped, soldered and then sealed using heat shrink tubing.
- 12.198 Joining Of Wires: _____
- All joining of wires to be soldered and sealed using heat shrink tubing or approved OEM weather tight connections
- Note:** Crimp on electrical connectors for joining wires are not acceptable
- 12.199 Wiring Routing: _____
- Any holes required to run wires through shall be drilled (not punched), grommeted and sealed

13.0 **WARRANTY:**

13.1 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

The warranty shall cover the complete equipment, and all parts thereof against any defects of workmanship, construction and materials

Any equipment that has become defective during said warranty period and has not proven to have been caused by negligence on the part of the user shall be repaired or replaced at no cost to the City.

The warranty shall be effective from the date the equipment is put into service by the City of Winnipeg.

13.2 Basic Vehicle (Comprehensive) **State:** _____

13.3 Corrosion Perforation **State:** _____

13.4 Emission Control Components **State:** _____

13.5 Powertrain Coverage: **State:** _____

13.6 Roadside Assistance **State:** _____

Optional Warranties

13.7 Extended Warranty State optional price for extended **OEM Factory Warranty:**

“Bumper to Bumper” or “Comprehensive”
State:

Deductible: Yes or No **State:** yes or no and amount \$ _____

Towing: Yes or No
State: yes or no if towing is included

5 years/ (160,000 km) \$ _____

6 years/ (200,000 km) \$ _____

7 years/ (250,000 km) \$ _____

Provide a summary of coverage with Bid Submission

13.8 Prepaid Service and Maintenance Package (PPM)

State optional price for **OEM Service and Maintenance Package** which includes:

- Pre-Paid Maintenance covering all services:

- Service Intervals
State: _____
i.e. 2-Year or 30,000 km service interval, whichever comes first

- 2 Services.
State: _____ \$ _____

- 4 Services.
State: _____ \$ _____

- 6 Services.
State: _____ \$ _____

- Option to purchase additional services
State: _____ \$ _____

Provide a summary of coverage with Bid Submission

13.9 Complete Service Package

State optional price for **OEM Complete and All-Inclusive Service Package**

- Combination of Extended Warranty and Prepaid Service & Maintenance Packages
 - Covers Wear and Tear Components
 - No Deductible
- 3 years/ (100,000 km) \$ _____
- 4 years/ (130,000 km) \$ _____
- 5 years/ (160,000 km) \$ _____

State: examples of wear and tear components covered

Provide a summary of coverage with Bid Submission

13.10 Buyback Program

State optional price for **Buyback**

- If available, provide buyback amount per unit
- The Bidder shall state all terms and conditions to honour the buyback prices with Bid Submission

One (1) Year Buyback \$ _____

Two (2) Year Buyback \$ _____

Three (3) Year Buyback \$ _____

Four (4) Year Buyback \$ _____

Five (5) Year Buyback \$ _____

14.0 **DELIVERY:**

14.1 **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.

14.2 **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: _____

14.3 **Delivery Contact:**

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

14.4 **P.D.I:**

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

15.0 **MANUALS:**

15.1 **Operator's Manual:** One (1) per unit shall be supplied with the units when delivered: _____

16.0 **PARTS/LABOUR PRICING:**

16.1 Bidder to provide City of Winnipeg Parts Discount % Pricing from retail parts pricing. **State percentage discount** _____

16.2 Bidder to provide City of Winnipeg Labor Discount % Pricing from Retail shop labor rate. **State percentage discount** _____

17.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT:**

17.1 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. _____

17.2 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. _____