

**ADDENDUM NO: 2**

**REQ NO: 165368**

**FINAL SUBMITTAL: March 13, 2018 2:00 PM EST**

**FINAL QUESTIONS: N/A**

**Department: Fleet Management, Public Works**

**Changes to Bid No. 305023:**

**Attached are the updated specifications by Fleet Management Division.**

**Bid Opening date has been changed to March 13, 2018 due to changes in specification.**

**Req No: 165368 Bucket Truck Chassis & Body**

**PLEASE SIGN ONE (1) COPY OF ADDENDUM AND RETURN TO THE PURCHASING DEPARTMENT. RETAIN THE OTHER COPY FOR YOUR FILES.**

**Name:** \_\_\_\_\_

**Company:** \_\_\_\_\_

\_\_\_\_\_

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# Bid Boilerplate for Vehicles For Chattanooga Public Works Department Fleet Management Specifications For Bucket Trucks 2019

## **INTRODUCTION**

These specifications describe the vehicle and accessories to be purchased by the City of Chattanooga ("City"), Public Works Department, Fleet Management Division.

These specifications consist of three (3) parts:

1. **Required Features** – these requirements must be met without exceptions for a bid to be considered acceptable.
2. **Preferred Features** – attributes/performance that the City wants, however exceptions to Preferred Features are allowed with explanation (The more Preferred Features that are met by a bid, the better the bid).
3. **Options** – additional features/conditions that are optional (i.e., may or may not be offered by Suppliers, and may or may not be purchased by the City); Options will be priced as separate line items.

The attached specifications describe the requirements for two (2) Insulated Bucket Trucks and accessories to be purchased by the Chattanooga Public Work Department, Fleet Management Division. The specifications are intended to be flexible enough for all major manufacturers to comply. The uses of names or part numbers are used for cross-referencing to another brand name to be equivalent or greater to the specifications.

This shall be a twelve (12) month contract with an additional two (2) twelve (12) month renewals for purchasing bucket trucks.

## **Bid Requirements**

1. The entire vehicle/apparatus is to conform to D.O.T., ANSI, FMVSS, NFPA, OSHA, and to the requirements of all other applicable regulatory agencies.
2. Parts not specifically mentioned that are necessary to furnish a complete chassis or body/apparatus must have been produced using the automotive industries best manufacturing practices. This pertains to design, quality of materials and workmanship.
3. Using the attached specifications, bidders must indicate either "YES" or "NO" to the right of all line specifications. Exceptions or "NO" responses are to be listed and FULLY explained on a separate page. Failure to complete the spreadsheet or failure to properly document exceptions to the specifications may result in the bid being declared "non-conforming".
4. Loose and miscellaneous equipment is to be provided only as required by D.O.T. and specifications, Fire Ext., Triangles, Minimum height requirement inside cab.
5. Each bid is to be accompanied by a set of manufacturer's, and as applicable, Vendor's specifications. These are to consist of a detailed description of the proposed vehicle/apparatus and equipment. The specifications are to indicate size, type, model and make of all component parts and equipment. A CAD drawing of the proposed vehicle indicating wheelbase, Cab to Axle and Cab to end of frame measurements is desired. All weights and horsepower/torque to transmission ratios to axle ratios shall be approved by engineering per vehicle manufacturer to include all detachable components and operations.

All vehicles will be delivered with factory service manuals, wiring diagrams and component locators for cab, chassis and bodies installed on vehicle. CD's, DVD.s or Flash drives will be accepted.

All warranties will be listed with specific details as to time, including any and all exclusions. No warranties can be Terminated or Canceled for any reason during the warranty coverage as stated in bid where specified. No travel or drive time for repairs will be paid while under any manufacturer's warranty.

All power train components, assemblies, subassemblies, component parts and so on, will be designed and constructed with due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the vehicle is designed for and to be subjected to when placed in service. All parts of the vehicle will be strong enough to withstand the general service under full load. The vehicle will be so designed that the various parts are readily accessible for lubrication, inspection, adjustment and repair, and complete unit engineering approved.

All vehicles will be supplied with a line sheet to include as built and current part numbers of any and all components installed on vehicle.

The specified vehicle will be capable of reaching and maintaining a minimum speed of 20 MPH on any grade up to and including 25% or 15 degree grade. The vehicle will be capable of attaining a true speed of 35 MPH in 25 seconds and programmed not to exceed 62 MPH.

All warranty registrations will be completed by bidder and copies provided upon delivery, all warranties will begin on any and all components on the in service date or delivery date if no special training is needed to begin operating vehicle.

Any special software or hardware needed to perform diagnostics on any computer mounted on cab, chassis and body shall be provided by bidder.

All vehicles shall be equipped with a master Electrical disconnect switch inside cab by Drivers seat,

## **Warranty**

1. Warranty period shall be for three (3) years on the Bucket truck chassis, body and all of its components with no exceptions.
2. Warranty shall start on in service date.
3. All warranty registrations shall be completed by the vendor and copies provided upon delivery.
4. Bid an optional Warranty period to be "Bumper-to-Bumper" for five (5) years on the chassis, engine, transmission and drive train, body and all components excluding wear items.
5. Bidder shall include copy of warranty terms and conditions, and a list of any exceptions from the warranty as well as wear items.

**MY BID MEETS ALL REQUIRED FEATURES:**

**YES** \_\_\_\_\_ **NO** \_\_\_\_\_

Signed by Bidder: \_\_\_\_\_

## Preferred Features

<u>Item</u>	<u>Quantity</u>	<u>Description</u>	<u>Comply; Y/N</u>
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### Bucket Truck

1. Telescoping articulating aerial device with insulated pistol-Grip system at the boom tip and continuous rotation, installed behind the cab.

A. Ground to Bottom of Platform Height: 43.5 feet + 20" elevator

B. Working Height: 50 feet

C. Maximum Reach to Edge of Platform: 28.3 at 14.4 feet of platform height.

D. Pedestal: Post type pedestal design with large service opening. Pedestal consists of fixture welded steel tubing 8.63 inch (219 mm) diameter. The 1.0 inch (25.4 mm) top plate of the pedestal is machined after welding to provide a rigid, flat mounting surface for the rotation bearing. This extends the life of the bearing and reduces the life cycle cost. The pedestal is bolted to a quick mount interface frame which is attached to the chassis frame utilizing a bolt-on technique.

E. Turntable: Steel fixture-welded structure with a 1.0 inch (25.4 mm) steel bottom plate. The bottom plate of the turntable is machined after welding to ensure a flat mounting surface for the rotation bearing. A steel ring is welded to the bottom plate to stiffen the plate and to protect the rotation bearing. For ease of maintenance, hydraulic valving is located on the side of the turntable and protected by a metal guard.

F. Lift Cylinders: The rod eye is welded to the rod while the blind end of the cylinder is of cast steel, one piece design, which utilizes cartridge-type, bi-directional counter-balance holding valves. Non-lubricated type bushings are used at each end of the cylinder.

G. Telescopic Boom: Fabricated, reinforced steel, two-section telescopic boom with lower section. Ultra-high molecular weight polyurethane slide pads are installed at the boom tip to guide the telescopic upper boom section. These pads have a large contact area in order to reduce wear. The pads are shimmed and attached to externally removable steel plates for ease of adjustment or replacement without disassembly of the booms.

- H. Telescopic Upper Boom Section: Rectangular filament wound fiberglass, providing a minimum of 8.0 inch (203 mm) of isolation when retracted and 35 inches (889 mm) when extended. The inner surface of the fiberglass boom has acrylic polyurethane applied to provide a dry, smooth inner surface which will cause moisture to bead. The outer surface has a smooth gelcoat finish.
- I. Telescopic Boom Pivot Pin: High strength chrome plated steel with self-lubricating, replaceable, non-metallic bearings.
- J. Telescopic Upper Boom Extension: The upper boom section is extended and retracted by a double acting hydraulic cylinder installed within the booms. Chain is not acceptable. The boom extends and retracts over slide bearings located in the end of the lower boom section.
- K. Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the upper boom and designed to **maintain the dielectric integrity of the aerial device**. Controls for leveling and tilting the platform are located at the platform. Leveling for the platform includes two (2) double acting cylinders incorporating counter-balance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders are located at the platform and at the end of the lower boom. The master-slave action of the cylinders maintains a level platform throughout the full range of boom articulation.
- L. Platform: Totally enclosed, fiberglass.
- M. Controls: The Control System for all models is a full pressure type operating at 2,200 psi (152 bar) maximum. The upper control, located at the platform, consists of a single handle control of the tiller type. The single handle control, through an insulated linkage, actuates valves in the control head to actuate the boom. The controls provide fine metering capability and allow the operator to make simultaneous multiple boom movements. The single handle control activates Lower Boom – **Up and Down**, Upper Boom – **Extend/Retract**, and Rotation – **Clockwise/Counter-clockwise**. Unit rotation is accomplished by moving the control from side-to-side similar to a tiller. Conventional multiple lever ground controls located on the turntable include an upper control override. The same control handle controls the articulating arm for Up and Down. Pistol grip is a 4-function controller.

- N. Manual Lowering Valve: A valve located at the boom tip, easily accessible by the operator without having to remove any covers allows the lower boom to be lowered in the case of engine or hydraulic system failure.
- O. Bucket must be able to articulate from one side to another (180 degrees) and raise an additional 20" in working height.
- P. Boom Articulation: Travel arc should be -13.5 to +80. Platform shall come to the ground for operator entry.
- Q. Diagnostic Pressure Test Quick Disconnect Couplings: Are located at the turntable to allow a mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost.
- R. ANSI Category C, 46 kV and below dielectric rating.
- S. Manuals: Two (2) Operator's and two (2) Factory Maintenance/Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device.
- T. Paint: Painted white with a Powder Coat/Tow Stage Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion.
- U. Articulating Arm: Tubular steel structure with insulating fiberglass insert. The articulating arm is designed so that the articulating arm and telescopic boom are compensating. By raising the articulating arm only, the arm and telescopic boom maintain the same relative angle with the ground. By raising the articulating arm in conjunction with the telescopic boom, the operator is able to position himself more quickly and easily into the work area.
- V. 600 lb. weight rating without Jib.



2. The pistol-Grip System includes the following boom tip components that can provide an additional layer of secondary electrical contact protection. This is not a primary protection system.
  1. Control Handle: An insulated single handle controller that is dielectrically tested to 40 kV AC with no more than 400 microamperes of leakage. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation. ANSI 92.2 Standards
  2. Auxiliary Control Covers: Non-tested blue silicon covers for auxiliary controls.
  3. Control Console: Non-tested non-metallic control console plate.
  4. Boom Tip Covers: Non-tested non-metallic boom tip covers. The covers are not dielectrically tested, but they may provide some protection against electrical hazards.

Pistol grip dielectric certification tested to 40 kV as minimum requirement, must be dated, signed and delivered with completed vehicle showing test voltage, and tester's signature.

3. Single, one-man platform with liner with 180 degree Rotator – End-mounted, 24" x 30" x 42", platform is rated at 400 pounds minimum.
4. Reservoir, 15-gallon capacity, installed on the pedestal.
5. Engine start/stop, captive air, located at platform.
6. Mounting frame – post mount for straight frame application. Unit weight shall not exceed 1,700 pounds.

### **Unit and Hydraulic Accessories**

7. Scuff pad for 24" x 30" platform.
8. Platform liner, 24" x 30" x 42".
9. Platform cover, 24" x 30", foam filled.
10. Hydraulic oil, lubricants and filter installed.
11. Pump, vane type, mounted to Power Take-off on chassis transmission.

12. Cab controlled heavy-duty SAE power take-off, electric hot shift, installed with indicator light in cab, for automatic transmission.

## **Body**

13. Body suitable for installing on any chassis with an approximate CA dimension of 84", built in accordance with the following specifications:

- A. Body: Fabricated from A60 grade 100% zinc alloy coated steel with the following minimum gauge thickness:

1. 16 gauge outside panels
2. 20 gauge door panels
3. 18 gauge shelving, spangled steel
4. 12 gauge steel floor, formed tread plate

- B. Body Dimensions:

1. 132" overall body length
2. 94" outside width
3. 40" body height
4. 18" compartment depth
5. 58" floor width

- C. Compartmentation – Curbside:

1. First Vertical: (30") Two (2) adjustable shelves with five (5) removable dividers
2. Second Vertical: (30") Two (2) adjustable shelves with removable dividers on 4" centers
3. Horizontal: (54") One (1) removable shelf with eight (8) removable dividers

4. Rear Vertical: (24") One (1) adjustable shelf with removable dividers on 4" centers

D. Compartmentation – Streetside:

1. First Vertical: (30") Two (2) adjustable shelves with removable dividers on 4" centers
2. Second Vertical: (24") Two (2) adjustable shelves with removable dividers on 4" centers
3. Horizontal: (54") One (1) removable shelf with removable dividers on 8" centers
4. Rear Vertical: (24") Open for platform storage

**Additional Items:**

- Spray anti-slip coating shall be applied to inside bed and tail extension only. None on top of Body.
- Full length shelf in top of curbside compartments with rear drop door.
- Wheel chock storage, two (2) curbside wheel wells with safety retainer.
- Master body locking system installed one (1) per side of body, located at front of body.
- Rope style LED compartment lighting (Grote XTL LED Light Stripe) with automatic switches when doors opened and master switch located in chassis cab.
- Inside of body compartments painted.
- 5" drop in metal tailgate.
- Install conduit carrier on top of curbside tool box with hold down straps.
- Doors with locks are to be on any possible compartment.
- Cone holder.

- Install rope hooks in both front compartments
- Exhaust to be extended to prevent paint damage or heat damage during regeneration.
- Install camera to attach to Camera Prepped monitor provided with Chassis

### **Body Accessories**

14. 94" long x 29" side x 8" tall tread plate tail shelf with two-section tread plate bumper tapered for pintle hook, 10" wide. Liner coated, anti-slip.

Tail shelf needs to be 29" long. Extension, if necessary, needs to extend off of tail shelf made of 2 x 2 inch tubing with expanded metal to protect platform while backing. Edge of guard shall have a rubber dock bumper. Must have a Transverse compartment with door openings on both sides under tail shelf.

15. Grab handle installed at curbside and streetside rear corners of tail shelf.
16. Rubber hanging step installed at curbside and streetside rear corners of tail shelf.
17. Boom storage support installed at streetside rear of cargo area. Installed as close to streetside cargo area wall as feasible to maximize access to cargo area.
18. Boom storage to include ratchet strap type tie down.
19. Platform rest, rubber tube type. Installed directly on tail shelf, bolted and positioned under platform for support of platform during transit.
20. Outriggers – Modified A-frame type.
21. Dimensions Inverter model number 3600 NPL, providing 3600 watts and 30 amps.
22. Combination 2" ball and pintle hook installed on the frame extension. To also include two (2) safety chain eyes installed one each side of pintle hook with 6-pin round trailer plug.
23. Splash aprons (Mud flaps) installed behind rear tires. One each side of body.

## **Electrical Accessories**

24. Lights and reflectors in accordance with FMVSS #108 lighting package, LED type.

All lighting to be LED with programmable flash pattern. AMBER

25. Four (4) rear facing surface mount Amber 2 LED Strobe mounted to Pedestal above cab height to articulate with lift Sound Off Signal LED Beacon/Amber and White ENRBCSHCD14Z.
26. Light switch to control added lighting.
27. Go Light RadioRay #20004 White LED, Mounted on plate to utilize mounting holes for rear tail/Stop light. No holes are to be cut or drilled in cab.
28. 97 Db back-up alarm installed between chassis frame rails. Back-up alarm to activate when chassis is in reverse.

## **Final Assembly**

29. Paint accessories one color, WHITE, to match chassis cab. The 4 aerial device is painted white.
30. Ten pound fire extinguisher with mounting bracket. Mounted in right rear vertical (curbside) compartment.
31. Triangular reflector kit shipped loose behind bench seat in chassis cab.
32. Fall Protection System to include one extra-large body harness and 6 foot fixed length decelerating type lanyard. Harness has tongue buckle type strap for leg, waist and shoulder. Decelerating lanyard has 1" nylon webbing with rip-stop deceleration device.
33. Steel wheel Chocks, pair, 10" L x 8" W x 5 ¾" H
34. Safety and Instructional signs installed per standards. To comply with all ANSI and OSHA standards.
35. **Additional springs added to rear after body installed to ensure vehicle level.**
36. **Hydraulic brake lock (MICO) to lock all wheels when lift is in use.**

## **Chassis**

- 37. 2019 Model Cab and Chassis
- 38. Ford F-550
- 39. 4 x 2 Conventional Cab.
- 40. GVWR: 19,500 lbs.
- 41. FGAWR: 7,500 lbs.
- 42. RGAWR: 14,706 lbs.
- 43. Wheelbase: 169"
- 44. Cab-to-Axle dimension: TBD by Body Manufacturer.
- 45. Transmission: 5-speed automatic with PTO provision.
- 46. Engine: Gas V10.
- 47. Exhaust type: Horizontal.
- 48. 12V power point on dash
- 49. Tires: Mud and Snow rear / All Season Michelin Radials
- 50. Fuel Tank: 40 Gallons
- 51. Alternator: 200 Amp
- 52. Brakes: Hydraulic
- 53. Air Conditioning
- 54. Battery: 750CCA
- 55. Instrument Package with Tach
- 56. Heavy Duty Cooling Package
- 57. Engine Cooler
- 58. Bench Seat

- 59. Intermittent Wipers
- 60. AM/FM Stereo with Bluetooth capability
- 61. Cab Steps – Running boards factory installed
- 62. Cab access grab handles on driver and passenger side
- 63. Hour Meter
- 64. Back-up camera prep option
- 65. Power windows and locks
- 66. Four (4) LED Amber flashing lights Grill Mounted strobe on front
- 67. Switch for all added lighting installed in Cab.

### **Radio Requirements**

- 68. 20 amp continuous circuit power and ground shall be provided with an additional 4 amp ignition feed.
- 69. RG58 Antenna cable with 800 MHz NMO mount and min UHF connector.

## **Options**

Total life cycle cost will be used as part of the analysis of bids for all vehicles and equipment purchased by the City of Chattanooga, Fleet Management Division. This includes daily cost of vehicle downtime.

For any and all Vehicles and/or Equipment purchased by the City of Chattanooga, Fleet Management Division, a re-imbursement of daily cost for vehicles under warranty and out of service for a period of greater than ten (10) days. This means if you are not serious about the support of vehicles you sell, you need to consider this factor as a cost item to you in this bid.

A loaner vehicle meeting height and weight requirements will be accepted while unit is under manufacturer's warranty

Provide supplemental bid for five (5) year warranty: \$ \_\_\_\_\_

Telescopic Aerial and Body Price: \$ \_\_\_\_\_

Chassis: Conventional: \$ \_\_\_\_\_

## **Other Options**

Ground to Bottom of Platform Height: 37.5 feet

Working Height: 42.5 feet

Maximum Reach to Edge of Platform: 28.3 at 14.14 feet of platform height

300 lb. bucket weight rating plus liner totaling 350 lb,