

**Town of Rowe  
INVITATION FOR BID  
for  
Rapid Attack CAFS Unit / Fire Truck  
Bid 20211202**

Sealed bids for delivery of one Rapid Attack CAFS (Compressed Air Foam System) Unit, as detailed in attached Specifications, or equal, will be received on behalf of the Town of Rowe, Massachusetts, at the **Franklin Regional Council of Governments, J.W. Olver Transit Center, 12 Olive Street, Suite 2, Greenfield, MA 01301** on or before **DECEMBER 2, 2021 AT 2PM** at which time they will be opened and publicly read by the FRCOG Chief Procurement Officer. The Chief Procurement Officer's clock shall be the sole determining factor of time.

The Town of Rowe is the awarding authority and reserves the right to determine what is "equal" if "or equal" components or services are proposed. In the event the FRCOG office is officially closed for weather or emergency, the bid will be opened the next open day at the same time. Specifications are available only through the FRCOG bid website <https://frcog.org/bids> in order for all recipients to be notified of any addenda or deadline changes.

This bid is being undertaken under MGL Chapter 30B. All bidders shall be familiar with the law's requirements.

Any questions pertaining to the bid requirements or documents should be directed, in writing, to Andrea Woods, Chief Procurement Officer, FRCOG. Questions may be emailed to [bids@frcog.org](mailto:bids@frcog.org) or mailed. Written responses will be emailed to all bidders on record as having picked up the IFB through the website.

Any addenda must be acknowledged on the Bid Price Form. Failure to do so may result in rejection of bid. If you received this bid form from any other source than FRCOG, you must register to receive any addenda.

Bids should be placed in a sealed envelope marked "**ROWE FIRE TRUCK- SEALED BID**" in the lower left hand corner and hand delivered or mailed to **Franklin Regional Council of Governments**. No faxed or emailed bids will be accepted. If requested, a receipt indicating this date and time will be given to any bidder delivering a bid in

person. A bidder may correct, modify, or withdraw a bid by written notice received by the the FRCOG prior to the time and date set for the bid opening. Bid Modifications must be submitted in a sealed envelope clearly labeled "Modification No...." Each modification must be numbered in sequence, and must reference the original IFB. After the bid opening, a bidder may not change any provision of the bid in a manner prejudicial to the interests of the Town or fair competition. Minor informalities will be waived or the bidder will be allowed to correct them. If a mistake and the intended bid are clearly evident on the face of the bid document, the mistake will be corrected to reflect the intended correct bid, and the bidder will be notified in writing; the bidder may not withdraw the bid. A bidder may withdraw a bid if a mistake is clearly evident on the face of the bid document, but the intended correct bid is not similarly evident.

All bids must be accompanied by the Bid Price Form with Bid Signature Page/Corporate Authorization which includes a Certification of Tax Compliance/Non-Collusion, Affidavit of Compliance, Tax Identification Number, executed by an authorized agent of the bidder. Any bid that does not include this document, fully completed, will automatically be deemed non-responsive and will not be considered. Additional material may be included with the bid. Any or all Bids may be accepted or rejected as the Town determines is the best interest of the public.

The sealed bid should include the entire Invitation for Bids Package so that no pages requiring acknowledgement will be forgotten.

Each bidder must submit one (1) original and one (1) copy of their bid as well as one copy on a USB/Flash drive.

FRANKLIN REGIONAL COUNCIL OF GOVERNMENTS  
Andrea Woods, MCPPO, Chief Procurement Officer  
NOVEMBER 8, 2021

The Franklin Regional Council of Governments (FRCOG) and the Town do not discriminate on the basis of race, color, national origin, sex, age, disability, or gender with respect to admission to, access to, or operation of its programs, services or activities. If you would like accessibility or language accommodation, please contact the Title VI Coordinator at 413-774-3167 (voice) (MA Relay System: 800-439-2370), 413-774-3169 (fax), or [civilrights@frcog.org](mailto:civilrights@frcog.org) (e-mail).

## IMPORTANT DATES

### ADVERTISEMENT

*Advertisement for Supplies and Services (M.G.L. ch 30b)*

- *Greenfield Recorder Newspaper Legal Ad – November 8, 2021*
- *FRCOG and Town of Rowe Webpage – November 8, 2021*
- *Goods and Services Bulletin - November 8, 2021*
- *CommBUYS – November 8, 2021*

### CRITICAL DATES

- *Deadline for written questions – November 15, 2021 at 4pm*

*Written questions should be submitted to [bids@frcog.org](mailto:bids@frcog.org), not to the Town*

- *If needed, Addenda to be sent by November 19, 2021*
- *Deadline for Submission of Bids – December 2, 2021 at 2pm*

### ESTIMATED DATES

- *Review of Bids – December 2 through December 10,, 2021*
- *Equipment Delivered – within 365 days of Notice of Award/Receipt of Order*

## GENERAL BID INFORMATION

### (1) Award

In compliance with MGL Ch. 30B, §5, the contract resulting from this bid will be awarded to the lowest responsible and responsive bidder based upon bid price, past performance and reliability of the bidder, quality of product or service at the discretion of the Town of Rowe. The Board of Selectmen reserves the right to accept or reject any or all bids if it is in the best interest of the town.

### (2) Period of Contract

The delivery of the vehicle shall be no later than 365 days from order. **A penalty of \$100.00 per day will be assessed to the vendor for non delivery after the specified date in the contract.**

### (3) Intent of Specifications

It is the intent of these specifications to cover the furnishing and delivery to the purchaser of a complete vehicle, current NFPA compliant, equipped as hereinafter specified **or equal. The Town reserves the right to determine what is EQUAL.** With a view to obtaining the most acceptable equipment, these specifications cover minimum requirements as to the type of construction, finish, and tests to which the apparatus must conform, together with certain details as to equipment to be furnished. Minor details of construction and materials, where not otherwise specified, are left to the discretion of the vendor, who shall be solely responsible for the design and construction. **Components specified by brand name, model, dimension or capacity are thought to be available to all Manufacturers. Substitutes or alternates claimed to be equal will be evaluated, but may not be accepted by the Awarding Authority.** The equipment shall conform to the requirements of the current (at the time of bid) NFPA standard to the extent as specified herein.

### (4) Bid Requirements

The bid form provided herein shall be completed and returned with the appropriate "yes" or "No" marked by each paragraph in the "Bidder Complies" column by Number. A paragraph indicated with both the "yes" and "No" column marked shall be considered non-responsive and treated accordingly.

"Or Equal" submissions must be described on separate document with each line # listed as provided in the bid specifications to easily refer to the substitutions.

Each bidder shall submit their own equipment specifications, detailing their construction. This is necessary to evaluate the bidder's actual intent of building the equipment as specified. Bidder shall supply one sales blueprint (18" x 24" or larger) as well a Color Rendering of the vehicle showing at the least, the driver's flank view. The rendering does not need to show all fine details or measurements.

# Town of Rowe

## Specifications for One (1) Rapid Attack CAFS Unit

**Bidder  
Complies**

Yes      No

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These #'s are  
not meaningful

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**Bidder  
Complies**

Yes      No

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Yes      No

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Complies**

Yes      No

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**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

Bidder must check YES or NO for each Numbered Item. Any NO's must be addressed in an attachment explaining the exception and how an Or Equal substitution will be handled.

**1 APPROVAL DRAWINGS**

Two (2) sets of 2D engineering blueprints, CAD-drawn to scale specifically for this apparatus, shall be provided. The Purchaser shall review and approve these drawings prior to actual construction of the apparatus.

Both left and right-side views, a rear view and a front view shall be provided. The blueprints shall also show the overall dimensions of the apparatus, proposed compartment sizes and features, booster tank position, and the location of all emergency warning and work lights that are to be provided by the body builder.

Digital full-color 3D renderings of the apparatus including the chassis shall also be provided.

**2 ENGINEERING & FABRICATION**

The modular body shall be designed using Computer Aided Design (CAD) and 3-D modeling programs. This process allows for a design review that ensures the strongest and most efficient body build possible. The use of this engineering system will ensure accuracy and repeatability for service parts in the event of accidental damage.

The body components shall be fabricated using Computer Numerically Controlled (CNC) equipment to cut and bend the individual body parts.

Individual body panels shall have an interlocking "tab and slot" system where the tab in one panel is inserted into a slot in the adjacent panel. This insures that the panels are assembled exactly as designed without the need for jigs.

**3 NFPA 1906 COMPLIANCE**

The completed apparatus shall meet or exceed all N.F.P.A. Pamphlet No. 1906 (latest edition) specifications and standards except for loose equipment. A list of loose equipment required to meet NFPA 1906 specifications shall be supplied to purchaser upon delivery.

**4 PHOTO UPDATES**

Production photos of the apparatus being built will be provided by the body builder. The photos will be taken every week as production allows and emailed to the Purchaser. These photos will allow the Purchaser to view the manufacturing process of the truck and possibly detect things that they may want changed earlier in the production process.

**5 ROLLOVER STABILITY TEST**

The completed apparatus shall be physically tested for rollover stability. The apparatus shall be loaded with ballast to simulate "in-service" personnel and equipment loads. The loaded apparatus shall be positioned on a tilt table and tilted left and right in accordance with SAE J2180 standard. The minimum tilt criteria for this apparatus per NFPA table 4.13.1.1 is 30 degrees. The apparatus shall be tilted in both directions more than 30 degrees without losing stability in either direction.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**6 STATEMENT OF WARRANTY**

If within a specified warranty period a part shall be proved to manufacturer's satisfaction to be defective, the manufacturer's will, without charge, repair or (at the manufacturer's option) replace the defective part thereof, f.o.b. the manufacturer's factory. Such repair or replacement shall be the manufacturer's sole obligation and Purchaser's exclusive remedy hereunder and shall be conditioned upon the manufacturer's receiving notice of any alleged defect within 10 days after its discovery and, at the manufacturer's option, Purchaser's return of such part to the manufacturer, f.o.b. the manufacturer's factory. This warranty applies only to the original Purchaser and only while the body is installed on the original chassis. The manufacturer may, at its sole option, discharge in full all its obligations with respect to any defective emergency vehicle covered by this warranty by reimbursing the Purchaser the purchase price actually paid.

If a performance bond is issued which guarantees performance of this warranty and the contract to which it is attached, the term of coverage provided by the performance bond relative to the terms and conditions of the warranty is limited to one year.

THE MANUFACTURER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

The manufacturer reserves the right to make changes in the design of its products without obligating itself to make the changes to products previously manufactured.

The manufacturer's liability with respect to breaches of warranty shall be limited as provided above. With respect to other breaches of any contract, the manufacturer's liability shall in no event exceed the contract price. THE MANUFACTURER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD BY THE MANUFACTURER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

**7 Complete Apparatus, 1 Year Warranty Policy**

The manufacturer will warrant to the original purchaser only (Purchaser) that each new Apparatus is free from defects in materials or workmanship appearing within one year after the date of delivery indicated on the manufacturer's certification plate attached to the body.

The manufacturer shall have no obligation, under this warranty or otherwise, for any of the following: (a) equipment, accessories, tires or other goods manufactured and separately warranted by others; (b) used equipment regardless of manufacturer; (c) goods delivered hereunder which, after delivery, have been repaired or altered by anyone other than the manufacturer; (d) products used for any purpose other than the intended use disclosed to the manufacturer's; or (e) products subjected to impact or strain in excess of customary and reasonable usage.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**8 Paint, 7 Year Warranty Policy**

The manufacturer will warrant to the original purchaser only (Purchaser) that all paint products will be free from defects and will not result in corrosion blisters, unreasonable color, or gloss loss, or delaminating for a period of 7 (seven) years after the date of delivery indicated on the manufacturer's certification plate attached to the body.

The manufacture shall have no obligation, under this warranty or otherwise, for any of the following: (a) Damage caused by neglect, accident, misuse, fire, theft, vandalism, riot, explosion, lighting, earthquake, windstorm, hail, flood, or use in acidic environment. (b) Any repairs, modifications, alterations, or after-market parts added after manufacture without the authorization of the manufacturer'. (c) Chassis or other parts not painted by the manufacturer.

**9 Electrical, 5 Year Warranty Policy**

The manufacturer will warrant to the original purchaser only (Purchaser) that all items of its manufacture found in the electrical system will be free from defects in material and workmanship for a period of five (5) years. The manufacturer will not warranty any components which carry a warranty of another manufacturer and the manufacturer's sole responsibility regarding such items shall be to pass on any existing manufacturer's warranty to the purchaser.

The manufacturer shall have no obligation, under this warranty or otherwise, for any of the following: (a) paint finish or hardware; (b) used equipment regardless of manufacturer; (c) the body, after delivery, has been repaired or altered by anyone other than the manufacturer; (d) the body is used for any purpose other than the intended use disclosed to the manufacturer; (e) the body and/or compartments are subjected to impact or strain in excess of customary and reasonable usage.

**10 Stainless Steel Plumbing, 10 Year Warranty Policy**

The manufacturer will warrant to the original purchaser only (Purchaser) that the stainless-steel plumbing components used in the construction of the fire apparatus water/foam plumbing system shall be free of defects for a period of ten (10) years after the date of delivery indicated on the manufacturer's certification plate attached to the body.

**11 Structural, 10 Year Warranty Policy**

The manufacture will warrant to the original purchaser only (Purchaser) that the body of the new Emergency Vehicle is structurally sound and free of joint separation, cracks, and all other structural defects in materials or workmanship appearing within ten (10) years after the date of delivery indicated on the manufacturer's certification plate attached to the body.

The manufacturer shall have no obligation, under this warranty or otherwise, for any of the following: (a) paint finish or hardware; (b) used equipment regardless of manufacturer; (c) the body, after delivery, has been repaired or altered by anyone other than the manufacturer; (d) the body is used for any purpose other than the intended use disclosed to the manufacturer; (e) the body and/or compartments are subjected to impact or strain in excess of customary and reasonable usage.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**12** CHASSIS MODEL

The chassis shall be a **2022 Ford F-550 4X4 CrewCab XLT with a 179" wheelbase and 19,500 GVWR.**  
 The chassis shall be equipped as follows: (Underlined items are non-standard options for XLT)

**13** CHASSIS EXTERIOR

- Color - (OEM)
- Argent Painted Wheels, 19.5"
- 225/70R19.5G Max Traction Tires Front and Rear
- Chrome Plated Front Bumper
- Chrome surround grille
- Dual beam jewel headlights
- 3-blink lane change signal
- Roof clearance lights
- Fog lamps
- Manual telescoping trailer tow mirrors w/power heated glass, integrated clearance lights & 2-way fold
- Front Tow Hooks
- Privacy tinted glass in rear
- Fixed rear window
- Variable intermittent windshield wipers
- Front license plate bracket
- Black door handles
- Under hood service light

**14** CHASSIS INTERIOR

- 4.2" LCD Productivity Screen in Instrument Cluster w/Compass display
- AM/FM stereo -inc: MP3 player, digital clock and (5) speakers
- SiriusXM Radio
- SYNC3 Voice-Activated Communications & Entertainment with 911 Assist
- 8" LCD Capacitive Touchscreen in Center Stack
- (2) Smart Charging USB-C Ports
- Manual air conditioning with chrome bezel around vents
- Cruise control steering wheel mount
- Door trim – soft arm rest, grab handle, upper and lower map pockets, and reflector
- High Series Cloth 40/20/40 split bench seat (Center section to be removed)
- Manual driver lumbar support
- Cloth rear bench seat
- Black vinyl full floor covering
- Color-coordinated scuff plates
- Tilt & telescoping steering wheel/column
- Black urethane steering wheel

<p style="text-align: center;"><b>Town of Rowe</b>  <b>Specifications for One (1) Rapid Attack CAFS Unit</b></p>	<b>Bidder Complies</b>	
	<b>Yes</b>	<b>No</b>
<ul style="list-style-type: none"> <li>• Oil minder system</li> <li>• Inside hood release</li> <li>• Dash-top tray</li> <li>• Color-coordinated instrument panel -inc: glove box, (4) air registers w/positive shutoff, pwr point &amp; (4) up fitter switches</li> <li>• Auxiliary 12V power point</li> <li>• Dual front grab handles</li> <li>• Front passenger roof ride handles</li> <li>• Color-coordinated molded cloth headliner</li> <li>• 11.5" day/night rearview mirror</li> <li>• Color-coordinated vinyl sun visors -inc: LH pocket, RH insert</li> <li>• Door activated dome lamp w/delay, I/P switch operation</li> <li>• Dual map lights</li> <li>• Dual color-coordinated coat hooks</li> </ul>		
<p><b>15 <u>CHASSIS MECHANICAL</u></b></p> <ul style="list-style-type: none"> <li>• <u>Payload Plus upgrade to 19,500 GVW</u></li> <li>• <u>Extra heavy duty front suspension, 7500 LB</u></li> <li>• <u>6.7L OHV 32-Valve V8 POWER STROKE Diesel Engine</u></li> <li>• Intelligent Oil Life Minder</li> <li>• <u>Fire/Rescue prep package w/EPA special emissions</u></li> <li>• <u>Upfitter Interface Module</u></li> <li>• <u>Engine block heater</u></li> <li>• 10-Speed SelectShift Automatic Transmission W/OD</li> <li>• Transmission PTO Port (Power Take OFF)</li> <li>• <u>4.88 axle ratio w/limited slip</u></li> <li>• Stationary elevated idle control (SEIC)</li> <li>• <u>Four-wheel drive</u></li> <li>• Electronic Shift-On-Fly transfer case &amp; hubs</li> <li>• <u>Transfer case skid plate</u></li> <li>• 78 amp/hr 750 CCA batteries</li> <li>• <u>Dual alternators, 397-amp total</u></li> <li>• Electronic trailer brake controller</li> <li>• 7-wire trailer tow harness w/relays, blunt cut &amp; labeled</li> <li>• <u>179" wheelbase</u></li> <li>• Mono-beam front axle w/coil spring suspension</li> <li>• Rear auxiliary springs</li> <li>• HD gas shock absorbers</li> <li>• Front/rear stabilizer bars</li> <li>• Dual rear wheels</li> <li>• Pwr steering w/steering damper</li> <li>• Pwr 4-wheel disc brakes w/hydro boost</li> <li>• (40) gallon aft-axle fuel tank</li> </ul>		

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**16** **CHASSIS SAFETY**

- Traction control
- Anti-lock braking system (ABS)
- Driver/front passenger frontal, side & curtain airbags
- Passenger side airbag deactivation switch
- Color-coordinated 3-point safety belts w/front outboard height adjustment
- Child tethers on all passenger seats
- SOS post-crash alert system
- Dual-note electric horn

**17** **CHASSIS REBATES**

A Ford FIN (Fleet Identification Number) shall be supplied to the manufacturer by the customer. The manufacturer will assist with acquiring this number if customer needs to obtain one.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**18 POLISHED ALUMINUM WHEELS**

The chassis shall be supplied from factory with polished aluminum wheels installed on the front axle and outer rear axle. Factory chrome hub covers for the front and rear axle shall also be provided.

**19 REAR VIEW CAMERA, SYNC 3**

The chassis shall be supplied from the factory with a rear-view camera system with the video display located in an 8" SYNC 3 LCD display. The factory-supplied camera shall be installed in the body.

**20 TAKE-OFF PARTS**

Any parts removed from the chassis such as bumpers, wheels, seats, etc. shall become the property of the manufacturer.

**21 BACK UP ALARM**

An electronic back up alarm shall be hooked up to the vehicle back up circuit. The alarm shall have a 97 DB minimum rating.

**22 BUCKSTOP BUMPER, FRONT**

The factory front bumper shall be replaced with a Buckstop Truckware severe duty bumper base with an integral 2" hitch receiver. The bumper base shall be constructed of steel and shall be powder coated black with a hammer-tone finish. The bumper base shall include (2) two 6" light buckets which shall be used for siren speaker mounting.

An Outback model grille guard shall be included. The grille guard shall be constructed of steel and shall be powder coated black with a hammer-tone finish.

**23 CHASSIS FRAME PAINT**

The chassis frame and axles shall be scuffed and painted with epoxy primer and polyurethane black paint for maximum rust prevention. All wheels, bumpers, fender liners, etc shall be removed prior to paint to maximize coverage.

**24 ENGINE AIR INTAKE**

The air intake shall have a stainless-steel wire grille installed to protect burning particulate matter larger than 0.039 from entering the air filter element.

An engine intake air restriction indicator light shall be mounted in the center console. A Motorcraft intake restriction indicator with integral switch shall be installed in the engine air intake plumbing in place of the factory non-switch indicator.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**25 CAB STEPS**

An 8" deep step shall be installed under the cab doors. The height of the upper surface of the step shall not exceed 24" from the ground.

Steps shall be constructed of embossed aluminum treadplate meeting the requirements for NFPA 1901 and 1906 step surfaces. The brackets shall be constructed of stainless steel and shall be attached ONLY to the cab so that the cab can be removed for major engine service without removing steps.

**26 CAB STEP LIGHTS**

A TecNiq LED waterproof light strip shall be provided to illuminate the entire length of the stepping surface. Lights shall be powered on with the cab interior lamps.

A Luma-Bar H2O LED waterproof light strip shall be provided to illuminate the ground at each cab door. Lights shall be powered on when transmission is placed in park (engine running) and parking lamps are turned on.

**27 UREA TANK RELOCATE**

The urea tank shall be relocated from the left inside frame rail to the right outside frame rail. An OEM relocation kit shall be utilized.

**28 EXHAUST TIP RELOCATE**

The factory exhaust shall be modified to avoid interference with the body and shall be routed to discharge ahead of the right rear wheel. A polished stainless-steel tip with integral cooling vents shall be installed at the termination. A "HOT" warning sign shall be installed in the rub rail.

**29 SUSPENSION AND ALIGNMENT**

The rear suspension height shall be adjusted for appropriate frame angle after the unit is assembled and loaded. An appropriate spacer shall be installed between the rear wheels to increase stability and improve appearance at the wheel well. The wheels shall be professionally aligned.

**30 TIRE PRESSURE MONITORING DEVICE**

Each tire installed on the apparatus shall be equipped with a tire pressure monitoring device. The device shall consist of a valve stem cap with red and green color bands to indicate tire pressure conditions. If the cap is ALL GREEN the tire is properly inflated. If the cap is HALF GREEN/HALF RED, the tire is approximately 10% under inflated. If the cap is ALL RED, the tire is 20% or more under inflated.



**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**31 FUEL FILL**

The fuel tank fill shall be in the left fender panel behind the rear wheel. The fuel port and cap shall be installed in a molded plastic recess. The recess shall incorporate a well and drain to capture drips and divert them underneath the apparatus. The opening shall be concealed with a hinged stainless-steel door with a brushed finish. The doors shall latch with a Southco 1/4 turn latch.

**32 DEF FILL**

The DEF (Diesel Exhaust Fluid) tank fill shall be in the left fender panel ahead of the rear wheel. The fill port and cap shall be installed in a molded plastic recess. The recess shall incorporate a well and drain to capture drips and divert them underneath the apparatus. The opening shall be concealed with a hinged stainless-steel door with a brushed finish. The doors shall latch with a Southco 1/4 turn latch.

**33 REAR TOW EYES, CHROME PLATED**

Two (2) heavy-duty rear tow eyes, 0.75" thick x 3" high with a 2" elongated hole, shall be bolted directly to the frame. Each tow eye shall be rated at 20,000 lb. of working load. The tow eyes shall have rounded edges and shall be chrome plated for maximum durability. The body opening shall be furnished with stainless steel trim plates.

**34 CAB DOME LIGHT**

One (1) interior/map lamp shall be installed in the cab ceiling. Lamp shall be Whelen model 60CREGCS 6" LED lamps with 6 white LEDs and 6 Red LEDs each. The red and white shall have independent integral switches.

**35 POWER TAKE OFF, MUNCIE**

A Muncie model F20 PTO with MuncieStart option shall be installed in the transmission PTO port.

**36 PTO DRIVE SYSTEM**

The power take off system shall include a patented LiveDrive PLUS kit whereby the appliance can be driven with a conventional hot-shift PTO. The LiveDrive PLUS driveshaft shall travel through the 4X4 transfer case. Minimum drive line angles shall be maintained to reduce driveline vibration and extend component life.

The LiveDrive PLUS kit shall consist of the following: A modified 4X4 transfer case with a tube for a shaft to pass through and a self-aligning mounted bearing to support the shaft as it exits the transfer case. A 1.25" diameter, stress-proofed, TGP (Turned, Ground and Polished) shaft to extend from the PTO through the back of the transfer case. A 1310 series universal joint to couple the PTO to the shaft.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**37 DRIVE LINE, PTO**

A driveline shall be installed to connect the PTO to the driven appliance. Tube shall be Drawn Over Mandrel (D.O.M.) tubing intended for drive shafts. They shall be electrically MIG welded by a certified welder on a specially designed drive shaft fabrication machine. When assembled, the drive shaft shall be checked for straightness and be dynamically balanced by computerized machinery.

**38 HITCH RECEIVER, REAR**

An integral receiver hitch shall be installed at the rear. The receiver shall accept a standard 2" hitch. The receiver shall be constructed entirely of stainless steel for maximum durability.

The receiver shall have the following ratings:

- 16,000 LB Trailer Gross Weight
- 2,000 LB Trailer Tongue Weight
- 10,000 LB Straight Line Pull (Portable Winch)

**39 TRAILER RECEPTACLE**

One 7-way RV/ 4-way flat combination trailer wiring receptacle with a weatherproof cover shall be installed at the rear of the apparatus near the receiver hitch.

**40 REAR SCBA SEAT**

Two (2) H. O. Bostrom SCBA seats shall be provided in place of the rear bench seat. A Bostrom Secure-All SCBA bracket shall be installed in each seat back. Seat covering shall be Pacifica gray vinyl trim and gray/black Durawear polyester waterproof fabric.

A facemask storage pouch shall be included behind the headrest.

**41 STORAGE CONSOLE, REAR SEATS**

A storage console shall be located between the rear seats in the cab. The console shall be fabricated of aluminum and shall be painted with a textured polyurethane finish to blend with interior decor.

Area shall be provided for secure storage of medical bag(s).

Final size and layout to be determined at preconstruction meeting.

**42 SCBA BRACKETS, CENTER REAR**

Two (2) SCBA storage brackets shall be provided vertically between the outer seating positions. Brackets shall be quick-release units meeting the NFPA requirements for personnel compartments. The panels required to support the brackets shall be painted with heavy duty coatings to match the center console.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**43 WATEROUS FOAM/CAFS PACKAGE**

A Waterous ONE STEP™ CAFS-System consisting of the following components shall be provided:

**TELLURUS™ 7" HMI Operator Interface Terminal**

The Operator Interface Terminal, mounted on the pump operator's panel allows the operator to perform the following functions:

**CAFS**

- Engages Pump and Compressor
- Engages the ONE STEP™ CAFSystem
- Select from Dry or Wet Foam
- Monitor Discharges
- Monitor Compressor Performance
- Select Foam Only
- Select Water Only
- Select Hi Flow Option
- Select High-Rise Option

**FOAM**

- Control of foam proportioning rates from 0.1% to 1%.
- Calibrate flow rate
- Flashes and then displays a steady "low concentrate" warning when the foam concentrate tank runs low
- Flash a "no concentrate" warning when the foam concentrate tank is empty
- Flash an "error" warning with associated code in the event of an electronic malfunction
- Provide a manual back-up mode, controlled by the operator

**Compact Foam Generator (CFG)**

One CFG is provided for each simultaneously operated discharge outlet. Two 2" Foam Generators are standard. These are specially developed and patented devices in which the ONE STEP extinguishing agent will be generated. These foam generators include all necessary elements such as:

- Volume flow regulation of water and air
- Volume flow limitations of water and air
- Non-return valves for water and air
- Mixing chamber
- Mixing pressure control valve
- Wet-dry changeover

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**Mixing Pressure Control Valve**

The ONE STEP™ CAFS-System uses an independent, patented pressure regulation, which keeps constant mixing pressure in the mixing chamber of the foam generator. This pressure regulation allows a variation of pump discharge pressure above the minimum working pressure of the ONE STEP without disrupting the function of the ONE STEP systems or changing the consistency of the extinguishing agent.

**Air Compressor**

GHH-Rand air end with tapered roller bearings and triple lip shaft seal, oil-flooded, rotary screw type, sized to supply 150 scfm (4.25 m3/min) at a minimum of 125 P.S.I.G (8.6 bar).

**Pneumatic Modulating Inlet Valve**

The air compressor is controlled by the pneumatic modulation inlet valve mounted on the air end. The pneumatic modulating inlet valve controls air delivery while maintaining constant pressure.

**Fixed Air Pressure Operation**

The compressor supplies a fixed air pressure supply to the foam generators at 120 PSI (8 Bar). Pressure balancing systems are not used or required.

- Fixed - Air pressure defaults to manual setting on compressor mounted control valve.
- Unload - Air pressure reduced to 40 P.S.I.G. (2.75 bar) for standby operations or when water only from the pump is required

**Air Compressor Drive**

The compressor is driven off a sprocket on the pump PTO shaft. An electric clutch disengages the compressor for pump testing and high pressure/flow pump use. Power is transferred via a synchronous drive “toothed belt” with an adjustable tensioner. The system is designated to operate the air end at rated capacity when the fire pump is developing 130 to 140 P.S.I.G. (9 to 9.7 bar) in a “no flow” state.

**Air Compressor Oil System**

A spin-on, full-flow oil filter unit is part of the system to control oil flow to the cooler. All oil lines are routed in braided hose conforming to SAE 100R1 standards for hydraulic hose.

**Modular Air/Oil Separator Unit**

Replacement elements for the oil filter and separator are available.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**Air Compressor Cooling System**

The air compressor is cooled by the Waterous fire pump<sup>1</sup>, utilizing an all copper and brass shell and tube heat exchanger. When the fire pump is operating, water flows through the heat exchanger while an in-line removable strainer, on the water inlet side, prevents clogging. The system maintains oil temperature within 160° to 225°F (71° to 107° C).

**Foam Concentrate Piping**

All concentrate piping is stainless steel, brass or high-pressure wire braid reinforced hose with stainless steel or brass fittings.

**Foam Manifolds**

Foam manifolds are constructed of cast iron. The manifold is a fully integrated assembly with foam injector port, flow meter mount and high-flow, low-loss, spring-assisted brass swing check valve to prevent back-flow of foam concentrate or foam solution into the pump.

**44 AQUIS 2.5 FOAM SYSTEM**

**Microprocessor Controller**

AQUIS™ is equipped with a 16-bit, mixed-signal microcontroller with a 60kB flash memory, 2 kB RAM and 12-bit analog to digital converter. This allows the AQUIS™ to receive input from the flowmeter and temperature sensor, controlling the foam pump motor to provide accurate injection into the foam manifold.

**Foam Pump**

The 12-volt, electric motor driven, positive displacement triplex plunger foam pump is equipped with an aluminum crankcase, ball bearings, forged brass pump body and manifold, solid ceramic plungers, stainless steel check valves and piston guides, Buna packing and preset thermal and pressure relief valves.

The foam pump is rated at 2.5 GPM @ 150 psi (9.46 l/min @ 10 bar) with operating pressures up to 450 psi (32 bar). Maximum electrical load of 40 amps @ 12 VDC and 21 amps @ 24 VDC.

A pump motor electronic driver, located inside the controller housing, receives signals from the microcontroller and powers the 1/2 hp (.4 kW) electric motor in a variable speed duty cycle to ensure that the correct amount of foam concentrate set by the pump operator is injected into the water stream.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**45 PUMP PRIMING SYSTEM**

The pump priming system shall be a Hale model ESP, self-lubricating type. The priming pump shall be a positive displacement vane type 12-volt electric driven priming pump, which is to be totally enclosed to prevent dust, dirt, and water from entering. It shall be furnished with a Hale model PVG hand operated "Pull-Release" bronze priming valve which automatically starts the priming pump.

**46 THERMAL RELIEF VALVE, HALE**

A Hale model TRV-120 thermal relief valve shall be provided and installed on the discharge side of the pump. The valve shall function automatically when the water temperature in the pump exceeds 120 degrees Fahrenheit. The valve shall discharge a 3/8" stream of water to the ground thereby preventing pump overheat. The valve shall be self-resetting after the temperature of the water in the pump drops below 120 degrees Fahrenheit.

**47 MASTER DRAIN VALVE**

Suitable valves and lines shall be mounted for properly draining all piping lines and pump. The pump shall be equipped with a single master drain valve that includes individually ported drains that do not require check valves. This drain shall also include all relief valves, auxiliary engine cooler, and pump transmission.

**48 DRAIN VALVES - QUARTER TURN**

Seven (7) bleeder/drain valves shall be provided in a row below the pump panel. The drain valves shall be 3/4" nickel plated brass with chrome-plated quarter turn handles. Each handle shall include a recessed color-coded label identifying each valve.

Valves shall be provided for the following:

- BOOSTER REEL
- HOSEBED PRECONNECTS
- 1.5" DISCHARGE
- 2.5" DISCHARGE
- PUMP INTAKE
- MANIFOLD

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**49 PUMP PIPING & VALVES**

All discharge valves smaller than 4" shall be Akron brand HD 8800 series. All 4" discharge valves shall be Akron 8840 series and shall be equipped with a mechanism to restrict the speed of operating the valve from full closed to full open or vice versa in less than 3 seconds. All threads shall be NST unless specified otherwise.

Discharge and suction piping shall be 100% stainless steel or where more flexibility is required, the discharge and suction lines shall be plumbed with high pressure reinforced flexible hoses which have threaded stainless steel or Victaulic fittings. Victaulic couplings shall be used wherever needed to prevent vibration damage and to aid in servicing the pump and related plumbing.

**Galvanized piping or fittings will not be accepted (NO EXCEPTIONS).**

**50 MANIFOLD**

A custom fabricated stainless steel pressure manifold shall be provided.

**51 4" PUMP INTAKE**

One (1) 4" auxiliary suction intake shall be provided to supply the fire pump from an external water supply or to draft.

The inlet shall terminate with a 6" NST chrome adapter with removable screen. A chrome port cap shall be provided.

The suction shall be gated by a 4" Akron model 8840 quarter-turn ball valve with a manual gear-drive actuator. The actuator shall be controlled by an Akron Navigator located at the pump panel. The Navigator shall indicate the actual position of the valve.

An intake pressure relief valve shall be included to prevent accidental over pressurizing the pump/manifold by another pressure source.

The discharge shall have an individual bleeder drain which shall be piped toward the ground.

**52 1.5" DISCHARGE VALVE, REAR PANEL**

There shall be one (1) 1.5" discharge provided at the pump panel. Discharge valve shall be a 1.5" Akron model 8815 quarter-turn ball valve and shall be mounted behind the pump panel.

The discharge valve shall be controlled by an Akron TS handle mounted directly to the valve. The handle shaft shall be chrome plated and shall terminate with a plastic ball.

The outlet shall have a chrome NST elbow capped with a chrome plated female cap and chain.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**53****2.5" DISCHARGE VALVE, REAR PANEL**

There shall be one (1) 2.5" discharge provided at the pump panel. Discharge valve shall be a 2.5" Akron model 8825 quarter-turn ball valve and shall be mounted behind the pump panel.

The discharge valve shall be controlled by an Akron TS handle mounted directly to the valve. The handle shaft shall be chrome plated and shall terminate with a plastic ball. The outlet shall have a chrome NST elbow capped with a chrome-plated female cap and chain.

Unless otherwise specified the valve shall have a 45-degree elbow with a 2.5" cap.

**1.5" PRE-CONNECT DISCHARGE-CAFS**

One (1) pre-connect discharge shall be provided in the hose bed.

The discharge shall be controlled by the *One Step* operator interface.

**2.5" PRE-CONNECT DISCHARGE-CAFS**

One (1) pre-connect discharge shall be provided in the hose bed.

Each discharge shall be controlled by the *One Step* operator interface. Flow through this discharge will be limited by the 2" CAFS valve and plumbing.

**54****BOOSTER REEL**

One (1) Hannay booster reel shall be located behind the pump panel and shall be mounted to the tank. The reel shall have a stainless-steel frame and drum. It shall also have plated drive chain, sprocket, hub assembly, swivel joint and fastenings. The reel shall have a 12-volt motor driven rewind. A 50-amp circuit breaker shall be provided to prevent motor overload.

The reel rewind shall be controlled by a switch located on the pump panel.

A stainless-steel guide roller shall be furnished to aid in deployment of the hose.

The reel shall have a capacity of 175 ft. of 1" Mercedes Boostlite hose.

The reel shall be supplied through a 2" Akron model 8820 quarter-turn ball valve located behind the pump panel and controlled with an Akron TS handle mounted directly to the valve. The handle shaft shall be chrome plated and shall terminate with a plastic ball.

An LED light shall be provided to illuminate the reel and pump house.



**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**55 TANK TO PUMP LINE**

The piping from the tank to pump shall be one (1) 3" line and shall deliver not less than 350 GPM. Valve to be a 3" Akron model 8830 quarter-turn ball valve with control located below the pump operator's control panel. The valve shall be controlled with easy operating push pull control. A flexible line shall be used between the tank sump and the tank to pump valve. A 3" check valve shall be included in the tank to pump line.

**56 TANK FILL LINE**

A 2" tank refill and pump recirculation line shall be provided from the discharge side of the pump into the tank. Valve shall be a 2" Akron model 8820 quarter-turn ball valve with control at the pump operator's control panel. The valve shall be controlled by an Akron TS handle mounted directly to the valve. The handle shaft shall be chrome plated and shall terminate with a plastic ball. The discharge shall be attached to the tank using flexible hose so as not to put any undue strain on the plumbing or tank.

**57 AUTO DIRECT TANK FILL**

A 2.5" direct tank fill port shall be located at the rear of the apparatus. Valve shall be a 2.5" Akron model 8825 quarter-turn ball valve with electric actuator. The valve actuator shall be controlled by an Akron Brass style 9330 auto tank fill valve controller.

An Akron Brass Style 9330 Navigator Pro Auto Tank Fill controller shall be provided. The controller shall be compatible with the Class 1 Intelli-tank fill gauges to provide a closed loop tank fill control system. The electric valve controls must be of true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open and close buttons as well as manual and auto buttons. The controller shall provide options within the setup menu for selecting one of multiple empty/full profiles for tank level. The unit must provide position indication through a series of 5 ultra-bright LEDs. It shall have manual adjustment of the brightness in the configuration menu. The unit must carry a five-year warranty.

The tank shall be plumbed internally so that the direct tank fill discharges at the roof of the tank, allowing for complete draining of the direct tank fill plumbing even when the tank is nearly full.

The inlet side of the valve shall have a chrome 2.5" NST female swivel and a chrome plug with chain.

The inlet side of the valve shall have a bleeder drain which shall be piped toward the ground.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**58 PUMP COMPARTMENT**

The pump plumbing shall be in a pump house at the rear of the body and shall be integral to the body structure.

**59 PUMP / GAUGE PANELS**

The pump panels shall be constructed of 14 gauge brushed stainless steel. A hinged access door with Southco trigger-style latches shall be provided for easy access to the plumbing. The entire pump panel shall also be removable and held in place with stainless steel fasteners.

Suction and discharge openings and valve control openings shall be trimmed with color coded bezels. Bezels shall be easily removable to allow for convenient access to service valves.

The drain handles will be installed in a separate panel in the apron to allow for easy maintenance.

**60 PUMP PANEL IDENTIFICATION**

Suction and discharge openings and valve controls shall be clearly labeled and trimmed with color-coded bezels.

Discharges and Inlets shall be labeled as follows:

- |                              |                    |                     |
|------------------------------|--------------------|---------------------|
| • Left Hose bed Pre-connect  | LEFT PRECONNECT    | 03 Yellow           |
| • Booster Reel               | BOOSTER REEL       | 11 Green            |
| • Right Hose bed Pre-connect | RIGHT PRECONNECT   | 11 Blue             |
| • Master Intake, 4"          | PUMP INTAKE        | 16 Burgundy         |
| • Auxiliary Intake, 2.5"     | AUX INTAKE         | 22 Graphite         |
| • Tank to Pump               | TANK TO PUMP       | 24 Black (Standard) |
| • Tank Fill / Recirculation  | TANK FILL / RECIRC | 24 Black (Standard) |

**61 PUMP HOUSE HEATER**

The pump house shall contain a compact heater rated at a minimum of 20,000 BTU. The chassis engine coolant shall be plumbed to the heater. The heater fan shall automatically start when outside temperature reaches below 40 degrees Fahrenheit.

**62 PUMP PANEL LIGHTING**

A stainless-steel hood shall be located at the top of the pump panel. LED light strips shall be installed the full width of the hood. The lights shall be switched through a switch at the pump operator's control panel and shall turn on by default when pump is engaged.

**63 PUMP PANEL ROLL-UP DOOR**

An aluminum roll-up shutter door shall be provided at the rear pump control panel.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**64 PRESSURE GOVERNOR**

Fire Research PumpBoss series PBA406-C00 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 3/4" high by 4 5/8".

The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored engine information shall be from an installed J1939 Translator Module. Outputs for engine control shall be on engine specific wiring. Inputs from the pump discharge and intake pressure sensors shall be electrical.

The following continuous displays shall be provided:

- Engine RPM; shown with four daylight bright LED digits more than 1/2" high
- Check engine and stop engine warning LEDs
- Engine oil pressure; shown on a dual color (green/red) LED bar graph display
- Engine coolant temperature; shown on a dual color (green/red) LED bar graph display
- Transmission Temperature: shown on a dual color (green/red) LED bar graph display
- Battery voltage; shown on a dual color (green/red) LED bar graph display
- Pressure and RPM operating mode LEDs
- Pressure / RPM setting; shown on a dot matrix message display
- Throttle ready LED.

The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and nighttime operation. The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure
- High Engine Coolant Temperature
- Out of Water (visual alarm only)
- No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

The governor shall operate in two control modes, pressure, and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor and display shall be programmed to interface with a Ford 6.7L diesel engine.

**65 MASTER GAUGES**

Two (2) 4" NoShock brass case gauges shall be provided. Both gauges shall indicate pressure from -30hg to 400 PSI. The gauges shall be fully filled with pulse and vibration dampening fluid to lubricate the internal mechanisms, to prevent lens condensation and to ensure proper operation to minus 40 degrees F. Each gauge shall have a chrome bezel with integral function legend.

**66 DISCHARGE GAUGE**

Two (2) 2.5" white faced, brass cased individual pressure gauge, liquid filled, 0-400 PSI shall be provided for the following discharges:

Each gauge shall have a chrome bezel with color coded function legend incorporated.

**67 PUMP TEST ADAPTER**

A pump test gauge adapter will be provided on the pump panel.

**68 WATER LEVEL INDICATOR**

A Class 1 model ITL-40M tank indicator kit shall be installed. The kit shall include an electronic indicator module, a pressure sensor, and a sensor cable. The indicator shall show the volume of water in the tank on eight (8) easy to see multi-color LEDs. The indicator case shall be waterproof and have a distinctive blue label.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the water tank near the bottom. No probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**69 FOAM LEVEL INDICATOR**

A Class 1 model ITLF-40M tank indicator kit shall be installed. The kit shall include an electronic indicator module, a pressure sensor, and a sensor cable. The indicator shall show the volume of foam in the tank on eight (8) easy to see multi-color LEDs. The indicator case shall be waterproof and have a distinctive red label.

The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the foam tank near the bottom. No probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.

**70 DISCHARGE GAUGE, FRONT CONSOLE**

One (1) 2.5" white faced, brass cased individual pressure gauge, liquid filled, 0-400 PSI shall be provided inside the cab and located in the front console. The gauge shall display pump master pressure per NFPA 1906 requirements for pump-and-roll.

**71 SWITCH PANEL, PUMP PANEL**

Switches shall be provided on the pump panel. Switches shall be rocker switches with backlit switch function label permanently engraved in the switch. Switches shall have integral indicators where applicable to indicate when switch is "on".

Switches shall be provided as follows:

- PANEL LAMP
- LEFT POLE
- RIGHT POLE
- LEFT SCENE
- RIGHT SCENE
- REAR SCENE
- PUMP

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**72 WATER TANK**

The tank shall have a minimum capacity of 250 U.S. gallons of water and shall be manufactured by United Plastic Fabrication (UPF). The tank shall be constructed of PT3 polypropylene material. This material shall be a non-corrosive stress relieved thermoplastic and UV stabilized for maximum protection. Tank shell thickness may vary depending on the application and may range from ½ to 1” as required. Internal baffles are generally 3/8” in thickness.

**73 CONSTRUCTION**

The booster and/or foam tank shall be of a specific configuration and is so designed to be completely independent of the body and compartments. Joints and seams shall be fused using nitrogen gas as required and tested for maximum strength and integrity. The tank construction shall include PolyProSeal technology wherein a sealant shall be installed between the plastic components prior to being fusion welded. This sealing method will provide a liquid barrier offering leak protection in the event of a weld compromise. The top of the booster tank is fitted with removable lifting assembly designed to facilitate tank removal. The transverse and longitudinal swash partitions shall be manufactured of a minimum of 3/8" PT3 polypropylene. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. The partitions shall be designed to provide maximum water flow. All swash partitions interlock with one another and are completely fused to each other as well as to the walls of the tank. All partitions and spacing shall comply with NFPA 1901. The walls shall be welded to the floor of the tank providing maximum strength as part of the tank’s unique Full Floor Design. Tolerances in design allow for a maximum variation of 1/8” on all dimensions.

**74 WATER FILL TOWER AND COVER**

The tank shall have a combination vent and manual fill tower. The fill tower shall be constructed of 1/2" PT3 polypropylene and shall be a minimum dimension of 8" x 8" outer perimeter. The fill tower shall be blue in color indicating that it is a water-only fill tower. The tower shall be in the left front corner of the tank unless otherwise specified by the tank manufacturer to the purchaser. The tower shall have a 1/4" thick removable polypropylene screen and a PT3 polypropylene hinged cover. The capacity of the tank shall be engraved on the top of the fill tower lid. Inside the fill tower there shall be a combination vent/overflow pipe. The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I.D. of 4" that is designed to run through the tank and shall be piped to discharge water behind the rear wheels as required in NFPA 1901 so as to not interfere with rear tire traction.

The tank cover shall be constructed of 1/2" thick PT3 polypropylene and UV stabilized, to incorporate a multi-piece locking design, which allows for individual removal and inspection if necessary. The tank cover(s) shall be flush or recessed 3/8" from the top of the tank and shall be fused to the tank walls and longitudinal partitions for maximum integrity. Each one of the covers shall have hold downs consisting of 2" minimum polypropylene dowels spaced a maximum of 40” apart. These dowels shall extend through the covers and will assist in keeping the covers rigid under fast filling conditions. A minimum of two lifting dowels shall accommodate the necessary lifting hardware.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**75 SUMP**

There shall be one (1) sump standard per tank. The sump shall be constructed of a minimum of 1/2" PT3 polypropylene and be in the center of the tank, unless specified otherwise. On all tanks that require a front suction, a 3" schedule 40 polypropylene pipe shall be installed that will incorporate a dip tube from the front of the tank to the sump location. The sump shall have a minimum 3" N.P.T. threaded outlet on the bottom for a drain plug per NFPA. This shall be used as a combination clean-out and drain. All tanks shall have an anti-swirl plate located approximately 3" above the inside floor.

**76 OUTLETS**

There will be two (2) standard tank outlets: one for the tank-to-pump suction line, which shall be sized to provide adequate water flow to the pump; and, one for tank fill line, which shall be sized according to the NFPA minimum size chart for booster tanks. All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank, and be capable of withstanding sustained fill rates of up to 1000 G.P.M. The addition of rear suction fittings, nurse valve fittings, dump valve fittings, and through-the-tank sleeves to accommodate rear discharge piping must be specified. All auxiliary outlets and inlets must meet all NFPA guidelines in effect at the time of manufacture.

**77 CAPACITY CERTIFICATION**

All water and foam tanks shall be tested and certified as to capacity on a calibrated and certified tilting scale. Each tank shall be weighed empty and full to provide precise fluid capacity. Each Poly-Tank III is delivered with a Certificate of Capacity delineating the weight empty and full and the resultant capacity based on weight. Engineering estimates for capacity calculations shall not be permitted for capacity certification.

**78 TANKNOLOGY TAG**

A tag shall be installed on the apparatus in a convenient location and contain pertinent information including a QR code readable by commercially available smart phones. The information contained on the tag shall include the capacity of the water and foam (s), the maximum fill and pressure rates, the serial number of the tank, the date of manufacture, the tank manufacturer, and contact information. The QR code will allow the user to connect with the tank manufacturer for additional information and assistance.

**79 WARRANTY**

For normal fire department applications, the tank shall have a limited Lifetime warranty that provides warranty service for the life of the fire apparatus in which the tank is installed. Warranties are transferable if the apparatus ownership changes by requesting the transfer from UPF. In applications where the tank will be subject to severe conditions, the tank may have a warranty unique to the application that is clearly defined for each such application.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**80** **FOAM CELL**

A foam cell shall be integral and contained within the water tank. The foam cell shall have a minimum capacity of 10 U.S. gallons of foam and shall be manufactured by United Plastic Fabrication (UPF).

The foam cell shall have a manual fill tower. The fill tower shall be constructed of 1/2" PT3 polypropylene and shall be a minimum dimension of 8" x 8" outer perimeter. Each foam fill tower shall be constructed of a colored material (green for Class A foam, yellow for Class B foam and black for other foams) indicating which tower is to receive each type of foam utilized. The capacity of the tank shall be engraved on the top of the fill tower lid. The tower shall be in the right front corner of the tank unless otherwise specified. The tower shall have a 1/4" thick removable polypropylene screen and a stainless steel hinged-type cover. Inside the fill tower, approximately 1.5" down from the top, there shall be an anti-foam fill tube that extends down to the bottom of the tank.

**81** **TANK MOUNTING**

The booster tank will rest on body crossmembers that are spaced to allow no more than 530 square inches of unsupported area under the tank if the tank height is 40" or less.

Where the overall height of the tank exceeds 40", crossmember spacing must be reduced to allow for not more than 400 square inches of unsupported area. In addition, the tank must be isolated from crossmembers using hard rubber strips with a minimum .25" thickness x 1.50" width and a minimum of 60 durometer hardness.

The tank will sit cradle-mounted using four (4) corner angles approximately 4" x 4" x 6" high x .25" welded to the body crossmembers. The angles will keep the tank from shifting left to right or front to rear. The tank design is based on a free-floating suspension principal. To minimize the movement of an empty tank during vehicle operation, the hose bed slats and dividers will act as a retainer and be fastened front and rear. The tank shall be completely removable without disturbing or dismantling the apparatus body structure.



**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**82 BODY CONFIGURATION**

- 116" Body Length (Not including rear bumper)
- 76" Body Height
- 96" Body Width
- 60" Cab/Axle
- 6" Rear Taper

Approximate Compartment Opening Dimensions:  
 (Completed engineered drawings will contain the final dimensions)

<b>Compartment</b>	<b>Door Width</b>	<b>Door Height</b>	<b>Depth</b>
Driver Side #1	27"	59"	22" Lower, Transverse Upper
Driver Side #2	43"	31"	22"
Driver Side #3	27"	53"	22"
Passenger Side #1	27"	59"	18" Lower, Transverse Upper
Passenger Side #2	43"	31"	22"
Passenger Side #3	27"	53"	22"

**83 BODY CONSTRUCTION**

Construction material shall be aluminum. All aluminum body parts are to be welded for unitized construction to give maximum strength throughout the body. All welds shall be of good craftsmanship and pleasing appearance. Welds, which are visible, shall be either ground smooth, cleaned or power wire brushed.

The body shall be fully capable of being removed and remounted on another chassis.

The body shall have squared corners with no tapering. No extrusions shall be visible to the exterior sides or ends.

The body shall be constructed of a combination of 3003-H14 aluminum sheet and 6063-T52 aluminum extrusion.

Compartment floors shall be properly supported, and capable sustaining up to a five hundred (500) pound load.

The space between the top of the compartment doors and the top of the body shall be 12 inches. The side panel shall be a continuous formed sheet, shall extend the length of the body. The side panel shall accommodate the mounting of emergency and/or scene lighting.

The roof sheet shall consist of .125" polished aluminum treadplate. The roof sheet shall be attached with torx drive stainless steel machine screws and when removed, shall permit access to the side compartments if a roll-up door would jam in the closed position.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

The compartments shall be entirely supported by an integral extruded aluminum subframe. Extruded aluminum body rails shall be located directly above the chassis frame rails and shall extend the full length of the body. Body rails shall be 5" tall with a 3" wide "T" flange on the top and a 2" wide "L" flange on the bottom. Body rail shall have a 0.25" thick web.

Aluminum body crossmembers, 2" wide x 4" high x 0.25" wall, shall extend into the front wall, rear wall, and fender area. Additional crossmembers shall be located under the compartment floors and bed area as required. Compartments shall NOT be directly welded to the subframe. Gussets shall be welded between the compartments and the subframe to distribute the stress point.

The body shall taper upwards 6" starting 32" behind the center of the rear wheels for improved ground clearance.

**84 COMPARTMENT VENTS**

Ventilating holes shall be provided in each compartment and so located and guarded that water cannot normally enter the compartment through the holes. Each compartment shall have sufficient ventilation to dry out compartment interiors and equipment.

**85 BODYGUARD, FRONT**

The left and right body side compartment front panels shall be covered for protection from stones. Shields are to be 0.125" bright aluminum treadplate construction and fastened with stainless steel torx head screws.

**86 BODYGUARD, CORNER**

The front and rear body corners shall be protected by a mirror-polished stainless-steel trim that shall extend the full height of the corner.

**87 FENDER AND LINER**

The body panels above the wheel housing shall be smooth painted aluminum which has been flush fit and welded in place.

Polished stainless steel fenderettes shall be installed in the fender well. An extruded rubber gasket is to be installed between the fenderettes and the body to restrict moisture and or reduce the possibility of electrolysis.

The wheel wells shall have an aluminum liner welded in place over the rear wheels. Liner shall provide protection to the wheel well compartment and prevent moisture, dirt and road debris from being distributed through-out the understructure.

A plastic mudflap shall extend down from the liner at the back. Mudflap shall have an embossed reflective manufacturer's logo.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**88 RUB RAILS**

Rub rails shall be installed along the sides and run the length of the apparatus body below the compartments, only to be interrupted by the wheel wells. Rub rails shall consist of a decorative extruded aluminum "C"-channel with polished anodized finish and be mounted to the body using stainless steel fasteners. Rub rails shall be completely removable for replacement.

**89 BODY MOUNTING**

The body sub-frame shall be securely fastened to the chassis with "J-type" bolts with a tensile strength of 120,000 psi. The bolts shall be arranged on each side of the chassis frame rail and shall utilize existing holes in the frame rail. A stainless-steel structure shall be provided at the rear to support the rear bumper and shall be bolted to the chassis frame rails and to the body sub-frame. The body subframe shall be isolated from the chassis frame with a HDPE poly strip which shall lay the full length of each frame rail. The isolator strip thickness shall be stepped to compensate for variances in the frame rail.

There shall be minimal clearance between cab body and box. Consideration shall be given for the presence of push-up floodlights and any other equipment placed between the cab and body.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**90 HOSE BED**

A storage area for hose shall be located above the tank and pump panel.

The interior shall be free of any projections or sharp edges that might damage fire hose or other equipment.

The floor of the hose bed shall be constructed of 3/4" x 3" aluminum hose bed extrusion ribbed on top. The extrusions shall be welded together with 3/4" spacing to vent the hose bed. The entire bed shall be easily removable from the body. The floor shall allow ample air circulation between the top of the tank, and the underside of the hose bed floor.

To reduce maintenance and eliminate paint chips, the sides of the hose body that are above the hose bed floor shall have an unpainted circle-burnished finish.

**91 HOSE BED ILLUMINATION**

A LumaBar H20 LED strip light shall be provided at the front of the hose bed to illuminate the full width of the hose bed area. The light shall be controlled with the underbody lights.

**92 REMOVABLE HOSE TRAY**

Two (2) removable stainless steel hose trays shall be provided to fit in the hose bed area. The tray shall drop into a recess in the hose bed to keep the tray from sliding off the rear during transport. Tray shall have a circle-burnished finish.

The trays shall be capable of holding:

- Tray #1: 150' of 1.75
- Tray #2: 200 feet to f 2 1/2

**93 HOSE LOAD**

The hose bed will be sized to accommodate the following hose load:

- 300 feet of 4" supply
- 150 feet of 1.75
- 200 feet of 2 1/2

**94 HOSE BED DIVIDERS**

Two (2) adjustable hose bed dividers shall be provided to separate the different hose loads. To reduce maintenance and eliminate paint chips, all hose bed dividers shall have an unpainted buffed aluminum finish. The dividers shall be constructed of .18" smooth aluminum with a round radius corner at the rear. The bottom of each divider shall be welded to a heavy duty, full length slotted extrusion for extra divider rigidity. Each divider shall be attached to Unistrut to allow infinite adjustment from side to side. Each divider shall have a hand-hole cut into the panel at the rear to facilitate access.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**95**HOSE BED COVER

A removable heavy duty waterproof hose bed cover consisting of 22 oz. vinyl shall be provided. The hose bed cover shall extend over the rear of the hose bed. Rear edge of the cover shall be weighted to prevent wind damage and include a positive hold down device to secure hose load. The tarp shall attach along the front and sides with a durable nylon hook and shock cord system for long life and ease of removal/installation. NO VELCRO OR SNAPS PERMITTED

Tarp color shall be red.

**96**HOSE BED TARP LETTERING

The tail flap of the tarp shall have permanently attached reflective letters which shall spell: "ROWE"

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**97 COMPARTMENT DETAIL**

All compartments shall be of sweep-out type with no lip at bottom edge. The compartment floors shall be raised 1" above the lower sill to prevent water from entering the bottom of the opening.

Ventilating holes shall be provided in each compartment and so located and guarded that water cannot normally enter the compartment through the holes. Each compartment shall have sufficient ventilation to dry out compartment interiors and equipment.

There shall be six (6) storage compartments provided on the apparatus.

**98 Driver's Side**

One (1) full height compartment shall be located on the driver's side in front of the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep lower (transverse upper) x 59" tall x 26" wide.

One (1) full height compartment shall be located on the driver's side above the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep x 32" tall x 45" wide.

One (1) full height compartment with elevated floor shall be located on the driver's side behind the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep x 53" tall x 26" wide.

**99 Officer's Side**

One (1) full height compartment shall be located on the officer's side in front of the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep lower (transverse upper) x 59" tall x 26" wide.

One (1) full height compartment shall be located on the officer's side above the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep x 32" tall x 45" wide.

One (1) full height compartment with elevated floor shall be located on the officer's side behind the rear wheels. This compartment will have approximate closed-door dimensions of 22" deep x 53" tall x 26" wide.

**100 COMPARTMENT, UPPER SIDES**

There shall be two (2) compartments located next to the hose bed, one compartment on the left side and one on the right side. Compartment shall be integral to the body.

The compartments shall have a "sweep-out" floor design. Compartment shall have a hinged door toward the rear with Southco trigger latch. A LED utility light shall be provided at the opening.

The left side compartment shall store suction hose and the right-side compartments shall store the requisite ground ladder package found in the "Loose Equipment" section of this document.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**101 SCBA BOTTLE COMPARTMENT**

Three (3) SCBA bottle compartments shall be provided in the rear fender housing area to accommodate one (1) SCBA bottle (each). The compartment shall be constructed from rotary molded poly to protect scuffing of the SCBA bottles. The compartment shall have a brushed stainless-steel door and shall include a Southco trigger latch.

**102 120 VOLT OUTLETS, BODY INTERIOR**

Two (2) 120-volt AC duplex outlets shall be furnished, located as directed by the purchaser. The outlets shall be mounted inside a cast aluminum outlet box and shall be mounted flush with all wiring concealed. The receptacle shall be labeled with a permanent nameplate listing the voltage, type of current and amp rating. A stainless-steel trim plate shall be provided.

Outlet configuration will be a duplex 5-20R.

Receptacle shall be powered only by the shoreline.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**103 SHELF & TRAY FINISH**

Any shelves, trays, etc. shall have a 6" diameter overlapping circle design burnished into the metal to hide scuffs and scratched associated with normal wear and tear over the life of the apparatus.

The edges of all the roll-out items will include a reflective red/lime chevron stripe to improve safety.

**104 SHELVING STANDARDS FOR ADJUSTABLE SHELVES**

Six (6) compartments shall be equipped with heavy duty adjustable shelving standards, one per wall on all depths 20" or less and two per wall on depths greater than 20". These standards are to be the infinitely adjustable type of 6061-T6 extruded aluminum, located 2" up from floor and 12" down from ceiling.

**105 ADJUSTABLE SHELF**

One (1) adjustable aluminum pan type shelf shall be provided in the officer's rear compartment. For ease of adjustment and as additional shelving reinforcement, the shelf shall not be bolted directly to the standards but shall be supported by angle shelf holders that in turn are fastened to the standards.

The shelf shall be capable of supporting a minimum weight of three hundred (300) pounds.

**106 ALUMINUM TOOL BOARD, TRANSVERSE**

One (1) tool board shall be furnished in the front transvers compartment. The board shall consist of (2) aluminum panels with mounted ball bearing roller guides along the top and bottom. An extruded aluminum track shall be mounted to the top and bottom of the compartment. The board shall extend out either side with a minimum of 70% extension. The slide shall lock in the stored position and shall have a release at both ends. A die-cast chrome handle shall be provided at both ends.

The tool board shall be rated for a maximum weight capacity of 300 pounds.

**107 ALUMINUM TOOL BOARD - 300 LB CAP. ROLL OUT**

One (1) tool board shall be furnished in the driver's rear compartment. The board shall be fabricated of 0.19" smooth aluminum. The board shall be mounted on a 300 lb. capacity Accuride 9301/9308 ball bearing slides with 100% full extension.

The lower slide shall "lock-in" and "lock-out" with intuitive front latch release.

**108 STORAGE, STOKES LITTER**

A fabricated aluminum compartment shall be provided against the reward transverse compartment wall for storage of one (1) department supplied Stokes basket with two (2) department supplied backboards being stored within the Stokes. A Velcro strap shall be provided to keep litter securely in the compartment.



**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**109 ROLL-UP COMPARTMENT DOORS**

The body side compartments shall be equipped with R. O. M. brand roll up doors.

The doors will be of anodized aluminum to form a close-fitting curtain, manufactured of close tolerance slat profiles. The doors will have a pretension operator in a sealed alloy drum. The operator is positioned at the forward part of the compartment to afford maximum clearances and head room.

Each door will be provided with side seals as a standard feature. These will be a specially formulated extruded neoprene, shaped to readily shed water. The side seals are mounted in a special extrusion, forward of the curtain track.

The latching mechanism will be a lift bar arrangement, which utilizes a door wide spring-loaded bar and two (2) cam surfaced latch points. The lift bar shall be constructed of extruded aluminum for optimum strength and appearance.

Any roll door that exceeds a 63" high door opening from the rub rail or above 30" if over a wheel well shall include a pull-down strap to make for easy closing.

**110 COMPARTMENT LIGHTING**

A ROM DuroLumen LED light strip shall be incorporated into the door track on both sides of each door opening. LED strips shall produce 250 lumens per foot.

**111 DOOR FINISH**

The body side compartment roll-up doors shall have a natural anodized finish.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**112 BUMPER STEP**

The rear bumper step shall be 8" deep and full width. Step framing shall be a combination of formed stainless steel sheet and stainless-steel square tubing, securely reinforced, and bolted to the chassis frame rails.

The step will be fabricated from 0.125" serrated bright aluminum treadplate. Step surface shall be lit with LED utility lights.

There shall be a warning label mounted above the rear step. "DANGER - DO NOT RIDE ON REAR STEP WHILE VEHICLE IS IN MOTION. DEATH OR SERIOUS INJURY MAY RESULT."

**113 HOSEBED STEP**

A step shall be provided at the rear of the hose bed. The step shall be 8" deep and shall be rated for 500 lb. The step shall be fabricated from 0.125" serrated bright aluminum treadplate with an extruded subframe. The underside of the step shall be closed.

**114 BUMPER STEP, PULL-OUT**

One (1) pull-out ladder step shall be provided below the rear bumper. The step shall hang 8" below the bottom of the bumper when deployed and shall store 3.5" below the bumper when not in use. The step shall be approximately 10" wide and shall have a serrated aluminum ladder rung stepping surface. The stepping surface shall be no greater than 24" from the ground when deployed.

**115 STEP, FOLDING, ANODIZED**

Four (4) heavy duty anodized aluminum steps with a slip resistant surface, shall be provided on the rear body face. The steps shall include a built-in LED light, located above the stepping surface, to provide better visibility.

**116 12" ACCESS RAIL**

One (1) 12" access rail shall be mounted on the right rear of the body.

Access rails shall be 1.25" diameter extruded aluminum tubing in chrome plated stanchions.

**117 24" ACCESS RAIL**

Two (2) 24" access rails shall be mounted vertically one each side of the pump operator's station.

The access rails shall be 1.25" diameter extruded aluminum tubing in chrome plated stanchions.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**1182 VOLT WIRING – MULTIPLEXING, V-MUX**

The body electrical shall incorporate a system for controlling the electrical devices of the vehicle. This system shall utilize a Controller Area Network (CAN) protocol providing multiplexing control signals for "real time" operation. It shall consist of several modules (nodes) strategically located throughout the vehicle and interconnected via "twisted pair" control wiring. Each module shall be readily available for inspection or service. Nodes shall be capable of operating independently and shall hold their own configuration.

Electrical load shedding, sequencing and low voltage alarms shall be included in the electrical system program.

Junction areas with a removable aluminum cover shall be located inside the front and rear side compartments for ease of service. A wiring trough shall be built into the upper body roof rail and above the exterior compartment doors. Easily removable panels shall be furnished to gain access to these wiring troughs.

The electrical equipment installed shall conform to current automotive electrical system standards, the latest federal DOT standards, and the requirements of NFPA 1901.

All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent. Wiring, wiring harnesses, and insulation shall be in conformance to applicable SAE and NFPA standards. Wiring harnesses shall conform to SAE J-1128 with GXL temperature properties. All exposed wiring shall be run in a loom with a minimum 289-degree Fahrenheit rating. All wiring looms shall be properly supported and attached to body members. Electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

Wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection and shall be installed in accordance with the device manufacturer's instructions. Weather-resistant connectors shall be provided throughout to facilitate removal of components for service. Electrical connections shall utilize large rubber grommets where wiring passes through metal panels.

Primary wiring shall be marked every 6" minimum. The marking shall consist of text to indicate which circuit the wire is completing (i.e.. BRAKE LAMP or WARNING A) The marking color shall contrast with the wire color. The marking shall be a weather resistant permanent mark that will not rub off of the wire when handled. **COLOR CODING OR NUMBERING IS NOT PERMITTED.**

All electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. The main body junction panel shall house automatic-reset breakers and relays (as required).

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments (except for low voltage compartment lights), unless they are enclosed in an electrical junction box or covered with a removable electrical panel.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

The electrical system shall have the following features:

- Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. A corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body.
- The electrical wiring shall be harnessed or be placed in protective loom.
- Double-wall heat shrink material and sealed connectors shall be used to protect exposed connections.
- Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in the component.
- A sufficient length of wiring shall be provided behind any electrical appliance to allow the device to be pulled away from the panel for inspection and/or service work.

**119 MASTER DISCONNECT SWITCH**

A master disconnect relay shall be provided between the batteries and the apparatus electrical load. The chassis electrical system shall NOT be switched per OEM requirements. A Blue Sea model ML-RBS relay shall be installed in the center console and shall be automatically controlled by the ignition switch. The relay shall have a continuous rating of 500 amps and shall have a manual override knob.

**120 BATTERY CONDITIONER**

The vehicle shall be equipped with a Kussmaul Auto Charge LPC 20, model #091-207-12 single battery conditioner. Output of the battery charger shall be 20 amps with a 15-amp auxiliary output. The battery conditioner shall be wired to the 120-volt shoreline inlet receptacle.

**121 BATTERY STATUS DISPLAY**

A remote mounted graph display board shall be provided which indicates the state of the charge and the condition of the batteries. Display shall be installed in the center console in the vehicle cab.

**122 AUTOMATIC SHORELINE DISCONNECT WITH SNAP COVER**

A 120-volt, 20 Amp shoreline inlet shall be provided in the location specified. To eliminate broken cables which result when drivers forget to remove the shoreline, the inlet connector shall automatically eject the shoreline plug-in when the chassis engine is started. The automatic disconnect shall be a Kussmaul model #091-55-20-120 complete with a rear protective cover for the eject device and a weatherproof snap cover for the receptacle. The inlet shall be labeled with a permanent nameplate listing the voltage and type of current.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**123 CONSOLE PANEL, FLOOR MOUNT**

A control console shall be located between the front seats in the cab. The top of the console shall be removable for easy inspection and servicing. The console shall be fabricated of aluminum and shall be painted with a textured polyurethane finish to blend with interior decor.

The console shall contain "constant power" and "battery switched power" fuse blocks for convenient installation of 12V chargers, radios, etc. in the future.

A switch panel shall be installed in the center console to control the electrical circuits. Switches shall be rocker switches with backlit switch function label permanently engraved in the switch. Switches shall have integral indicators where applicable to indicate when switch is "on".

Switches shall be as follows:

- MASTER WARN
- LIGHT BAR
- FRONT WARN
- REAR WARN
- LEFT SCENE
- RIGHT SCENE
- REAR SCENE
- LEFT POLE
- RIGHT POLE
- PUMP / PUMP ROLL

LED indicators shall be provided in the console.

Indicators shall be as follows:

- MASTER ON
- DOOR AJAR
- LOW VOLTS
- AIR FILTER
- OK TO PUMP
- PUMP ENGAGED
- OK PUMP & ROLL

Area shall be provided for installation of emergency radios, siren, etc.

Two (2) map slots shall be incorporated into the back of the console.

**124 VFD TEXT DISPLAY**

A Weldon vacuum fluorescent display shall be provided in the center console. Display shall read out which doors are ajar and other applicable diagnostic information.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**125 USB CHARGE PORT**

One (1) dual USB charge module shall be provided in the center console. Each module shall have two (2) 2.4-amp ports. The ports shall be powered by: (Battery or Ignition)

**126 CUP HOLDER**

A Havis model CM001407 dual molded plastic cup holder shall be provided in the center console. The cup holder shall be removable for ease of cleaning.

**127 ANTENNAE, EMERGENCY RADIO**

Two (2) Larsen model NMOKHFUD antennae bases shall be installed on the cab roof. Cable shall extend from base to center console. Cable shall be blunt cut with no connector attached.

**128 120 VOLT OUTLET, CAB INTERIOR**

One (1) 120-volt AC duplex outlet shall be furnished, located in the cab control console, facing the rear. The outlet shall be mounted inside a cast aluminum outlet box and shall be mounted flush with all wiring concealed. The receptacle shall be labeled with a permanent nameplate listing the voltage, type of current and amp rating. A stainless-steel trim plate shall be provided.

Outlet configuration will be a duplex 5-20R.

Receptacle shall be powered only by the shoreline.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**129 FOG LIGHTS**

A pair of JW Speaker model 6145 LED fog lights shall be provided. A rocker switch shall control the fog lights and shall be interlocked to function only with the low beam headlamps. Light shall be located as follows:

(2) located in front bumper 4" light buckets

**130 MARKER LIGHTS, LED**

Body shall be equipped with all lighting and reflectors as required by Federal Motor Vehicle Safety Standards.

Marker/clearance lights shall be Grote M5 LED with chrome bezels.

An LED license plate light with chrome housing shall be provided.

**131 STOP/TAIL, TURN AND REVERSE LIGHTS**

One (1) rectangular Whelen M6 series Linear Super LED amber arrow light each side of body for turn signals.

One (1) rectangular Whelen M6 series Linear Super LED red light each side of body for stop and tail.

One (1) rectangular Whelen M6 series Super LED scene light each side of body for reverse.

One (1) Whelen chrome housing for 4 (four) M6 lights each side of body. (4th lamp will be LED emergency flasher)

**132 STEP LIGHTS**

Step lights shall be wired through the marker light and parking brake circuit with the locations as follows:

- Two (2) LED surface mounted lights with chrome flanges, one each side on the apron to illuminate the rear step area.

**133 GROUND LIGHTS**

Six (6) Amdor Luma Bar H2O LED lights shall be installed around the perimeter to illuminate the ground at stepping/standing areas. The lights shall be activated through the parking brake circuit.

These lights shall be in addition to those already provided for the cab door areas.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**134 TELESCOPING SCENE LIGHT, LED**

Two (2) Fire Research Spectra MAX LED Scene Light model SPA530-Q28-SW-ST side mount push up telescopic lights shall be installed, on the front body panel one each side of the apparatus. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall rotate 360 degrees. The outer pole shall be a grooved aluminum extrusion and qualify as an NFPA compliant handrail. The pole mounting brackets shall have a 2 3/4" offset. Wiring shall extend from the pole bottom with a 4' retractile cord.

The lamphead shall have eighty-four (84) ultra-bright white LEDs, 72 for flood lighting and 12 to provide a spotlight beam pattern. It shall operate at 12 volts DC, draw 19.2 amps, and generate 28,000 lumens of light. The lamphead shall have a unique lens that directs flood lighting onto the work area and focuses the spotlight beam into the distance. The lamphead angle of elevation shall be adjustable at a pivot in the mounting arm and the position locked with a round knurled locking knob. The lamphead shall be no more than 5 3/8" high by 14" wide by 3 3/4" deep and have a heat resistant handle. The lamphead and mounting arm shall be powder coated. The LED scene light shall be for fire service use.

The pole shall have an integral position switch to activate the "door ajar" alarm when not properly stowed.

**135 CRESTLIGHT LED SCENE, 50"**

One (1) scene light shall be provided and shall be switched in the cab. The lights shall be 50" FRC Crestlight Scene/Flood/Spot lamp model CLA100-A49. Each light shall produce 12,500 effective lumens.

The light shall be mounted below the lightbar, facing forward. Light mounting brackets shall attach to the lightbar to reduce the number of holes required in the cab roof.

**136 SCENE LIGHT, SURFACE MOUNT LED**

Four (4) Scene lights shall be provided in the location specified and shall be switched in the cab. The lights shall be Whelen M6 Series Super LED, gradient Opti-Scene lights™ with chrome flange. Lights shall provide 2,000 lumens each.

**137 PIONEER MICRO SERIES LED SCENE**

Two (2) scene lights shall be provided in the location specified and shall be switched in the cab. The lights shall be Whelen Micro Pioneer with recessed mounting bracket and chrome plated flange. Each light shall produce 4,100 lumens.

Each light shall be supplied with one each of the following optic lenses: 8° spot, 90° x 20° wide flood, 40° x 20° flood, 40° x 8° horizontal flood. Optic lens shall be easily changed via four screws in picture frame fixture.

Housing Color: (Black or White)

Location: Rear body one each side of pump panel



**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**138 SIREN**

A Whelen #295SLSA1 Heavy Duty Series siren shall be provided. The siren shall produce 200 watts when connected to two (2) siren speakers.

The siren shall include the following features:

- Scan-Lock™ Tone Programing
- Hands-Free operation.
- Siren Interruption Control
- High and Low Voltage Shutdown
- LED External Backlight Control
- Radio Repeat
- Horn Ring Transfer
- Simulated mechanical siren tones
- Speaker Diagnostics
- Harmonically-rich, composite Airhorn tones
- Title 13-compliant profiles
- Non-destructive Short Circuit Protection

The siren will be wired so that the horn button will activate the siren when it is in the "on" position. The siren shall be installed so it is convenient for both the driver and officer.

**139 SIREN SPEAKERS**

Two (2) Whelen model SA315 100-watt speakers shall be installed in recessed openings in the bumper and wired to the siren.

**140 LIGHTBAR**

The lightbar shall be a Whelen Freedom IV LED, Model F4N2VLED, 55" long. Lightbar will contain four Red Linear12's Super LED corner modules, two Red inboard LED modules, two Clear inboard LED modules. The white modules shall be independently controlled. The outer lenses shall be clear. Lightbar shall be mounted on the cab roof.

**141 WARNING LAMP, LED, M2, RED**

Four (4) Whelen M2 Wide-Angle LED red lights with clear lenses and chrome flanges shall be provided and mounted.

**142 WARNING LAMP, LED, SERIES M6, RED**

Twelve (12) Whelen M6 LED red lights with clear lenses and chrome flange shall be provided and mounted.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**143** **BODY PAINT**

The apparatus body exterior shall be painted to match the chassis color.

Paint preparation and application shall be as follows:

- Metal surfaces shall be rough sanded to remove all burrs and imperfections in aluminum, before etching and treatment.
- A wax & grease solvent shall be used to clean and prep the aluminum surface. This step removes wax, grease, and other surface contaminants, thus leaving a bright, clean, and conditioned surface.
- A minimum of 3 coats of PPG epoxy primer shall be applied next. The primer shall seal the metal and provide corrosion protection.
- Any imperfections in the metal surface from the welding process shall be filled and smoothed. Body seams shall be sealed with epoxy glue. **No filler or seam sealer shall be applied before an epoxy primer is applied.**
- A PPG sandable primer shall be sprayed on top of the epoxy primer to seal the surface for the polyurethane paint. Primer is then sanded smooth, leaving the best surface for topcoat.
- The apparatus body shall then be painted with a minimum of three (3) coats of PPG color base coat.
- Base color coat shall be immediately coated with minimum of two (2) coats of PPG automotive OEM grade clear coat.
- Exposed paint surfaces shall be sanded smooth and buffed for maximum shine.

These steps are followed as recommended by PPG Testing Laboratory to provide a lasting and high-quality gloss finish. All paint products shall be provided and/or approved by PPG.

The paint shall be warranted by PPG against corrosion, discoloration, or loss of gloss for a period of 7 (seven) years.

To prevent electrolysis around fasteners, special attention must be given to how components are fastened to the exterior of body. **Every screw hole possible that protrudes into the body shall be cut BEFORE any painting is done.** After painting, a plastic insert will be installed to isolate the dissimilar metals. Where an insert cannot be used, a zinc-rich type coating will be applied to each screw before they are installed.

**144** **CAB PAINT**

The cab and wheel exteriors shall be supplied in the proper color and shall not be repainted. Fire Department to use an available color from the chassis manufacturer.

**145** **COMPARTMENT FINISH**

To reduce marring and scuffing, the insides of the exterior compartments shall be painted with a durable light gray spatter type coating and sealed with a automotive-grade clear coat.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**146 CORROSION PROTECTION**

A bottle of ECK corrosion prevention chemical shall be supplied loose with final delivery of the apparatus to ensure the customer will be able to place this on any screws inserted or removed from the body in the future.

**147 REFLECTIVE STRIPING**

A 4" horizontal Scotchlite reflective stripe shall be provided on the side of the cab and body for a minimum length of 50% of the total length.

**148 REFLECTIVE STRIPING, REAR CHEVRON**

A two color 6" Scotchlite diamond grade reflective V-pattern Chevron shall be applied to the rear of the apparatus. The Chevron stripe shall alternate between yellow green with red stripes and shall cover the entire rear painted body surface.

**149 REFLECTIVE, CAB DOOR**

A reflective panel with a minimum of 96 square inches shall be installed inside each cab door. The reflective panel shall have a red/yellow chevron pattern.

**150 LABELS**

Custom printed labels shall be included in the cab. They shall include:

- As-Built Height and Weight
- Fluid Types and Quantities
- Maximum Occupants
- Seatbelt Warning
- Helmet Warning

Custom printed labels shall be included on the exterior. They shall include:

- Riding On Step Warning
- No Step Warning
- Diesel Fuel
- DEF Fluid
- Shoreline Rating
- Trailer Tow Rating
- Pump Performance Rating

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

**Yes      No**

**151 ALCO-LITE FL-10 FOLDING LADDER**

One (1) Alco-Lite model FL-08 ladder with the following specifications shall be provided:

- Open Length:** 8' 3"
- Folded Length:** 9' 3"
- Open Width:** 15.5"
- Folded Width:** 5.25"
- Banking Thickness:** 2"
- Weight:** 12 LB

**152 ALCO-LITE PEL3-16 SUPER-COMPACT PUMPER LADDER**

One (1) Alco-Lite model PEL3-16 ladder with the following specifications shall be provided:

- Extended Length:** 16'
- Closed Length:** 7' 4.5"
- Width:** 23.5"
- Banking Thickness:** 7.25"
- Weight:** 61 LB

**153 SUCTION HOSE, 4"**

Two (2) suction hoses shall be furnished and will be Kocheck PVC 4" x 10' long type with lightweight couplings on each end. Couplings shall be 4" cam lock on each end.

**154 WHEEL CHOCKS**

Two (2) Worden model HWC7YWH aluminum wheel chocks with yellow powder coating shall be included. The chocks shall meet NFPA 1906 requirements for tires up to 46" in diameter. A custom mounting bracket shall be included.

The chocks shall be mounted to the transverse tool board driver's side.

**155 MISCELLANEOUS FASTENERS**

A bag of miscellaneous fasteners that was used in the construction of the apparatus will be provided with the completed unit.

**156 BOOSTER HOSE, LIGHTWEIGHT**

Two (2) sections of Mercedes BOOSTLITE 1" lightweight booster hose shall be provided on the booster reel, one (1) length shall be 100 feet in length the other 75 feet in length. The hose color shall be yellow. The hose shall have field-replaceable aluminum anodized couplings with 1" NH threads.

**Town of Rowe**  
**Specifications for One (1) Rapid Attack CAFS Unit**

**Bidder  
Complies**

Yes      No

**157** **INTAKE ADAPTER**

One (1) Kochek 4" NST female by 4" male camlock adapter shall be included. The adapter shall be aluminum.

**158** **NFPA REQUIRED ITEMS**

It shall be the purchaser's responsibility to provide all equipment items required by NFPA 1901 that are not otherwise addressed in these specifications. These items shall be installed on the apparatus prior to it being put into active service.

## (5) Qualification of Bidders

Bids will only be considered on vehicles constructed in the continental United States, whose manufacturers have an established reputation of permanency and reliability in the field of fire apparatus construction. Each manufacturer shall furnish satisfactory evidence of their ability to construct the apparatus as specified, and shall state the location of the factory where the complete apparatus will be built. If the components are manufactured in different facilities, the location of each facility shall be stated in the bid. Experimental apparatus will not be acceptable.

Bidders must submit a complete list of all RAPID ATTACK CAFS UNITS they have built in the past 5 years including contact names and current telephone numbers. References that are not current and cannot be contacted may result in disqualification. The bidder must submit no less than 10 references. The Town and FRCOG reserve the right to investigate other contracts undertaken by the bidder other than those provided in the References.

## (6) Service Requirements

The bidder must offer emergency on-site or mobile service, as needed. Also, the bidder shall offer services including overseeing collision repairs and painting. **SERVICE IS CRITICAL.** The ability of the bidder to provide prompt and capable future service for the equipment supplied will be considered a Minimum Criteria. **THE TOWN OF ROWE REQUIRES THAT SERVICE FACILITY MUST BE AVAILABLE WITHIN 100 MILES OF THE TOWN OF ROWE.** The bidder must have a full service facility and be staffed by full-time technicians. Technicians must be factory trained in the operation and repair of all the equipment supplied with full authorization from the manufacturer. The facility shall maintain an inventory of major system parts including major parts and electrical items.

## (7) Preconstruction / Order Conference

There shall be a preconstruction conference held at the Purchasers facility. To ensure accuracy, performance, operability, & reliability of the apparatus, the preconstruction conference shall be conducted by the Dealer principal who shall also be The Sales & Service engineer.

To ensure a full understanding of the apparatus, this preconstruction conference will include the following AS APPLICABLE TO THIS TRUCK.

- Complete page by page, line by line review of the specifications and item descriptions.
- The Sales engineer & purchaser shall initial each page as being reviewed. Changes or modifications shall be noted in the left margin and initialed. A change order if required shall be generated by the sales engineer after the meeting and approved by both prior to submission to the factory.
- Drawing review
- Paint codes will be confirmed and entered into the order
- Hose loads shall be confirmed and documented
- Lettering & stripe locations, fonts, etc., shall be documented
- Shelves, trays, toolboard, locations shall be confirmed
- Electrical outlets locations and receptacle type confirmed
- Titling information shall be confirmed and recorded to ensure the apparatus is titled correctly
- Purchaser information such as points of contact, person/s authorized to make decisions and changes to the apparatus (both major & minor)
- Financial Points of contact
- Any open or remaining order or contractual documents if not previously completed shall be.

### **(8) Apparatus Pre-Delivery**

The Apparatus shall receive a pre-delivery check over & cleaning prior to final delivery to the department.

### **(9) Delivery and Training Requirements**

The truck shall be delivered under its own power to assure adequate break-in while under warranty. Vendor shall provide familiarization training on the vehicle (no less than 6 hours in duration) following NFPA 1901 (2016 edition) upon delivery. The training shall be performed by both the salesperson of record and the product specialist.

### **(10) Temporary Registration**

A temporary registration shall be applied to the vehicle prior to delivery so as to ensure the department can start the driving portion of predelivery training without waiting for title and registration documents to arrive. These items to be provided by the dealer or a registered & bonded auto dealer.

### **(11) Insurance**

Manufacturer's and service center's Liability Insurance certificate shall be provided by the successful bidder upon award of the contract, equal to or exceeding

**\$2,000,000.** The manufacturer must also carry statutory worker's compensation insurance.

## **(12) Bid Bond**

Each bid shall be accompanied by a bid bond in the amount **five (5) percent of the bid price**. Bids submitted without a bond will not be read. The bid bond must be issued by an Insurance Company registered with the Insurance Commissioner of the Commonwealth of MA or by Bank/Treasurer's Check payable to the Town of Rowe. Bonds must be signed by an Officer of the Bidder's Company. Bonds issued by non-registered or foreign Insurance Companies will be immediately rejected. The cost of the Bid Bond shall be borne by the vendor. In the event the bidder refuses to sign a contract/purchase and sale agreement at the terms in the bid, the bond will be forfeited to compensate the town for having to re-bid for the apparatus.

## **(13) Contract and Payment**

These specifications, together with any documents required herein, shall be included in the final contract. A contract substantially in accord with the sample contract, attached, is expected to be executed.

Payment will be made within 45 days of acceptance and completion and delivery of the entire apparatus, training, delivery and manuals/warranty.



**Checklist for inclusion in the bid package:**

- General Information Form (1<sup>st</sup> page)
- Detailed equipment specifications/drawings including all Warranty information
- List of references – all contracts from the last five (5) years of similar equipment and no less than ten (10) total references with current contact information.
- Signed Bid Price Form
- Signed Bid Signature Page
- Signed Tax Compliance and Non Collusion Statements
- Taxpayer Identification Number (TIN)
- Letter from auditing firm or other acceptable entity attesting to Financial Stability
- Completed Bid Specification Form (Compliance Yes/No/ with Exceptions enumerated per the numbered bid specification list separately)
- Location of Service facility identified within 100 miles of Rowe.
- 1 original and 1 copy as well as 1 USB/Flash Drive of bid package required

Bids will be received at Franklin Regional Council of Governments, 12 Olive Street, Greenfield, MA 01301 by the Chief Procurement Officer.

**GENERAL INFORMATION FORM**

SUBMIT THIS FORM AS THE FIRST PAGE OF YOUR RESPONSE  
AFTER THE COVER LETTER

Name of Organization: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Years in Business under this Name: \_\_\_\_\_

Years in Business under another Name: Name: \_\_\_\_\_ Yrs. \_\_\_\_\_

Organization is (check one):

- Corporation       Partnership       Association  
 Joint Venture       Sole Proprietorship       Public Agency  
 Quasi-Public Agency       Other: (Explain) \_\_\_\_\_

Organization's Address: \_\_\_\_\_  
\_\_\_\_\_

Email Address of Contact Person: \_\_\_\_\_

Name, Title and Telephone Number of the Organization's Authorized Representative:

\_\_\_\_\_

The undersigned, being cognizant of the pages, documents and attachments concerned herewith agrees to provide the Town of Rowe with the equipment as specified and subsequently amended by any Addenda.

The Bidder agrees to comply with all Local, Federal, and State requirements and the Firm has not been debarred from contracting with any local, state, or federal governmental agency?

The Bidder hereby affirms that this Bid is genuine, not a sham or collusive, and is not made in the interest of any person not therein named.

The Bid attests that the firm is financially stable and has included a letter from an auditing firm or other acceptable entity attesting to same.

Authorized Signature:  \_\_\_\_\_ Date \_\_\_\_\_



**BID PRICE FORM PAGE 2**

**Authorized Bid Signature**

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Telephone number

\_\_\_\_\_  
Name and Title of Individual Authorized to Sign

\_\_\_\_\_  
Email Address



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Signature for Partnerships (must be signed by ALL general partners)**

\_\_\_\_\_  
Name of Partnership

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Partner



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and Title of Partner



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone Number of Company Offices  
**Use additional sheet if necessary**

\_\_\_\_\_  
Email Address

**Signatures for Corporation**

\_\_\_\_\_  
Name of Corporation

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name and Title of Duly  
Authorized Company Officer



\_\_\_\_\_  
Signature

Corporate Seal (affix below)

**BID PRICE FORM PAGE 3**

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
E-Mail Address

Please furnish the following additional information:

Incorporated in what state? \_\_\_\_\_

President: \_\_\_\_\_

Treasurer: \_\_\_\_\_


Secretary: \_\_\_\_\_

**\*If a sole proprietorship, you must indicate your status as a sole proprietorship; the person signing this bid shall be deemed to be the sole proprietor and legal entity for the purposed of this bid and contract.**

**TAX COMPLIANCE YOU MUST SIGN IN BOTH PLACES INDICATED BY **

*Any person failing to sign the Tax Compliance and Non Collusion Statements shall not be allowed to obtain, renew, or extend a license, permit, or public contract.*

**Pursuant to M.G.L. Chapter 62C, §49A, I hereby certify, under the penalties of perjury, that, to the best of my knowledge and belief, I am in compliance with all the laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.**

 \_\_\_\_\_  
Signature of individual submitting bid


\_\_\_\_\_  
Printed Name of Above

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Date

**CERTIFICATE OF NON-COLLUSION**

The undersigned certifies under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

 \_\_\_\_\_  
Signature of individual submitting bid

\_\_\_\_\_  
Printed Name of Above

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Date

**Taxpayer Identification Number (TIN) and Certification**

\_\_\_\_\_  
Name (as shown on your income tax return)

\_\_\_\_\_  
Business name, if different from above

- Check appropriate box:**
- Individual/Sole proprietor
  - Corporation
  - Limited Liability Corporation (LLC)
- Circle tax classification: **D** (disregarded entity) **C** (corporation) or **P** (partnership)
- Partnership
  - Other .....

\_\_\_\_\_  
Address (number, street, and apt. or suite no.)

\_\_\_\_\_  
City, State, and ZIP Code

**Taxpayer Identification Number (TIN)**

Enter your TIN on the appropriate line below. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the IRS instructions on filling out Form W-9. For other entities, it is your employer identification number (EIN).

SSN: do not fill in on public document, contact FRCOG if no EIN

EIN: \_\_\_\_\_

**Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: a) I am exempt from backup withholding, or b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. person (including a U.S. resident alien).

**Certification Instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return.

Signature of U.S. person  \_\_\_\_\_ Date \_\_\_\_\_