

PART A

TENDER SUBMISSION

FORM A: TENDER
(See B7)

1. Project Title **SUPPLY and DELIVERY of an
AERIAL DEVICE mounted on a
FORD F – 550 CAB and CHASSIS TRUCK**

2. Bidder _____
Name of Bidder

Street

City Province Postal Code

(Mailing address if different)

Street or P.O. Box

City Province Postal Code

(Choose one) The Bidder is:
 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

4. Definitions All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D3 unless the context otherwise requires.

5. Offer The Bidder hereby offers to perform the Work in accordance with the Contract for the Unit Price(s), in Canadian funds, set out on FORM B: PRICES, appended hereto.

6. Subcontractors The Bidder agrees that, if he subcontracts any portion of the Work, he shall employ only Subcontractors who have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, or who are fully capable of performing the Work required to be done in accordance with the terms of the Contract.

7. Contract The Bidder agrees that the Tender Package 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 Tender Submission.

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. Signatures In witness whereof the Bidder or the Bidder's authorized official or officials have signed this
_____ day of _____, 20_____.

Signed and sealed in the presence of:

Signature of Bidder or Bidder's Authorized Official or Officials

(Witness)

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

(Witness)

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

SEAL

FORM B: PRICES
 (See B8)
SUPPLY and DELIVERY of an
AERIAL DEVICE mounted on a FORD F - 550 CAB and CHASSIS TRUCK

PLEASE NOTE: This contract will be awarded as a “whole” (Total Bid Price), and not by unit.
 Bidders are required to complete entries for all items in this table (Form B: Prices).

UNIT PRICES When entering prices into the table below, do not include
 Tire tax, Federal and Provincial Taxes (Goods and Services Tax (GST) and Manitoba Retail
 Sales Tax (PST)).
 These taxes shall be extra See Clause B 8.4

ITEM	DESCRIPTION	SPEC. REF.	UNIT	UNIT PRICE	QUAN	EXTENDED AMOUNT (Unit price X Quantity)
1	Ford F- 550 – Reg Cab – 4 x 4 Diesel Eng – 84” CA – 165” WB	03 - 045	Ea	\$ _____	1	\$ _____
2	Telescopic Articulating Insulated Aerial Device <u>and</u> installation	03 - 046	Ea	\$ _____	1	\$ _____

TOTAL BID PRICE (in figures)	\$ _____
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(in words)

 Name of Bidder

DETAILED SPECIFICATION 03 – 45 and 03 - 046

**SUPPLY and DELIVERY of an
AERIAL DEVICE mounted on a FORD F - 550 CAB and CHASSIS**

1.0 INTENT

- 1.1 The intent of these specifications is to describe a truck mounted, hydraulic powered, **telescopic, articulating insulated aerial device and accessories installed on a Ford F550 4x4 (17,500 GVWR) cab and chassis.**
- 1.2 The Cab and Chassis Truck, shall be a **2002 model or newer** .
- 1.3 The Aerial Device, hereinafter referred to as the apparatus, shall be a **2002 model or newer** as may be modified by these specifications. The Aerial Device, including all auxiliary equipment, shall be furnished complete and ready for use. All parts not specifically mentioned but which are required to complete and place the apparatus into successful operation shall be furnished as though specifically mentioned in these specifications.
- 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 design, performance, reliability and satisfactory operational function of the unit.
- 1.5 The ratings specified herein state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular Aerial Device being bid.

2.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATION

- 2.1 All items in these specifications must be answered indicating compliance or non-compliance. **Bidders shall state "yes" for compliance or state deviation**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

Each Bidder is required to fill in every blank. **Failure to do so may be used as a basis for rejection of bid.**

3.0 INSTALLATION

- 3.1 The successful Bidder shall supply and install the aerial device in accordance with the manufacturer's recommendations

DETAILED SPECIFICATION 03 - 045

ITEM 1

CAB and CHASSIS UNIT - GENERAL

2002 or newer - Ford F - 550, Super Duty

The cab and chassis shall have less than 500 kilometers on the odometer _____

17,500 lbs. GVWR _____

Regular Cab _____

Wheelbase: 165 in. _____

- Cab to Axle distance 84 in.

- Engine: 8 cylinder, Diesel

- Drive train: Four(4) wheel drive

- Transmission: Automatic

- Front Axle: 6,000 lbs

- Rear Axle: 13,500 lbs

- ABS Brakes

- Tires: LT225/70Rx19.5F – Front and Rear

- Power Steering

- Full Bench Seat

- Air Conditioning

- AM/FM Stereo

- Front Tow Hooks

- Batteries – dual 750 CCA (minimum)

- Front Stabilizer Bar

- Engine Block Heater

- Cab and Chassis to be manufacturers standard white.

4.0 OTHER SPECIFICATIONS AND RATINGS

4.1 Canadian Standards Association Standard C 225-1988 forms an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.

5.0 PERFORMANCE

5.1 The truck mounted aerial device shall be capable of operating safely and efficiently in all working positions, in confined areas, while occupying one traffic lane, during summer and winter conditions normal to the City of Winnipeg.

6.0 ITEM 2 AERIAL UNIT GENERAL

6.1 The aerial unit shall be a new unused unit.
(Demonstration units will be accepted.)

6.2 Overall travel height (completed unit) not to exceed 120 in.
at any point. State.

6.3 Unit shall be designed, manufactured and installed in accordance with CSA Standard C225-1988 Vehicle Mounted Aerial Devices. _____

6.4 Weight distribution of the complete unit (truck, aerial device, and full fuel and hydraulic oil tanks): _____

Front Axle- _____

Rear Axle- _____

6.5 Vendor to supply a certified scale weight ticket to the Contract Administrator prior to final acceptance. _____

6.6 The completed unit (truck, installed and mounted aerial device, and full fuel and hydraulic oil tanks),
to be delivered within thirty(30)days of notification of award _____

7.0 PERFORMANCE CHARACTERISTICS (Mounted)

7.1 Ground to bucket floor height, 36 feet minimum. State. _____

7.1.1. Working height, 42 feet minimum _____

7.2 Horizontal reach from centerline, 28 feet minimum. State. _____

7.3 Boom travel (in degrees),

a) Above horizontal, _____

b) Below horizontal, _____

c) Operating speeds (in seconds) from min. to max. height, _____

7.4 Boom lifting capacity 136 kg., (300 lbs.) in all boom configurations with single bucket and shielded controls. _____

7.4.1 Boom structural safety factor, minimum 2:1. State. _____

7.5 Turret assembly to have continuous 360°, worm gear drive. _____

a) State time for complete (360°) rotation. _____

8.0 STABILITY

Stability requirements - to meet CSA 225 - 1988. _____

8.1 The supplier shall perform a stability test of the completed unit in accordance with CSA C225-1988 and shall provide a stability certificate to the Contract Administrator showing the date and results of the test prior to final acceptance. _____

8.2 Torsion bar stabilizer, state type if required. (hook leaf springs and outriggers are not acceptable) _____

8.3 Micro accumlock parking brake required. State Model. _____

9.0 PEDESTAL

9.1 Post type fixture welded steel tubing minimum 10 inches in diameter. _____

9.2 Pedestal shall be a chassis mount bolt on type _____

10.0 ROTATION SYSTEM (turret)

10.0 Support bearing (state type). _____

10.1 Rotation drive, worm gear type. _____

10.2 Mounting position as to center line of rear axle in inches. State. _____

11.0 ARTICULATING LINK for LOWER BOOM ASSEMBLY

11.1 Articulating link shall be a reinforced rectangular steel type assembly attached to main pedestal. _____

12.0 MAIN BOOM ASSEMBLY (lower boom)

12.1 Shall be a lower boom with a telescopic type upper boom. _____

12.2 Lower boom shall be a re-inforced steel box structure _____

12.3 Lower boom shall have polyurethane slide pads located for easy adjustment and replacement. _____

12.4 Lower boom pivot assembly shall be made of high strength, chrome plated steel c/w self-lubricating, replaceable, non-metallic bearings. _____

13.0 TELESCOPIC BOOM ASSEMBLY (upper boom)

13.1 To telescope into main boom assembly (lower boom) _____

13.2 Telescopic upper boom assembly shall be a rectangular, filament wound, fibreglass surface coated with acrylic polyurethane. _____

13.3 Fiberglass section to provide minimum 46 kV rating. _____

14.0 BOOM STORAGE SUPPORT

14.1 Boom storage support shall be a saddle type support, padded to prevent chafing of the boom, _____

14.2 Boom storage support shall be located/installed at the left rear of cargo area. (driver's side) _____

15.0 DIELECTRIC INTEGRITY TESTING

15.1 The completed unit shall be tested (**at the Contractor's expense**) by an independent testing organization capable of performing the required tests acceptable to the Contract Administrator according to the kV rating of the apparatus as supplied from the manufacturer.

15.2 The Contractor shall provide a certificate satisfactory to the Contract Administrator certifying that the equipment is designed to withstand 46 kVDC (wet and dry) prior to the delivery of the completed aerial device. The leakage during the test not to exceed 1.5 micro amps per kV/ft.

16.0 PERSONNEL PLATFORM

16.1 Single one man, end-mounted bucket constructed of fibreglass with rotator.

16.2 Bucket shall come complete with a gel coat surface, coated with acrylic polyurethane

16.3 Nominal bucket dimensions- (24"x30"x42"), c/w molded steps (combination exit/entrance steps), with anti-skid surfaces

16.4 Single one man, end-mounted platform with rotator. Nominal platform dimensions- (24"x30"x42"), c/w molded steps (combination exit/entrance steps)

16.5 Platform Rotator- shall have a hydraulically powered rotator system. The rotator shall include a surface mount lock valve to prevent creep in the working position. The system shall have flow control to allow for speed adjustment of rotation

16.6 Polyethylene platform liner with 50 kV rating (minimum) c/w water resistant cover.

16.7 Upper controls to have start/stop with emergency operating system, 12 V DC electric powered. To include pump and motor, operates from chassis battery. Control to be captive air operated from the platform which allows the operator to completely stow the booms and platform in a situation wherein the primary hydraulic source fails

16.8 BUCKET DUMP CAPABILITY

16.9 An approved lanyard attachment shall be supplied and connected to upper boom tip

17.0 HYDRAULIC SYSTEM

17.1 The hydraulic system shall be capable of operating the aerial device and shall include the following minimum features:

17.1.1 Hydraulic pump shall be engine driven, belt type, with an electric clutch.

State make and model. _____

a) State type of pump. _____

b) Capacity, _____ gpm @ _____ PSI, @ _____ rpm

c) State engine rpm required for aerial device operation. _____

17.2 Relief valve(s) located prior to aerial device functions set at system pressure. _____

17.2.1 State pressure setting. _____

17.2.2 State valve location. _____

17.3 Hydraulic oil reservoir

a) State capacity. _____

b) State mounting location. _____

c) Top mounted filler c/w breather filler cap with breather filter. _____

d) Filler strainer. _____

e) Level gauge state type. _____

f) Drain with plug. _____

17.4 Suction line strainer, 100 micron, rated at twice pump capacity. _____

17.5 10 micron external spin-on filter in return line, serviceable without oil loss. _____

17.6 Hydraulic hoses shall be non-conductive type where required. _____

17.6.1 Hose shall have minimum 4 to 1 burst pressure safety factor. _____

17.6.2 Hoses shall be protected at all wear and scuff locations. _____

17.7 Hydraulic cylinders shall be double acting type. _____

17.7.1 Hydraulic cylinders shall be equipped with dual holding valves. _____

17.8 Hydraulic oil shall have Dielectric value minimum 25 kV. _____

17.8.1 The Contractor shall provide a certificate satisfactory to the Contract Administrator certifying that the hydraulic oil has been tested to a value of 25kVDC prior to the delivery of the completed aerial device. _____

17.8.2 Oil testing shall be performed by those mentioned in clause 15.1.

17.9 Directional hydraulic motor coupled to rotation drive. State make.

18.0 HYDRAULIC CONTROLS

18.1 Location 1- Boom tip-

Single Joystick control shall be conveniently located and shielded. The Joystick control shall provide single handed operation of the following operations- extension/retraction, raise/lower and right/left rotation.

Shall have Emergency Lowering control.

18.1.1 Location 2- Base-

Controls shall be mounted on the turntable.

Lower controls shall have positive override of upper controls including Emergency Lowering.

Control switches shall be all weather type.

18.2 All controls must be clearly and permanently labelled with all weather type labels. Glued labels will not be acceptable.

19.0 MOUNTING

19.1 Aerial Device shall be mounted as per the manufacturer's recommendations. Bidder to provide copy of mounting procedure including plans and specifications within 48 hours of the request of the Contract Administrator.

20.0 CHASSIS EQUIPMENT

The following minimum equipment is to be installed in the Chassis

20.1 Dash mounted warning lights to indicate;

a) Aerial device out of travel position.

b) Applied Mico Accumulock parking brake.

c) Electric clutch engaged

20.2 On/Off switch for electric clutch to be mounted in the cab to the right of the steering column.

20.3 Hourmeter mounted in the cab and wired to operate when clutch pump is engaged.

20.4 Back Up Alarm, 97 DB rating, installed at the rear of the unit and located to be protected from damage

20.5 Vehicle anti-theft device, activated which cause engine to stall by moving the gear selector from the "park" position when the electric clutch is engaged. _____

20.6 Hidden switch to arm/disarm the system shall be easily accessible by the driver but not readily visible. _____

20.7 All switches and warning lights to be identified with all weather decals.
No decals shall be installed on upper surface of dash. _____

20.9 **All electrical equipment shall be installed in accordance with the following:**

a) All wiring shall be properly loomed, secured and routed. _____

b) All electrical connectors shall be crimped and soldered to the wiring. _____

c) All joining of wires shall be soldered and sealed using heat shrink tubing. _____

d) Circuit breakers shall be used in lieu of fuses for all circuits requiring overload protection. _____

21.0 MISCELLANEOUS

21.1 Inverter:

a) The inverter shall be 1800 watt _____

b) Powered by auxiliary battery minimum 700-800 amp, supplied by the Contractor, _____

c) Auxiliary battery shall be as recommended by the manufacturer to successfully meet or exceed the requirements necessary to operate the Inverter System, _____

d) Battery shall be installed in a convenient location, protected from the environment, _____

d) Battery shall be isolated via a regulator, wired through the ignition, _____

e) Inverter should be mounted in the right rear vertical compartment _____

21.2 Throttle control:

a) to increase engine speed only when low voltage is detected, _____

b) shall be wired through the transmission neutral safety switch, _____

c) grounded duplex receptacle, 120 VAC required, _____

21.3 Boom Leveling System _____

- 21.4 Rear step bumper – approx. 90" x 9.5" recessed for tow hook. _____
- 21.5 Heavy duty pintle hitch – with chassis frame reinforcement and two(2) safety chain eyes. _____
- 21.6 Safety Kit – Including 21/2 pound fire extinguisher w/bracket, safety triangles, flares and first aid kit. _____
- 21.7 Rubber wheel chocks – 5" W x 10" L x 5" H. _____
- 21.8 All lighting to conform to C.M.V.S.S. and the Manitoba Highway Traffic Act. _____
- 21.9 Light bars – two (2) Turbo Beam 15 in. mini light bars, one post mounted behind the cab and one mounted rear driver's side compartment top. _____
- 21.10 Fibreglo tubular lighting in each compartment with individual switches mounted high. _____

22.0 DECK DIMENSIONS

- 22.1 Length – approx. 132" _____
- 22.2 Outside width – approx. 94" _____
- 22.3 Compartment Depth – approx. 18" _____
- 22.4 Body Height – approx. 48" _____
- 22.5 Deck width – approx. 58" _____

23.0 STORAGE COMPARTMENTS

23.1 Passenger's Side

- 23.1.1 First Vertical – approx. 28" H x 58" L x 27" W transverse joining first vertical (driver's side) open at both ends with one shelf mounted mid height with 2" flange. _____
- 23.1.2 Second Vertical – approx. 28" H x 18" L x 27" W with three (3) adjustable shelves. _____
- 23.1.3 Horizontal – approx. 18"H x 18" L x 54" W with one adjustable shelf with dividers and one divider tray at bottom of compartment. _____
- 23.1.4 Rear Vertical – approx. 28" H x 18" L x 24" W with three (3) adjustable shelves. _____
- 23.1.5 Flip top – 8" deep with aluminium lid. _____

23.2 Driver's side

- 23.2.1 First Vertical – approx. 28" H x 58" L x 27" W transverse joining first vertical (passenger side) open at both ends with one shelf mounted mid height with 2" flange. _____

23.2.2 Second Vertical – approx. 28” H x 18” L x 27” W with three(3) adjustable shelves._

23.2.3 Horizontal – approx. 18” H x 18” L x 54” W with one (1) divider tray at bottom of compartment.

23.2.3 Rear Vertical – approx. 28” H x 18” L x 24” W. with four(4) locking swivel hooks.

24.0 BODY GENERAL

24.1 Subframe – structural steel, primed with premium epoxy primer and finished with polyurethane paint.

24.2 Floor – 3/16” steel floor and tailskirt with aluminum bulkhead.

24.3 Service body compartments to be fiberglass construction.

24.4 Wheel well panels are to removable.

24.5 Front corners to have aluminum rock gaurds.

25.0 COLOR

25.1 Aerial device steel sections painted to match cab. Paint requirements are as follows:

a) Primer- 1 coat Intergard 251 Inhibitive Epoxy Primer (or equivalent), minimum 2 –3 mil thickness.

b)Paint – 2 coats of Interlac 665FD Industrial Enamel (or equivalent), 1.5 –2 mils per coat to match color of cab State.

c) all components shall be painted (as above) or powder coated to match color of cab prior to assembly.

26.0 PERFORMANCE RELIABILITY

26.1 The responsibility for the design of the complete equipment, it's performance and reliability shall rest upon the Contractor.

26.2 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 equipment inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, or assembly.

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.

26.2.1 Where the equipment develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

27.0 PARTS AVAILABILITY

27.1 The Contractor shall have an established dealer/representative located within the boundaries City of Winnipeg limits.

27.2 The Contractors Winnipeg dealer/representative shall stock parts required for regular servicing, as outlined in the manufacturers service and maintenance manual.

27.3 The Contractor shall be responsible to ensure that regular servicing parts are made available to the City of Winnipeg within a twenty-four (24) hour period.

27.4 In order to ensure a minimum downtime of the equipment, the Contractor shall maintain a stock of all replacement parts in North America, either in his/her own inventory or in that of an agency that normally supplies parts to the Contractor and shall be made available to the City of Winnipeg within forty eight (48) hours.

28.0 MANUALS or CDs (preferred)

28.1 The following manuals/CDs shall be supplied at the time of delivery of the equipment:

28.1.1 Operator's manual/CDs – two (2) sets.

28.1.2 Parts and service manuals/CDs, including preventative maintenance schedules for the lifetime of the Aerial Device – two (2) sets.

Note: The manuals/CDs supplied for the equipment being bid must be specifically for the units supplied. General purpose manuals/CDs will not be acceptable. The Contract will not be considered complete until the manuals/CDs have been delivered.

29.0 TRAINING

29.1 The Supplier shall provide at their expense up to four (4) hours of operational and maintenance training by qualified staff for the City of Winnipeg Personnel. The training shall be conducted in a combined or separate session for each group of personnel. Each session shall be sufficient in duration and shall provide adequate familiarization and orientation on the apparatus, to the satisfaction of the Supervisor of Equipment Supply. The training shall be conducted in Winnipeg at a location to be designated by the Supervisor of Fleet Management Agency.

State if VHS video tape training aides on the type of apparatus being offered are available.

30.0 LITERATURE

30.1 Bidders shall submit current descriptive, detailed literature on the equipment being bid within two (2) Business Days of a request by the Contract Administrator

31.0 WARRANTY

31.1 The Contractor shall warrant all equipment, and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace without cost to the City any article that has become defective and not proven to have been caused by negligence on the part of the user within one (1) year from the date the equipment is put into service by the City of Winnipeg.

31.2 The warranty on the equipment shall include 100% replacement parts/labour and all incidental costs at no cost to the City and shall cover the complete equipment and all parts thereof against any defects of workmanship, construction and materials for a minimum one (1) year from the effective date of the Certificate of Total Performance.

31.3 A new one (1) year warranty period shall be provided for any article that is repaired or replaced under the terms of the "repeated failures" clause (Section 26.0 Performance Reliability). The new warranty period shall be effective from the date of acceptance of the repaired or replaced article.

31.4 All warranty items brought to the attention of the Contractor by the City shall be rectified expediently. The City reserves the right to effect warranty repairs to the equipment, at full cost to the Contractor, should the Contractor fail to execute the work within two working days.

31.5 In the case where the Bidder proposes that warranty work be performed by the City of Winnipeg Repair Facility, any work performed by the City of Winnipeg shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for - 2004, \$70.00/hour).

32.0 DELIVERY

32.1 All equipment shall be delivered F.O.B., freight prepaid, to the Equipment Inspections Section, 770 Ross Ave., Winnipeg, Manitoba, **within 30 Calendar days or sooner from the date of the award of the Contract.**

32.2 A pre-delivery inspection shall be performed by the Contractor on all equipment.

33.0 INSPECTION

33.1 Further to Clause GC.5.03 of the General conditions, final inspection of the equipment shall be conducted by the City of Winnipeg Inspector or his designate as promptly as practical. Successful completion of a continuous eight-hour full-performance test by the City shall be required as part of the inspection process for the equipment. At its option, the City may discontinue the process upon finding a lack of conformance to the specifications, until the deficiency is rectified by the Contractor. The inspection process shall then commence anew.

- 33.1.1 Equipment which fails to successfully complete the inspection process shall be rejected by the City and shall be removed from City property by and at the expense of the Contractor, promptly after notification by the City.

QUESTIONNAIRE

REFERENCE: DETAILED SPECIFICATIONS 03 – 045 and 03 – 046

1.0 **LIST** any significant features that will be supplied standard on the unit being offered, but were not specifically mentioned in the Detailed Specifications:

2.0 **LIST** three current users of the offered model:

3.0 **STATE** the location and percentage of parts stocked in Winnipeg:

4.0 **STATE** the location of the service facility located within the boundaries of the City of Winnipeg:

5.0 **DOES** the equipment being offered meet or exceed the minimum requirements of the Detailed Specifications?

6.0 **LIST** any deviations that might be considered less than equal to the Detailed Specifications:
