

FORM A: BID
(See B8)

1. Contract Title SUPPLY AND INSTALLATION OF SERVICE BODIES

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 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 INSTALLATION OF SERVICE BODIES

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Service Body	19002	Each	7	
2.	Service Body	19025	Each	1	

Name of Bidder

FORM N: DETAILED SPECIFICATIONS 19002

SERVICE BODY

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe the supply and installation of **Service Body** and other equipment and features as specified herein.
- 1.2 The **Service Body** shall be a new 2019 model year or newer.
- 1.3 The **Service Body** 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 **Service Body** 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 equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specification is used, the City will also consider deviations and/or equivalents.

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

7.0 PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the **Service Body** 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 **Service Body** 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 **Service Body** shall have five (5) years continuous experience manufacturing **Service Body**.

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 **Service Body** of the type being offered.

10.0 **SPECIFICATIONS:**

Performance

10.1 The Service Body shall be capable of consistent top performance for loading and hauling varying payloads 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)

Make and Model

10.2 Make **State:** _____

10.3 Model **State:** _____

Body Weight

10.4 Body Weight **State:** estimated weight of body _____

Weigh Scale Ticket

10.5 Weigh Scale Ticket: _____

The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including two (2) operators, all attachments and full of fuel.

Installation

10.6 The Contractor shall install the bodies on the following City owned cab & chassis vehicles: _____

Traffic Services:

2019 Ford F-550 Seven (7) Required

- 17,500 lbs. GVWR
- Regular Cab
- 84 in. CA
- 2WD
- 6.8 L, V10 Gasoline engine
- TorqShift® 6-Spd. Automatic
- Horizontal discharge exhaust

WFMA Vehicle Unit Number(s):

- 2159921
- 2159922
- 2159923
- 2159924
- 2159925
- 2159926
- 2159927

10.7 Availability

The chassis will be available during the fourth quarter of 2019 _____

10.8 Pick-Up

- The Contractor shall be responsible for picking-up the cab & chassis vehicles from the City upon commencement of the Contract
 - The vehicles will be available for pick-up at the Winnipeg Fleet Management Agency, 185 Tecumseh St., Winnipeg, Manitoba
 - Pick-up times will be between 8:00 am and 2:00 pm on any Business Day
 - The Contractor shall be responsible for any related fuel and Insurance costs to and from their facility
- _____

Note: The vehicles will be fully fuelled at the time of pick-up by the Contractor

10.9 Clearance

Clearance between service body and back of truck cab shall be a minimum 3 in. in accordance with the Cab & Chassis Incomplete Vehicle Manual _____

10.10 Tire Clearance

Body shall provide for approximately 4 in. clearance with rear springs fully loaded _____

10.11	Not-Permitted	<ul style="list-style-type: none"> • Drilling on chassis frame flanges • Welding on the chassis frame 	_____
10.12	Holes	<ul style="list-style-type: none"> • Holes in the chassis frame web shall be drilled and reamed to fit bolts • Holes required to run wires through shall be drilled (not punched), grommeted and sealed as required 	_____
10.13	Isolators	<ul style="list-style-type: none"> • All interfaces between aluminium and steel are to be separated by an approximately $\frac{1}{16}$ in. thick rubber or neoprene sheet • Shall be bolted through with stainless steel bolts and non-conductive bushings 	_____
10.14	Mounting	Mounting of the body shall be in accordance with the chassis manufacturer's guidelines for body mounting, including but not limited to, guidelines for tire and suspension clearance and fuel filler installation	_____
10.15	Mounting	<ul style="list-style-type: none"> • The fibreglass side packs shall be mounted to the steel deck using cadmium plated carriage bolts and fender washers • Bearing plates shall be used in high stress areas 	_____
10.16	Mounting Brackets	Shall be bolted to chassis frame using Grade-8 fasteners	_____
10.17	Departure Angle	State: departure angle of completed unit	_____
10.18	Diagram and Description	The Bidder shall submit within three (3) Business Days of a request by the Contract Administrator:	_____
		Diagram and description showing the body manufacturer's recommended body and deck to chassis mount	
	Welding Standards		
10.19	Welds	Continuous welds	_____
10.20	Standard	CSA Standard W47.1-30 and W59-03	_____
10.21	Weld Spatter	Weld spatter to be removed prior to finish	_____
10.22	Not-Permitted	Welding on the chassis frame	_____
	Finish		
10.23	Fibreglass	Fibreglass service body gel coat colour impregnated to match chassis cab colour	_____
10.24	Aluminum Components	Unfinished	_____

10.25	Deck	Deck surface properly cleaned and coated with: <ul style="list-style-type: none">• Rust-Oleum AS5400 Anti-Slip Floor Covering• Black	_____
10.26	Preparation	All steel components unless otherwise noted in these specifications shall be sandblasted, properly cleaned, primed and finished with the Endura, DuPont or Tristar paint process	_____
10.27	Primer	Required: Epoxy or Polyurethane primer Endura EP321 Intermix Epoxy Primer or DuPont polyurethane or Tristar Coatings Inc. Epoxy Primer Two (2) coats – Dry Film Thickness 3.0 – 4.0 mils	_____
10.28	Paint	Required: Polyurethane Colour: Black Endura EX-2C or DuPont Polyurethane or Tristar Coatings Inc. Polyurethane Two (2) coats: 3 - 5 mils Wet Film Thickness with a total combined overall average Dry Film Thickness of 4 – 6 mils Note: Complete body (inside and outside) shall be painted	_____
Fibreglass Service Body			
10.29	Material	High impact resistant fiberglass <ul style="list-style-type: none">• service body side packs• compartments• doors	_____
10.30	Compartment Layout	Each side of vehicle to have: <ul style="list-style-type: none">• one (1) front vertical compartment• one (1) horizontal compartment over the wheel well• one (1) rear vertical compartment Rear of Vehicle: <ul style="list-style-type: none">• Left (driver's) side of body to have one (1) rear hot stick door	_____

General Dimensions

For the purpose of these specifications:

- L – Length along or parallel to chassis longitudinal axis.
- H – Height, vertical.
- D – Depth on horizontal plane across vehicle

Note: Unless otherwise specified, all dimensions are in inches

10.31	Body Height	Approximately 40 in.	_____
10.32	Body Length	Approximately 132 in.	_____
10.33	Body Width	Approximately 90 in.	_____

Compartment Layout, Left (Street) Side

10.34	Front Vertical Compartment	<ul style="list-style-type: none"> • Approximately 60L x 40H x 18D • over-lapping barn style doors • no centre divider panel 	_____
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10.35	Horizontal Compartment	Approximately 46L x 20H x 18D	_____
10.36	Rear Vertical Compartment	<ul style="list-style-type: none"> • Approximately 26L x 40H x 18D • 13 in. H rear hot stick door providing access to street pole storage tubes 	_____
10.37	Street Pole Storage Tubes	<p>The service body shall accommodate:</p> <ul style="list-style-type: none"> • Qty nine (9) • 3 in. diameter x 114 in. Length PVC tubes • With a downward slope towards front • Tube ends fitted with stops to prevent poles from sliding through (both forwards and rearward) • The tubes shall be secured in place and designed to hold 120 in. L steel pipes with a total combined weight of approximately 200 lbs. • A heavy duty, rubber covered plate shall be installed at the tube ends to prevent the steel pipes from damaging the service body 	_____



Compartment Layout, Right (Curb) Side

10.38 Front Vertical Compartment

- Approximately 60L x 40H x 18D
- over-lapping barn style doors
- No centre divider panel



10.39 Sign Tray
Front Vertical Compartment

- One (1) 38 in. L approx. full depth, slide-out shelf
- Heavy duty sliders and shall allow the shelf to slide-out of the body in its entirety with a 36 x 30 sign in place.
- Shelf divided longitudinally into four (4) equally sized sections with 10 in. H divider panels.
- Handle required at front of shelf



10.40 Horizontal Compartment

- Approximately 46L x 20H x 18D

10.41 Fastener Tray
Horizontal Compartment

- Approximately 30L x 3H x 15D
- 1st compartment approximately 10L x 15D
- Remaining compartments approximately 4L x 7-1/2D



10.42 Wrench Hooks
Horizontal Compartment

- Six (6) wrench hooks on each side wall



10.43 Rear Vertical Compartment

- Approximately 26L x 40H x 18D
- Compartment lined with heavy duty rubber on three (3) sides

10.44 Hooks
Rear Vertical Compartment

- Two (2) hooks on each sidewall
- One (1) shovel hook centred on back wall



Standards

10.45 Compartment Floor
Reinforcement

Front drivers side compartment and both rear vertical compartments shall be lined with a $\frac{3}{16}$ in. steel plate covered with rubber matting

10.46 Compartment Floor Lining

Both horizontal compartments and front passenger side compartment shall be lined with Dri-Dek material

10.47 Drain Holes

All body compartments to include a $\frac{1}{2}$ in. drain hole complete with plug

10.48	Door Latches	<ul style="list-style-type: none">• Flush mounted with locks for all compartment doors• All locks shall be keyed alike	_____
10.49	Compartment Door Handles	<ul style="list-style-type: none">• Chrome plated or stainless steel paddle style handles• Barn door handles which shall be chrome plated or stainless steel D-ring type	_____
10.50	Door Hinges And Latches	Chromed or stainless steel with adjustable striker plates	_____
10.51	Compartment Door Openings	Sealed using automotive type bulb gasket door seal	_____
10.52	Door Hold-Open Devices	<ul style="list-style-type: none">• Over-centre door holders on front and rear compartments• Detachable cables on horizontal compartments	_____
10.53	Rubber Bumpers	<ul style="list-style-type: none">• Installed on the body below the horizontal compartments to prevent contact between the compartment door and the body• Two (2) bumpers per door	_____
10.54	Wheel Well Area	<ul style="list-style-type: none">• Shall incorporate a fibreglass or rubber fender flare• Wheel Well panels are removable	_____
10.55	Drip Edge	<ul style="list-style-type: none">• Installed along the full length of the body above the door openings• Designed to prevent water from entering into the storage compartments <p>State: method _____</p>	_____
10.56	Mud Flaps	<ul style="list-style-type: none">• No name, fabric reinforced, black rubber mud flaps installed fore and aft of rear tires• ½ in. diameter steel bar anti-sail brackets	_____
Main Deck Assembly			
10.57	Finish	All steel components of the Main Deck assembly including the Under Deck Compartments shall be primed and finished per specifications 10.26 through 10.28	_____
10.58	Deck	<ul style="list-style-type: none">• 3/16 in. steel checker plate with an under deck storage compartment• Rain lip or drip moulding to prevent water from entering into the storage compartment	_____

10.59	Deck Width	Approximately 54 in. between fibre glass side packs	_____
10.60	Under Deck Floor	1/8 in. steel plate	_____
10.61	Under Deck Compartment Tailgate	<ul style="list-style-type: none"> • 3/16 in. aluminum construction • Fold-down type with heavy duty hinges • Chrome or stainless steel paddle style door handle and latch • Grease fitting required on each hinge 	_____
10.62	Under Deck Compartments	<ul style="list-style-type: none"> • Qty three (3) complete with 1/8 in. thick steel dividers • Section dimensions from right to left as follows <p>Note: Widths are measured between wheel wells</p>	_____
10.63	Under Deck Compartment # 1	Approximately 106L x 7H x 19D	_____
10.64	Under Deck Compartment # 2	Approximately 73L x 7H x 16D	_____
10.65	Under Deck Compartment # 2 (Cut-a-Way Stand)	<ul style="list-style-type: none"> • 3/16 in. steel plate • dimensions approximately 4H x 16D • Welded near rear of compartment space to prevent pipes/rods from rolling from side to side • The plate shall have qty three (3), 1/2 circles cut into the top of the plate where pipes/rods will rest • 1/2-circle cut-outs to be approximately 3 in. diameter 	_____
			
10.66	Under Deck Compartment # 3	Approximately 122L x 7H x remaining width	_____
10.67	Drain Holes	3/4 in. drain holes required at front of each under deck compartment	_____
10.68	Deck Sides	3/16 in. aluminum checker plate, extended full height up sides of fibreglass side packs	_____
10.69	Front Headboard	<ul style="list-style-type: none"> • Aluminum construction • Expanded metal • Approximately 27H x width of vehicle 	_____
10.70	Kick Plate, Rear of Body	<ul style="list-style-type: none"> • 3/16 in. aluminum checker plate • Full width below deck floor level 	_____

10.71 Kick Plate, Front

- $\frac{3}{16}$ in. aluminum checker plate to protect lower front area of body protruding past chassis cab
- Each side
- Approximately 8 in. kick plate height

10.72 Sign Storage Provision

- 1 in. square steel tubing construction
- Galvanized
- Approximately 38L x 15H x 10D
- No top portion required
- Mounted at right-front passenger side, inside of service body in deck area
- Three (3), $\frac{3}{4}$ in. equally spaced drains holes required



10.73 Tailboard

- 6 in. high black poly board
- Mounted towards the front approximately 7 in. (i.e. towards cab) of the pipe vice
- Adequate cut-away for pipe to extend past body



10.74 Pipe Vice

- Ridgid BC 410, 1/8 in. – 4 in. Top Screw Bench Chain Vice
- Mounted on the driver's side rear corner of the deck
- Vice to be oriented so that an inserted pipe runs parallel to the vehicle length.



Location to be determined at pre-production meeting

10.75 Sealant

Deck sides and kick plates caulked along edges using elastomeric sealant

Barricade Storage Brackets

10.76 Construction

- Qty four (4) brackets required
- Two (2) per side
- Bolted to side packs
- Brackets shall consist of a 12 in. L x 2¼ square steel tube welded to a 3W x 5H x 3/16 steel bearing plate bolted to the side packs on the interior of the deck area.
- A height adjustable 16 in. L x 2" square steel tube shall insert into the larger steel tubing, height adjustable with a bolt system drilled through both tubes.
- Galvanized

Locations to be determined at pre-production meeting



Catwalk Structure

10.77	Regulations (Railings)	<p>Manitoba Workplace Safety and Health Regulation, MR 217/2006, Part 14 Fall Protection</p> <p>Guard Rails must be:</p> <p>(a) is at least 900 mm (35.5 in.) high and not more than 1,060 mm (42 in.) above the working surface, with an intermediate rail at between 450 and 530 mm (18 and 21 in.) above the working surface;</p> <p>and</p> <p>(b) is constructed and secured to resist a static load of 900 N in any direction in which the load may be applied at any point on the top rail and on any intermediate rail</p>	_____
10.78	Construction	<ul style="list-style-type: none">• 1 in. square steel tubing construction• Wrap around the front, sides and partial rear of the body• Incorporate stow-a-way or fold away features to prevent overhead vehicle hazards	_____
10.79	Finish	Galvanized	_____
10.80	Curb Side Railing	<ul style="list-style-type: none">• 4 ft. swing-up• Removable section with the pivot point located 7 ft. from the front of the body• One (1) horizontal angle iron support located immediately above the horizontal compartment (for use as a hammering strip for bending metal banding material)	_____
10.81	Walkway	<ul style="list-style-type: none">• Aluminum Grip Strut Safety Grating• Installed to top of side packs• Full length x full width<ul style="list-style-type: none">• 4-Diamond + 3-Diamond Grip Strut• Bolt holes sealed as required	_____

10.82 Platform

- Curb and street side railing to incorporate a platform
- 1st Platform approximately 18D x 20L
 - 3-Diamond + 4-Diamond Grip Strut
- Approximately 18 in. above top of service body at rear corners
- 2nd Platform approximately 18D x 7L
 - 3-Diamond Grip Strut
- Approximately 9 in. above 1st platform
- Platforms shall have an aluminum grip strut surface and a railing above platform along two (2) sides



10.83 Mounting Bracket
(Arrow Board)

Incorporate a mounting bracket or frame suitable for mounting a pair of Traffic Arrows at the rear of the body above the top of the compartment, one per side

Rear Bumper and Hitch

10.84 Rear Bumper

- Heavy duty step type bumper
- Tubular steel construction
- Galvanized
- Tapered at outer ends
- 12 in. steel grip strut surface
- Recess for a Pintle hitch mount
- Approximately 16 in. step height from ground

10.85 Auxiliary Step

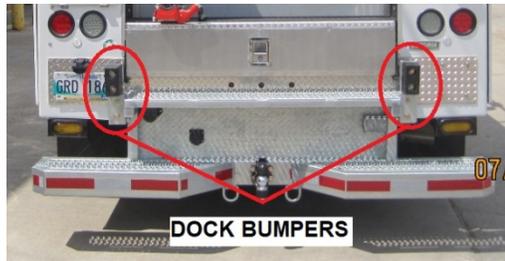
- Aluminum grip strut
- Approximately 7 in. L x full width of deck
- Located equidistant between bumper and deck level



Rear Bumper and Auxiliary Step

10.86 Dock Bumpers

- Rear mounted
- One (1) on each side of unit
- Vertically mounted to a heavy duty tubular steel frame welded to the rear of unit



Exact mounting location to be determined at pre-production meeting

10.87 Combination Hitch

Premier 150 w/2 in. ball.

Exact mounting location to be determined at pre-production meeting

10.88 Eye Bolt
(Required for Trailer Safety Chains)

- One (1) each side of hitch
- Buyers Products B56730 or equal.

Grab Handles

10.89 Grab Handles

- Located for ergonomic access to deck
- Diameter 1-1/4 in. (32 mm) – 1-1/2 in. (38 mm)
- Spacing behind grab bars approximately 3 in. (76 mm)
- Slip resistant
- Bolt-on construction
- Primed and painted safety yellow

Design and installation to be determined at a pre-production meeting

Running Boards

10.90 Construction

Custom made:

- Extending entire length of underside of front and rear doors, each side.
- AGS 6061 aluminium grip strut, 9-1/2 x 2 x .08
- Inside kick plate shall consist of 1/8 aluminium checker plate
- Support brackets shall consist of 1 1/2 x 1 1/2 x 1/8 RC aluminium square tubing with 1/4 aluminium support plates.

10.91 Mounting

- Cab steps to be mounted using the existing holes in the frame and body where applicable
- Use 3/8-16 nut inserts to secure the mounting brackets to the body



Rear Fenders

10.92 Rear Fenders

- Heavy Duty rear poly half-moon fenders complete with steel mounting hardware



Trailer Equipment

10.93 Trailer Connector

SAE J560 7-Way Flat trailer receptacle mounted and installed in rear bumper complete with all necessary wiring

Note: The cab and chassis will be supplied (unattached) with Ford OEM Trailer Plug Socket and Electric Trailer Brake Controller

Installation to be determined at pre-production meeting

Back-Up Alarm

10.94 Back-Up Alarm

- STAR model 99901
- Mounted between frame rails at rear of truck
- Located to be protected from damage and road spray

Rear View Camera

10.95 Rear View Camera

- The cab and chassis will be supplied (unattached) with a rear view camera
- Rear view camera prep kit to include camera, screen (or displayed in rear view mirror) mounting hardware and OEM wiring harness
- To be installed by body supplier

Conspicuity Tape

10.96 Conspicuity Tape

Truck-Lite 98127 or equal, affixed

Grease Fittings

10.97 Grease Fittings

Required:
On tailgate release mechanisms, pivot points and drop-down side linkages

Lighting and Electrical Standards

- | | | |
|--------|---|-------|
| 10.98 | Conformance: <ul style="list-style-type: none">• C.M.V.S.S.• Manitoba Highway Traffic Act.• City of Winnipeg Lighting Visibility Standard
http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf | _____ |
| 10.99 | Lighting: <ul style="list-style-type: none">• Supplier installed• High count LED lighting | _____ |
| 10.100 | Visibility: <ul style="list-style-type: none">• No clearance light shall protrude beyond the service body | _____ |
| 10.101 | Identification: <ul style="list-style-type: none">• 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 | _____ |
| 10.102 | All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled "Strobes" with a permanent type, engraved style label | _____ |
| 10.103 | Connection System: <ul style="list-style-type: none">• Weather Pack Sealed Connection System | _____ |
| 10.104 | Grommets: <ul style="list-style-type: none">• Rubber grommets unless otherwise specified | _____ |
| 10.105 | Harnesses: <ul style="list-style-type: none">• Harness system, properly routed and secured.• All harnesses shall be internally grounded, no exceptions• Colour coded or numbered | _____ |
| 10.106 | Junction box: <ul style="list-style-type: none">• Complete with necessary compression fittings, required for all vehicle lighting harness connections• Securely located – inside rear of truck frame• Readily accessible for servicing | _____ |
| 10.107 | All Plug-In Connectors: <ul style="list-style-type: none">• All plug-in connectors shall be coated with NYK compound prior to assembly. | _____ |
| 10.108 | Wiring: <ul style="list-style-type: none">• All wiring to be colour coded, loomed and properly secured.• All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled "Strobes" with a permanent type, engraved style label | _____ |
| 10.109 | Electrical Connectors: <ul style="list-style-type: none">• All electrical connectors to be crimped, soldered and then sealed using heat shrink tubing | _____ |

- 10.110 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
- 10.111 Wiring Routing: _____
• Any holes required to run wires through shall be drilled (not punched), grommeted and sealed
- Inverter**
- 10.112 Inverter _____
• CSA approved
• 110 Volt, 2500 Watts minimum
• Make: Xantrex
• Model: XPower 3000 Inverter
• Part Number: 813-3000-UL
State: make and model
- 10.113 Location _____
Upper right corner inside the passenger side front compartment.
Location to be determined at pre-production meeting
- 10.114 Wiring _____
• Wired through ignition through dash mounted inverter mfg. remote switch
• Labeled
• Inverter to be complete with suitable solenoid and battery isolator
- 10.115 Receptacle _____
• One (1) required
• Duplex receptacle
• Mounted at front of service body, passenger side
• Forward facing
• Mounted as high as practicable so as not to interfere with interior shelf positioning
• The receptacle shall be GFI, CSA approved
• Weatherproof type with hinged covers



Location to be determined at pre-production meeting

10.116 Deep Cycle Battery

- Group 31, approximately 900 CCA
- Mounted on a reinforced top shelf of the compartment

Location to be determined at pre-production meeting

10.117 Installation

- All exposed inverter terminals shall be:
- Coated with a dielectric grease
 - Completely covered with shrink wrap tubing or rubber fittings

Lighting

10.118 Mini Light Bar - Amber

- Whelen R2LPPA Series Amber LED Mini Light Bar
- Mounted to centre top of railing
- Protected by Branch Guard – heavy duty construction
- Mini Light Bar shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Beacon” with a permanent type, engraved style label.
- Switch shall be capable of high/low mode.

Location to be determined at pre-production meeting

10.119 Amber Strobe Lights (Warning)

- Four (4) total
- Whelen 5GA00FAR
- Mounting grommets
- Two (2) located outside of 3-Light cluster, rear facing in rear kick plate
- Two (2) located on rails, side facing near front



Locations to be determined at pre-production meeting

10.120 Traffic Arrows

- SWS 67301
- 1 piece aluminum with 1-1/2 square frame
- Aluminum front and rear panels
- Approximate size – 44 in. H x 22 in. W x 3-3/8 in. D
- 10 dual optic, LED modules with half sun shade
- Six (6) flash patterns
- 20 ft. of cable per half
- In-cab controller SWS 77501 with 10A auxiliary port



10.121 Combination Turn/Stop And
Taillights

- One (1) per side
- Truck-Lite 44302R with P/N 44710 mounting grommets
- Flash rate 70 – 90 fpm
- Flush mounted
- Mounted in rear of body at maximum practicable height

10.122 Back-Up Lights

- One (1) per side
- Truck-Lite 44206C with P/N 44710 mounting grommets
- Mounted in rear of body

10.123 3-Light Cluster

- Three (3)
- Truck-Lite 10250R with P/N 10403 mounting grommets

Or

- Truck-Lite 3-Lamp ID Light Assembly 33740R
- Located to protect from damage above auxiliary step

Locations to be determined at pre-production meeting

10.124	Clearance Lights	Truck-Lite 10250R and 10250Y with P/N 10403 mounting grommets.	_____
		Or	
		Truck-Lite 33250R and 33250Y with P/N 33720 grommets	
		Note: shall not protrude beyond the service body	
10.125	License Plate Light	Complete with license plate bracket P/N Truck-Lite 15040 (Light)	_____
10.126	Harness	<ul style="list-style-type: none">• Truck-Lite 50 Series or equivalent harness system• Properly routed• Internally grounded• Secured	_____
10.127	Compartment Lights	<ul style="list-style-type: none">• LED continuous "rope" style lighting in all service body compartments• Properly secured to prevent damage• Wired through ignition and through chassis manufacturer's OEM dash mounted switch• Labelled "Bin Lights"	_____
10.128	Work Lights	<ul style="list-style-type: none">• Four (4) Truck-Lite P/N 80395 total• Two (2) rear facing one on each side of front railing• Two (2) front facing one on each side of sign board brackets• Work lights to be wired through the ignition, wired through a single OEM dash mounted switch• Labelled "Work Lights" <p>Locations to be determined at pre-production meeting</p>	_____
11.0	<u>WARRANTY:</u>		
11.1	All warranty information shall be detailed and <u>include all exclusions.</u>		_____
	The Contractor shall provide all published warranty information upon delivery of the equipment.		
	Bidder shall state all warranty information.		
11.2	Body	State:	_____

12.0 **DELIVERY:**

12.1 **Delivery Point:** _____

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

12.2 **Delivery Time:** _____

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

State: earliest delivery time from date of chassis delivery: _____

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

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. _____

FORM N: DETAILED SPECIFICATIONS 19025

SERVICE BODY

1.0 DESCRIPTION OF EQUIPMENT

- 1.1 These specifications describe the supply and installation of **Service Body** and other equipment and features as specified herein.
- 1.2 The **Service Body** shall be a new 2019 model year or newer.
- 1.3 The **Service Body** 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 **Service Body** 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 equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specification is used, the City will also consider deviations and/or equivalents.

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

7.0 PERFORMANCE RELIABILITY

7.1 The responsibility for the design of the **Service Body** 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 **Service Body** 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 **Service Body** shall have five (5) years continuous experience manufacturing **Service Body**.

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 **Service Body** of the type being offered.

10.0 **SPECIFICATIONS:**

Performance

10.1 The Service Body shall be capable of consistent top performance for loading and hauling varying payloads 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)

Make and Model

10.2 Make **State:** _____

10.3 Model **State:** _____

Body Weight

10.4 Body Weight **State:** estimated weight of body _____

Weigh Scale Ticket

10.5 Weigh Scale Ticket: _____

The Contractor shall provide a certified weigh scale ticket upon delivery of the completed unit. The scale ticket shall include front and rear axle weights including two (2) operators, all attachments and full of fuel.

Installation

10.6 The Contractor shall install the bodies on the following City owned cab & chassis vehicles:

Insect Control:

2019 Ford F-550 One (1) Required

- 19,500 lbs. GVWR
- Crew Cab
- 60 in. CA
- 4WD
- 6.7 L, Diesel engine
- TorqShift® 6-Spd. Automatic
- Horizontal discharge exhaust

WFMA Vehicle Unit Number(s):

- 2129300

10.7 Availability

The chassis will be available during the fourth quarter of 2019

10.8 Pick-Up

- The Contractor shall be responsible for picking-up the cab & chassis vehicles from the City upon commencement of the Contract
- The vehicles will be available for pick-up at the Winnipeg Fleet Management Agency, 185 Tecumseh St., Winnipeg, Manitoba
- Pick-up times will be between 8:00 am and 2:00 pm on any Business Day.
- The Contractor shall be responsible for any related fuel and Insurance costs to and from their facility

Note: The vehicles will be fully fuelled at the time of pick-up by the Contractor

10.9 Clearance

Clearance between dump body and back of truck cab shall be a minimum 3 in. in accordance with the Cab & Chassis Incomplete Vehicle Manual

10.10 Tire Clearance

Body shall provide for approximately 4 in. clearance with rear springs fully loaded

10.11 Not-Permitted

- Drilling on chassis frame flanges
- Welding on the chassis frame

10.12	Holes	<ul style="list-style-type: none"> • Holes in the chassis frame web shall be drilled and reamed to fit bolts • Holes required to run wires through shall be drilled (not punched), grommeted and sealed as required 	_____
10.13	Isolators	<ul style="list-style-type: none"> • All interfaces between aluminium and steel are to be separated by an approximately $\frac{1}{16}$ in. thick rubber or neoprene sheet • Shall be bolted through with stainless steel bolts and non-conductive bushings 	_____
10.14	Mounting	Mounting of the body shall be in accordance with the chassis manufacturer's guidelines for body mounting, including but not limited to, guidelines for tire and suspension clearance and fuel filler installation	_____
10.15	Mounting	<ul style="list-style-type: none"> • The fibreglass side packs shall be mounted to the steel deck using cadmium plated carriage bolts and fender washers • Bearing plates shall be used in high stress areas 	_____
10.16	Mounting Brackets	Shall be bolted to chassis frame using Grade-8 fasteners	_____
10.17	Departure Angle	State: departure angle of completed unit	_____
10.18	Diagram and Description	The Bidder shall submit within three (3) Business Days of a request by the Contract Administrator:	_____
		Diagram and description showing the body manufacturer's recommended body and deck to chassis mount	
	Welding Standards		
10.19	Welds	Continuous welds	_____
10.20	Standard	CSA Standard W47.1-30 and W59-03	_____
10.21	Weld Spatter	Weld spatter to be removed prior to finish	_____
10.22	Not-Permitted	Welding on the chassis frame	_____
	Finish		
10.23	Fibreglass	Fibreglass service body gel coat colour impregnated to match chassis cab colour	_____
10.24	Aluminum Components	Unfinished	_____

10.25	Deck	Deck surface properly cleaned and coated with: <ul style="list-style-type: none">• Rust-Oleum AS5400 Anti-Slip Floor Covering• Black	_____
10.26	Preparation	All steel components unless otherwise noted in these specifications shall be sandblasted, properly cleaned, primed and finished with the Endura, DuPont or Tristar paint process	_____
10.27	Primer	Required: Epoxy or Polyurethane primer Endura EP321 Intermix Epoxy Primer or DuPont polyurethane or Tristar Coatings Inc. Epoxy Primer Two (2) coats – Dry Film Thickness 3.0 – 4.0 mils	_____
10.28	Paint	Required: Polyurethane Colour: Black Endura EX-2C or DuPont Polyurethane or Tristar Coatings Inc. Polyurethane Two (2) coats: 3 - 5 mils Wet Film Thickness with a total combined overall average Dry Film Thickness of 4 – 6 mils Note: Complete body (inside and outside) shall be painted	_____
Fibreglass Service Body			
10.29	Material	High impact resistant fiberglass <ul style="list-style-type: none">• service body side packs• compartments• doors	_____
10.30	Compartment Layout	Each side of vehicle to have: <ul style="list-style-type: none">• one (1) front vertical compartment• one (1) horizontal compartment over the wheel well• one (1) rear vertical compartment	_____

General Dimensions

For the purpose of these specifications:

- L – Length along or parallel to chassis longitudinal axis.
- H – Height, vertical.
- D – Depth on horizontal plane across vehicle

Note: Unless otherwise specified, all dimensions are in inches

10.31	Body Height	Approximately 40 in.	_____
10.32	Body Length	Approximately 107 in.	_____
10.33	Body Width	Approximately 94 in.	_____
10.34	Deck Width	Approximately 54 in.	_____
10.35	Compartment Depth	Approximately 20 in.	_____

Compartment Layout, Street Side

10.36	Front Vertical Compartment	<ul style="list-style-type: none"> • Approximately 35L x 40H x 20D • Single door • Rear of compartment to be closed off from transverse compartment 	_____
10.37	Shelves Front Vertical Compartment	<ul style="list-style-type: none"> • Qty two (2) height adjustable shelves • Full length x depth of compartment • Aluminum 	_____
10.38	Horizontal Compartment	Approximately 44L x 20H x 20D	_____
10.39	Slide Out Parts Trays Horizontal Compartment	<ul style="list-style-type: none"> • Qty four (4) • Each tray approximately 4 in. H • Full length x depth of compartment • Aluminum 	_____
10.40	Rear Vertical Compartment	<ul style="list-style-type: none"> • Approximately 28L x 40H x 20D • 	_____
10.41	Shelf Rear Vertical Compartment	<ul style="list-style-type: none"> • Qty one (1) height adjustable shelf • Full length x depth of compartment • Designed to hold aerosol cans, paint cans, cleaners etc. • Aluminum 	_____

Note: Final configuration and design to be determined at pre-production meeting

Compartment Layout, Curb Side

10.42	Front Vertical Compartment	<ul style="list-style-type: none"> • Approximately 60L x 40H x 18D • Single door 	_____
10.43	Transverse Section	<ul style="list-style-type: none"> • Extend the depth of the compartment to approximately 74 in. • Structurally sound to carry the weight of an air compressor tank or similar equipment 	_____

10.44	Slide Out Drawers Front Vertical Compartment	<ul style="list-style-type: none">• Qty two (2)• Approximately 30L x 4H x 70D• Aluminum• Rated for 250 lbs.• Drawers to divided into three (3) compartments across and fifteen (15) compartments deep• Dividers to be removable• Drawers to slide out full length on heavy duty sliders	_____
10.45	Horizontal Compartment	<ul style="list-style-type: none">• Approximately 46L x 20H x 20D	_____
10.46	Shelf Horizontal Compartment	<ul style="list-style-type: none">• Qty one (1)• Permanently fastened at mid-point• Aluminum	_____
10.47	Tray Horizontal Compartment	<ul style="list-style-type: none">• Qty one (1)• Approximately 42L x 3H x 17D• Aluminum• Removable• Complete with removable dividers	_____
10.48	Rear Vertical Compartment	<ul style="list-style-type: none">• Approximately 28L x 40H x 20D• Compartment lined with heavy duty rubber on three (3) sides	_____
10.49	Tool Organizer Board Rear Vertical Compartment	Tool organizer board complete with hooks, storage pouches and drop-in loops required for hanging tools etc. Note: Final configuration and design to be determined at pre-production meeting	_____
Standards			
10.50	Compartment Floor Reinforcement	All compartments floors shall be lined with a $\frac{3}{16}$ in. aluminum plate	_____
10.51	Compartment Floor Lining	All compartments shall be lined with Dri-Dek material	_____
10.52	Drain Holes	All body compartments to include a $\frac{1}{2}$ in. drain hole complete with plug	_____
10.53	Door Latches	<ul style="list-style-type: none">• Flush mounted with locks for all compartment doors• All locks shall be keyed alike	_____

10.54	Master Auto Locking System	<ul style="list-style-type: none">• Auto locking system• Actuated by chassis key FOBs and interior truck OEM lock/unlock switch• Manual key back-up to lock and unlock doors in case of electronic failure	_____
			
10.55	Compartment Door Handles	Chrome plated or stainless steel paddle style handles	_____
10.56	Door Hinges And Latches	Chromed or stainless steel with adjustable striker plates	_____
10.57	Compartment Door Openings	Sealed using automotive type bulb gasket door seal	_____
10.58	Door Hold-Open Devices	<ul style="list-style-type: none">• Over-centre door holders on front and rear compartments• Detachable vinyl-coated aircraft cable on horizontal compartments	_____
10.59	Rock Guards	Aluminum checker plate rock guards on front corners of service body	_____
10.60	Rubber Bumpers	<ul style="list-style-type: none">• Installed on the body below the horizontal compartments to prevent contact between the door and the body• Rubber bumpers to be installed to prevent contact between vertical doors and body• Two (2) bumpers per door	_____
10.61	Wheel Well Area	<ul style="list-style-type: none">• Shall incorporate a fibreglass or rubber fender flare• Wheel Well panels are removable	_____
10.62	Drip Edge	<ul style="list-style-type: none">• Installed along the full length of the body above the door openings• Designed to prevent water from entering into the storage compartments	_____
		State: method _____	
10.63	Mud Flaps	<ul style="list-style-type: none">• No name, fabric reinforced, black rubber mud flaps installed fore and aft of rear tires• ½ in. diameter steel bar anti-sail brackets	_____

Main Deck Assembly

10.64	Deck	$\frac{3}{16}$ in. aluminum checker plate	_____
10.65	Finish	Deck surface properly cleaned and coated with: <ul style="list-style-type: none">• Rust-Oleum AS5400 Anti-Slip Floor Covering• Black	_____
10.66	Deck Width	Approximately 54 in. between fibre glass side packs	_____
10.67	Tailgate	<ul style="list-style-type: none">• $\frac{3}{16}$ in. aluminum construction• Approximately 12 in. H• Fold-down type with heavy duty hinges• Chrome or stainless steel paddle style door handle and latch• Grease fitting required on each hinge	_____
10.68	Deck Sides and Top	<ul style="list-style-type: none">• $\frac{1}{8}$ in. aluminum checker plate, extended full height of side packs and wrapped over the top of side pack	_____
10.69	Front Headboard	<ul style="list-style-type: none">• Aluminum construction• Expanded metal• Approximately 27 in. H x width of vehicle	_____
10.70	Kick Plate, Rear of Body	<ul style="list-style-type: none">• $\frac{3}{16}$ in. aluminum checker plate• Full width below deck floor level	_____
10.71	Kick Plate, Front	<ul style="list-style-type: none">• $\frac{1}{8}$ in. aluminum checker plate to protect lower front area of body protruding past chassis cab• Each side• Approximately 8 in. kick plate height	_____
10.72	Sealant	Deck sides and kick plates caulked along edges using elastomeric sealant	_____

Rear Bumper and Hitch

10.73 Rear Bumper

- Heavy duty step type bumper
- Tubular steel construction
- Galvanized
- Tapered at outer ends
- 12 in. steel grip strut surface (5-Diamond)
- Recess for a hitch plate with mounting holes
- Approximately 16 in. step height from ground



Final design to be determined at pre-production meeting

10.74 Dock Bumpers

- Rear mounted
- One (1) on each side of unit
- Vertically mounted to a heavy duty tubular steel frame welded to the rear of unit

Exact mounting location to be determined at pre-production meeting

10.75 Bolt-on Receiver Tube

- Bolt-on Receiver Tube
- 2 in. with 5/8 hitch pin
- Adjustable on hitch plate

Exact mounting height to be determined at pre-production meeting

10.76 Eye Bolt
(Required for Trailer Safety Chains)

- Qty three (3) required
- One (1) each side of hitch
- One (1) for trailer break-away cable
- Buyers Products B56730 or equal

Trailer break-away cable eye bolt mounting location to be determined at pre-production meeting

Trailer Equipment

10.77	Trailer Connector	SAE J560 7-Way Flat trailer receptacle mounted and installed in rear bumper complete with all necessary wiring	_____
		Note: The cab and chassis will be supplied (unattached) with Ford OEM Trailer Plug Socket and Electric Trailer Brake Controller	
		Installation to be determined at pre-production meeting	
Under Hood Air Compressor			
10.78	Air Compressor	<ul style="list-style-type: none">• VMAC 70 Underhood 70 Air Compressor• Output up to 70 CFM @ 100 psi• Belt driven• Rotary screw• Compatible with supplied vehicle	_____
10.79	Air/Oil Separator Tank	<ul style="list-style-type: none">• aluminum construction• tank drain valve• mounted along frame rail	_____
		Mounting location to be determined at pre-production meeting	
10.80	Cooler	<ul style="list-style-type: none">• Liquid to liquid• Integrated into vehicle's cooling system• Mounted below radiator	_____
10.81	Controls	<ul style="list-style-type: none">• LCD display• Mounted in cab	_____
		Mounting location to be determined at pre-production meeting	
10.82	Filter Regulator Lubricator (FRL)	<ul style="list-style-type: none">• Adjustable• Maximum flow: up to approximately 70 CFM / 150 psi	_____
10.83	Hose Reel	<ul style="list-style-type: none">• ½ in. x 50 ft. Hose Reel• Deck mounted	_____
		Mounting location to be determined at pre-production meeting	
10.84	Service Kit	Supplied 200 Hours or 6 months service kit	_____



Water Tank

10.85	Capacity	Approximately 25 Imp Gal (113 L)	_____
10.86	Type	<ul style="list-style-type: none"> • Sprayer Parts No. 7720 • U/V Stabilized Polyethylene • Semi-transparent 	_____
10.87	Configuration	<ul style="list-style-type: none"> • Round or oval • Molded-in legs <p>Note: Tank must fit in back of vehicle between body side packs</p>	_____
10.88	Size	<p>Approximately 23 in Dia. x 18 in. Length</p> <p>State:</p> <p>Note: Tank must fit in back of vehicle between body side packs</p>	_____
10.89	Installation	<p>Mounted to a frame which is permanently attached to the deck</p> <p>Installation to be determined at pre-production meeting</p>	_____
10.90	Lid Size	<p>Approximately 6 in.</p> <p>State:</p>	_____
10.91	Outlet Fitting	<p>Required:</p> <ul style="list-style-type: none"> • At bottom of tank • Round 	_____
10.92	Support Bands	<p>Required:</p> <p>Rated for full-load tank capacity</p>	_____
10.93	Liquid Surge Stabilizers	<p>Required:</p>	_____

10.94	Water Pump	<ul style="list-style-type: none">• Everflo EF3000• Diaphragm Pump• 12V• 3.0 GPM flow• In-line fuse protection• Automatic shut-off	_____
10.95	Hose Reel	<ul style="list-style-type: none">• Reelcraft SWA3850 OLP• Retractable• 5/8 in. x 50 ft. hose included• Hose I.D. = 5/8 in.• Hose O.D. = 3/4 in.• Corrosion proof polypropylene <p>Mounting location to be determined at pre-production meeting</p>	_____
10.96	On / Off Switch	<p>Required and located in auxiliary switch in-cab or curb side front vertical compartment</p> <p>Location and type of switch to be determined at pre-production meeting</p>	_____
	Grab Handles		
10.97	Grab Handles	<ul style="list-style-type: none">• Located for ergonomic access to deck• Diameter 1-1/4 in. (32 mm) – 1-1/2 in. (38 mm)• Spacing behind grab bars approximately 3 in. (76 mm)• Slip resistant• Bolt-on construction• Primed and painted safety yellow <p>Design and installation to be determined at a pre-production meeting</p>	_____
	Running Boards		
10.98	Construction	<p>Custom made:</p> <ul style="list-style-type: none">• Extending entire length of underside of front and rear doors, each side.• AGS 6061 aluminium grip strut, 9-1/2 x 2 x .08• Inside kick plate shall consist of 1/8 aluminium checker plate• Support brackets shall consist of 1 1/2 x 1 1/2 x 1/8 RC aluminium square tubing with 1/4 aluminium support plates.	_____
10.99	Mounting	<ul style="list-style-type: none">• Cab steps to be mounted using the existing holes in the frame and body where applicable• Use 3/8-16 nut inserts to secure the mounting brackets to the body	_____



Rear Fenders

10.100 Rear Fenders

- Heavy Duty rear poly half-moon fenders complete with steel mounting hardware



Winch

10.101 Winch Mount - Front and Rear

- Winch mount system installed at the base of the front bumper frame
- Rear winch mount installed for moving the winch location
- Receiver tube with 12 Volt Quick-Connect Cables

10.102 Winch System

- Buyers Product 5571200
- IP68-rated, waterproof and submersible
- Heavy-duty approximately 12,000 lb. capacity
- 12 V
- 100' of 3/8 in. galvanized cable
- Operate from inside or outside
- Handheld remote control pendant with 12 ft. of cord

State: make and model

Back-Up Alarm

10.103 Back-Up Alarm

- STAR model 99901
- Mounted between frame rails at rear of truck
- Located to be protected from damage and road spray

Rear View Camera

- | | | | |
|--------|------------------|--|-------|
| 10.104 | Rear View Camera | <ul style="list-style-type: none">• The cab and chassis will be supplied (unattached) with a rear view camera• Rear view camera prep kit to include camera, screen (or displayed in rear view mirror) mounting hardware and OEM wiring harness• To be installed by body supplier | _____ |
|--------|------------------|--|-------|

Conspicuity Tape

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| 10.105 | Conspicuity Tape | Truck-Lite 98127 or equal, affixed | _____ |
|--------|------------------|------------------------------------|-------|

Grease Fittings

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| 10.106 | Grease Fittings | Required:
On tailgate release mechanisms, pivot points and drop-down side linkages | _____ |
|--------|-----------------|--|-------|

Lighting and Electrical Standards

- | | | | |
|--------|--------------|--|-------|
| 10.107 | Conformance: | <ul style="list-style-type: none">• C.M.V.S.S.• Manitoba Highway Traffic Act.• City of Winnipeg Lighting Visibility Standard
http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf | _____ |
|--------|--------------|--|-------|

- | | | | |
|--------|-----------|---|-------|
| 10.108 | Lighting: | <ul style="list-style-type: none">• Supplier installed• High count LED lighting | _____ |
|--------|-----------|---|-------|

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| 10.109 | Visibility: | <ul style="list-style-type: none">• No clearance light shall protrude beyond the service body | _____ |
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| 10.110 | Identification: | <ul style="list-style-type: none">• 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 | _____ |
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- | | | |
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| 10.111 | All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled "Strobes" with a permanent type, engraved style label | _____ |
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| 10.112 | Connection System: | <ul style="list-style-type: none">• Weather Pack Sealed Connection System | _____ |
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| 10.113 | Grommets: | <ul style="list-style-type: none">• Rubber grommets unless otherwise specified | _____ |
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| 10.114 | Harnesses: | <ul style="list-style-type: none">• Harness system, properly routed and secured.• All harnesses shall be internally grounded, no exceptions• Colour coded or numbered | _____ |
|--------|------------|---|-------|

10.115	Junction box: <ul style="list-style-type: none">• Complete with necessary compression fittings, required for all vehicle lighting harness connections• Securely located – inside rear of truck frame• Readily accessible for servicing	_____
10.116	All Plug-In Connectors: <ul style="list-style-type: none">• All plug-in connectors shall be coated with NYK compound prior to assembly	_____
10.117	Wiring: <ul style="list-style-type: none">• All wiring to be colour coded, loomed and properly secured• All LED strobe lights shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Strobes” with a permanent type, engraved style label	_____
10.118	Electrical Connectors: <ul style="list-style-type: none">• All electrical connectors to be crimped, soldered and then sealed using heat shrink tubing	_____
10.119	Joining Of Wires: <ul style="list-style-type: none">• All joining of wires to be soldered and sealed using heat shrink tubing or approved OEM weather tight connections <p>Note: Crimp on electrical connectors for joining wires are not acceptable</p>	_____
10.120	Wiring Routing: <ul style="list-style-type: none">• Any holes required to run wires through shall be drilled (not punched), grommeted and sealed <p>Inverter</p>	_____
10.121	Inverter <ul style="list-style-type: none">• CSA approved• 110 Volt, 2500 Watts minimum• Make: Xantrex• Model: XPower 3000 Inverter• Part Number: 813-3000-UL <p>State: make and model</p>	_____
10.122	Location <p>Upper right corner inside the passenger side front compartment.</p> <p>Location to be determined at pre-production meeting</p>	_____
10.123	Wiring <ul style="list-style-type: none">• Wired through ignition through dash mounted inverter mfg. remote switch• Labeled• Inverter to be complete with suitable solenoid and battery isolator	_____

10.124 Receptacle

- One (1) required
- Duplex receptacle
- Mounted at front of service body, passenger side
- Forward facing
- Mounted as high as practicable so as not to interfere with interior shelf positioning
- The receptacle shall be GFI, CSA approved
- Weatherproof type with hinged covers



Location to be determined at pre-production meeting

10.125 Deep Cycle Battery

- Group 31, approximately 900 CCA
- Mounted on a reinforced top shelf of the compartment

Location to be determined at pre-production meeting

10.126 Installation

- All exposed inverter terminals shall be:
- Coated with a dielectric grease
 - Completely covered with shrink wrap tubing or rubber fittings

Lighting

10.127 Mini Light Bar - Amber

- Whelen R2LPPA Series Amber LED Mini Light Bar
- Mounted to centre top of railing
- Protected by Branch Guard – heavy duty construction
- Mini Light Bar shall be wired through the ignition, wired through a single OEM dash mounted switch or on the control panel enclosure, labelled “Beacon” with a permanent type, engraved style label
- Switch shall be capable of high/low mode

Location to be determined at pre-production meeting

10.128	Amber Strobe Lights (Warning)	<ul style="list-style-type: none">• Two (2)• Whelen 5GA00FAR• Mounting grommets• Located outside of 3-Light cluster, rear facing in rear kick plate	_____
		Locations to be determined at pre-production meeting	
10.129	Combination Turn/Stop And Taillights	<ul style="list-style-type: none">• One (1) per side• Truck-Lite 44302R with P/N 44710 mounting grommets• Flash rate 70 – 90 fpm• Flush mounted• Mounted in rear of body at maximum practicable height	_____
10.130	Back-Up Lights	<ul style="list-style-type: none">• One (1) per side• Truck-Lite 44206C with P/N 44710 mounting grommets• Mounted in rear of body	_____
10.131	3-Light Cluster	<ul style="list-style-type: none">• Three (3)• Truck-Lite10250R with P/N 10403 mounting grommets	_____
		Or	
		<ul style="list-style-type: none">• Truck-Lite 3-Lamp ID Light Assembly 33740R• Located to protect from damage	
		Locations to be determined at pre-production meeting	
10.132	Clearance Lights	Truck-Lite10250R and 10250Y with P/N 10403 mounting grommets.	_____
		Or	
		Truck-Lite 33250R and 33250Y with P/N 33720 grommets	
		Note: shall not protrude beyond the service body	
10.133	License Plate Light	Complete with license plate bracket P/N Truck-Lite 15040 (Light)	_____
10.134	Harness	<ul style="list-style-type: none">• Truck-Lite 50 Series or equivalent harness system• Properly routed• Internally grounded• Secured	_____

12.0 **DELIVERY:**

12.1 **Delivery Point:** _____

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

12.2 **Delivery Time:** _____

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

State: earliest delivery time from date of chassis delivery: _____

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

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. _____