FLORIDA SHERIFFS ASSOCIATION, FLORIDA FIRE CHIEFS' ASSOCIATION, & FLORIDA ASSOCIATION OF COUNTIES

SPECIFICATION #23 – TRACTOR-DRAWN AERIAL APPARATUS

ALL ITEMS FACTORY INSTALLED UNLESS OTHERWISE INDICATED

INSTRUCTIONS: In the first column labeled "Manufacturer's Base Vehicle Standard Equipment", check the applicable areas where the manufacturer's base vehicle standard equipment meets the minimum specifications of the base vehicle bid.

Minimum Requirements: In all areas of this specification bidders must comply with the current publication of NFPA 1901 (2009 edition) and all chapters that are appropriate for a quint apparatus with a special emphasis on Chapters 1, 2, 3, 4, 8, 12, 13, 14, 15, 16, 18, 19, FMVSS (applicable areas) and NHTSA standards. When requested, bidders must submit complete detailed specifications for the apparatus being offered, as well as all options, to the end user.

All bidders are to bid under the current NFPA 1901 standards, and all addendums that are currently in effect at the time ofbidding.

The bidder is to understand that the Florida Sheriffs Association does not guarantee any quantity of vehicles will be ordered off this contract. The bidder will further understand that this program operates under a split bid award system which allows the end user authority to purchase from any of the responsive bidders authorized and awarded to do business off this contract. The end user authority will contract directly and individually with the awarded bidder of their choice for any and all vehicles offered on this contract and any other features, options and equipment items required to meet their individual needs. Customers shall choose from options furnished to them by the manufacturer.

Delivery of the vehicles shall be accomplished by factory or dealer drive away programs. However, the right is reserved for the individual end users to pick up the vehicles at either the factory or the dealership.

Prospective bidder(s) are advised that the following documentation is to be included and made a part of the bid submission. The Bid Coordinator reserves the right to disqualify any bidder(s) who are in non-compliance with this provision.

Bid Bond: A five percent (5%) Bid Bond issued by a bonding company licensed to conduct business in the state of Florida is required for base vehicle price and shall be provided as part of the bid package, bond must cover the highest priced submittal. Bid bond will be made out to the Florida Sheriffs Association as coordinator of this bid unless otherwise indicated or approved by FSA's Bid Coordinator.

Performance Bond: The contractor is required to notify the customer of the availability of a one hundred percent performance bond at an additional cost to the customer. The company submitting the performance bond must have a minimum A rating as determined by A.M. Best Company. The cost of the performance bond will be based on the final price of the contract and must be provided to the customer in writing.

Note: A letter from a bonding company licensed to do business in Florida must be submitted with the bid stating that the manufacturer will provide a 100% Performance Bond between the bidder and the end user authority upon award of this bid.

The manufacturer of this vehicle:

- Shall carry not less than fifteen million dollars ($15,000,000.00) in product liability insurance, listing the Florida Sheriffs Association as additional insured, and shall submit a copy of this insurance with the bid proposal.
- Shall possess a Florida Motor Vehicle Department license as a Manufacturer of Motor Vehicles and shall provide a copy of the license with the bid proposal.
- Shall be or have a Florida Dealer Representative who shall possess a Florida Motor Vehicle Dealers license and shall provide a copy of the license with the bid proposal.
- Shall employ full-time parts personnel with toll-free access number.
- Shall employ a full-time electrical troubleshooter with toll-free access number.
- Shall employ a full-time warranty representative with toll-free access number.
- Bidder shall submit how warranty service claims will be handled in the State of Florida.

1. DOCUMENTATION, DELIVERY,TRAINING

a. When requested by end user, bidders to accurately state wheelbase, cab to axle, overall length, bumper swing turn radius, curb-to-curb turning radius, overall height, overall width, GVWR, angle of approach, angle of departure and SCAAN certification for drivetrain compatibility in submitted specifications

b. Approval drawings provided prior to construction commencement
c. Two (2) sets of operator and service manuals
d. Delivery to be F.O.B. customer's location
e. Three (3) days of training by employee of manufacturer
f. Pump test certification by independent third party, if applicable
g. Water tank capacity certification, if applicable
h. Aerial non-destructive, performance and stability testing by independent third party
i. 12 volt and, if applicable, 110 volt testing by independent third party
j. Vehicle weight, as measured by certified scales

2. CHASSIS

a. 110,000 psi steel frame rail with full length inner 110,000 psi C-channel liner or integral torque box frame
b. Tow hooks or eyes front and rear attached to the frame
c. 18,000 pound minimum front axle, suspension, tubeless radial tires, steel disc wheels
d. 27,000 pound minimum rear axle, suspension, tubeless radial tires, steel disc wheels

f. Front and rear mud flaps
g. NFPA 1901 Chapter 4.15.3 top speed rating requirement
h. S-cam air brakes or equivalent, as large as possible, with automatic slack adjusters

i. Manufacturer's standard compressor
j. Minimum 5000 cubic inch air reservoir capacity
k. Air dryer, color coded air lines, turn drain valves on reservoirs
l. ABS brakes
m. Power steering with tilt/telescopic wheel
n. Vehicle data recorder (VDR) in compliance with Chapter 4.11 with required software meeting 4.11.8
o. Electronic Stability Control shall be provided in compliance with NFPA 1901 Chapter 4.13.1.2 if the manufacturer cannot comply with Chapters 4.13.1.1 through 4.13.1.1.3.2.
p. Tire pressure monitoring system with Chapter 4.13.4
q. Aluminum Wheels

3. POWERTRAIN

a. Minimum 470 horsepower turbocharged diesel engine with 1650 ft. lb. torque rating
b. Engine exhaust at front of right rear wheels
c. Secondary braking to meet NFPA
d. Engine manufacturer's statement of engine installation approval with approved cooling system
e. Drivelines to meet engine torque rating
f. Silicone coolant hoses with constant torque clamps
g. EVS 4000 automatic transmission
h. 50 gallon minimum fuel tank
i. OEM oil, fuel, transmission filters

4. CAB

a. Medium length tilt aluminum cab meeting NFPA 1901 Chapter 14.3.2
b. Seating for four, three in SCBA seats with SCBA brackets
c. Air ride driver seat, all others fixed position
d. All persons in 3-point seat belts per Chapter 14, seats equipped with seat belt/occupant detection/warning system per Chapter 14
e. Electric over hydraulic cab tilt with manual back-up
f. Single tone cab paint finish with 10 year paint warranty pro-rated
g. Air conditioning and heating
h. Remote controlled mirrors (from driver's position) with separate flat and convex sections
i. DOT compliant headlights
j. Forward facing turn and warning lights
k. Cornering turn and warning lights
l. Minimum four (4) dome lights with red and clear bulbs
m. Minimum four (4) under cab step lights

n. Cab and compartment door ajar light and buzzer
o. One (1) engine compartment light
p. Color coded and function coded wiring
q. Alternator sized according to amp draw report
r. Minimum four (4) 750 CCA batteries
s. Load manager with automatic high idle function
t. Dual air horns with dual in-cab controls

5. AERIAL APPARATUS – ALUMINUM OR STEEL

a. Aerial shall meet or exceed all sections of NFPA 1901 Chapter 19
b. Ladder material: aluminum or steel
c. Rear-mounted or mid-mounted configuration
d. 4-section aerial with minimum elevation of 100' per NFPA requirements
e. Rated horizontal reach per NFPA requirements
f. Rungs shall meet all aspects of NFPA 1901 19.2.5
g. Rungs equipped with a slip resistant surface meeting NFPA 1901 19.2.5
h. Rungs spacing meeting NFPA 190119.2.5
i. Turntable with pedestal mounted controls meeting NFPA 1901 19.4
j. Aerial rated load capacity not flowing water: 500 lbs. minimum in addition to equipment mounted at tip of ladder
k. Aerial rated load capacity while flowing 1000 gpm: 500 lbs. minimum in addition to equipment mounted at tip of ladder
l. Rated load capacities shall meet and /or exceed NFPA 1901 19.3
m. The aerial shall be rated in multiple configurations per Chapter 19.3.4
n. Extend/retract, rotate and hydraulic or electric over hydraulic controls meeting NFPA 1901 19.5 through 19.5.3.6.
o. Hydraulic pressure gauge at turntable controls
p. Illuminated Angle of Elevation Indicator meeting NFPA 1901 19.4.1
q. Flowmeter on turntable control pedestal meeting NFPA 1901 19.6.8
r. All aerial control devices shall meet NFPA 1901 19.17
s. Fall protection provisions shall be provided.
t. Bidders to state type of stabilizers and overall stabilizers spread
u. Aerial shall meet structural safety factors in accordance with NFPA 1901 19.20
v. Aerial shall meet NFPA 1901 stability safety factors Chapter 19.21
w. Lighted turntable area
x. The aerial manufacturer (the company that manufacturers the entire aerial device) shall maintain a Quality Control Program in accordance with NFPA 1901 Chapter 19.22
y. Special attention shall be paid to meeting all safety requirements per NFPA 1901 19.20
z. Aerial shall be fully tested and certified by third party certified testing company per NFPA 1901 19.24 and 19.25

aa. 2-way intercom system between ladder tip and turntable contro pedestal.
bb. Minimum 1000 gpm waterway system meeting NFPA 1901 with remote control nozzle (controls at fly section and at turntable control pedestal) with movable manual pinned waterway or remote control movable waterway.

cc. Minimum 4” rear waterway inlet with pressure gauge and long handled chrome cap
dd. Minimum 4” waterway discharge with 4” valve with handwheel
ee. Waterway relief valve and minimum 1.5” drain at rear of apparatus
ff. Stabilizer controls and stabilizer to aerial controls mounted on rear of apparatus body
gg. One (1) high intensity spotlights on ladder tip hh. Two high intensity flood lights on ladder base
ii. Painted finish on steel aerial-bidder shall provide copy of paint warranty on aerial
ii. Instruction plates and signs must be installed per NFPA 1901 Chapter 19.23

6. TILLER

a. Tiller cab to be totally enclosed
b. Tiller cab to have one (1) fixed seat
c. Tiller cab to have minimum 6” round convex mirror, one on each side.
d. Gooseneck area of tiller trailer to be constructed of 100,000 psi minimum yield strength steel.
e. Trailer frame rails to be constructed of 80,000 psi minimum yield strength steel
f. Tiller trailer axle to be minimum of 22,800 lbs
g. Aluminum wheels

7. APPARATUS BODY

a. Bidders to bid on each of their offered construction types:
   i. Extruded aluminum
   ii. Formed aluminum
   iii. Formed galvanneal steel
   iv. Formed stainless steel
b. Bidders to state thicknesses, alloys and construction methods of all materials used in body construction
c. High left side compartments or high right side compartments or lower rear compartments
d. Bidders to accurately state the total cubic footage of compartment space, along with each compartment size
e. Lights in compartments to meet NFPA 1901 Chapter 13.10.5
f. Back up alarm
g. Rear ladder storage for minimum 115’ NFPA ground ladders fully enclosed at rear of apparatus, ladders to be included
h. Rear pike pole storage for minimum of six (6) pike poles fully enclosed at rear of apparatus
i. Steps and handrails for climbing from ground to turntable – bidders to state exact design
j. Lights at each step

k. Rear/stop/turn/back up lights
l. DOT clearance and marker lights
m. License plate light
n. Rear deck lights
o. Rub rail along each side of body

8. EMERGENCY WARNING

a. NFPA Zone A lower and upper level lighting
b. NFPA Zone B / D lower level lighting
c. NFPA Zone C upper and lower level lighting
d. Electronic 200 watt siren/PA with minimum 100 watt speaker recessed in bumper
e. All emergency lights, stop/turn/back-up lights, DOT clearance, compartment, step, license plate, perimeter scene, and interior dome lights to be LED

9. PAINT FINISH/REFLECTIVE STRIPING

a. Cab and body to be painted single tone with 10 year pro-rated paint and corrosion perforation warranty
b. Reflective striping in accordance with Chapter 15.9.3
c. Reflective chevron on rear of apparatus in accordance with Chapter 15.9.3.2.

10. WARRANTY

a. 1 year bumper to bumper mechanical, excluding normal wear and tear items
b. 10 year cab and body structural
c. 10 year paint pro-rated
d. 10 year corrosion perforation on cab and body
e. 20 year aerial structural
f. Lifetime frame warranty
g. 2 year front axle
h. 2 year rear axle
j. 5 year fire pump, if applicable
k. Lifetime booster tank, if applicable
l. Manufacturer's standard 5 year warranty for transmission

I affirm that my bid is inclusive of all requirements listed within this specification and that we will supply the items listed, at the prices bid.

Bidding Company: REV RTC d/b/a Hall-Mark RTC Bidder Name: Dee Daniels

Bidder Title: Director of Apparatus Sales Bidder Signature: Dee Daniels Digitally signed by Dee Daniels Date: 2018.03.14 16:03:01 -04'00'

Date Signed: 3-14-18

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Bidding Company: REV RTC d/b/a Hall-Mark RTC

Manufacturer	**Chassis Make/ Model**	**Ladder Type**	**Body Type**	**Base Price** Discount Included	**% Discount Off MSRP**	**Build Sheet** Insert name of USB file
E-ONE	CYC II	100' Ladder	Extruded Aluminum	$1,077,156	5%	REV RTC - Spec #23 E-ONE Tracto