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Section 1

## Intent of Specifications

### 1.1 General Requirements

It shall be the intent of these specifications to cover the furnishing and delivery of a complete apparatus equipped as hereinafter specified. These specifications cover only the general requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder shall conform. Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the contractor, who shall be solely responsible for the design and construction of all features. Loose equipment shall be provided only as stated in the following pages.

Bids shall only be considered from companies that have an established reputation in the field of fire apparatus construction and have been in business for a minimum of 20 years. Further, bidder shall maintain dedicated service facilities for the repair and service of products. Evidence of such a facility shall be included in bidder proposal.

Each bidder shall furnish satisfactory evidence of their ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidder shall also show that the company is in position to render prompt service and to furnish replacement parts for said apparatus.

Each bid shall be accompanied by a set of "Contractor's Specifications" consisting of a detailed description of the apparatus and equipment proposed and to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.

### 1.2 Specification Bid Requirements

This bid consists of three sections, bid describing and requirements (Section 1), rescue pumper (Section 2), and equipment (Section 3). Section 3 is further broken down to fire equipment and rescue equipment. Bidder may bid on any or all sections. **Equipment and vehicle delivery no sooner than July 1, 2013.**

Bidders shall also indicate in the "yes/no" column if their bid complies on each item (PARAGRAPH) specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained on a separate page.

**Proposals taking total exception to specifications shall not be acceptable.**

Also, bidders shall submit a detailed proposal. A letter only, even though written on a company letterhead, shall not be sufficient. Bid proposals shall be submitted in the same sequence as specifications for ease of evaluation, comparison and checking of compliance.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.3 Quality and Workmanship

The design of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in its respective field. Special consideration shall be given to the following points: Accessibility of the various units which require periodic maintenance, ease of operation (including both pumping and driving) and symmetrical proportions. Construction shall be rugged and ample safety factors shall be provided to carry the loads specified and to meet both on and off road requirements and speed conditions as set forth under "Performance Tests and Requirements".

Welding shall not be employed in the assembly of the apparatus in a manner that shall prevent the ready removal of any component part for service or repair. All steel welding shall follow American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding shall follow American Welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding shall follow American Welding Society B2.1-2000 requirements for structural welding of sheet metal.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.4 Delivery

Apparatus, to insure proper break in of all components while still under warranty, **shall be delivered under its own power** - rail or truck freight shall not be acceptable. A qualified delivery engineer representing the contractor shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in the proper operation, care and maintenance of the equipment delivered. Delivery no sooner than July 1, 2013.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.5 Information Required

The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the completed apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.6 Safety Video

Documentation provided at the time of delivery shall also include an apparatus safety video, in DVD format. This video shall address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus. Safety procedures for the following shall be included: vehicle pre-trip inspection, chassis operation, pump operation, and maintenance.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.7 Performance Tests and Requirements

A road test shall be conducted with the apparatus fully loaded and a continuous run of ten (10) miles or more shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts, and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. Vehicle shall adhere to the following parameters:

- A) The apparatus, when fully equipped and loaded, shall have not less than 25% nor more than 50% of the weight on the front axle, and not less than 50% nor more than 75% on the rear axle.
- B) The apparatus shall be capable of accelerating to 35 mph from a standing start within 25 seconds on a level asphalt highway without exceeding the maximum governed rpm of the engine.
- C) The service brakes shall be capable of stopping a fully loaded vehicle in 35 feet at 20 mph on a level asphalt highway. The air brake system shall conform to Federal Motor Vehicle Safety Standards (FMVSS) 121.
- D) The apparatus, fully loaded, shall be capable of obtaining a speed of 60 mph on a level asphalt highway with the engine not exceeding its governed rpm (full load).

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.8 Failure to Meet Tests

In the event the apparatus fails to meet the test requirements of these specifications on the first trial, second trials may be made at the option of the bidder within 30 days of the date of the first trial. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be cause for rejection of the apparatus. Permission to keep or store the apparatus in any building owned or occupied by the purchaser or its use by the purchaser during the above-specified period with the permission of the bidder shall not constitute acceptance.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.9 Liability

The successful bidder shall defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.10 Exceptions

All exceptions shall be stated no matter how seemingly minor. Any exceptions not taken shall be assumed by the purchaser to be included in the proposal, regardless of the cost to the bidder.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.11 General construction

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

This apparatus will operate in a community that has many hills and transitions from steep grades (maximum 18%) to side roads. The community also has a level limited access highway. Design of the engine, powertrain, chassis, brakes and axles should take into consideration that this apparatus will driving up and down hills on every response.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.12 Commercial General Liability Insurance

The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

Products/Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage subject to the terms and conditions of the policy. The policy shall include owner as an additional insured as their interest may appear.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.13 Commercial Automotive Insurance

The successful bidder shall, during the performance of the contract keep in force at least the following minimum limits of commercial automobile insurance:

Each Accident: \$1,000,000

Coverage shall be written on a Commercial Automobile form.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.14 Umbrella/Excess Liability Insurance

The successful bidder shall, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

Aggregate: \$25,000,000, Each Occurrence: \$25,000,000

The umbrella policy shall be written on an occurrence basis and at a minimum provide excess to the Bidder's General Liability, Automobile Liability and Employer's Liability policies. Owner shall be included as an additional insured on the General Liability policy as their interest may appear.

The required limits can be provided by one or more policies provided all other insurance requirements are met. Coverage shall be provided by a carrier(s) rated A- or better by A.M. Bests.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverage listed above along with its bid. The certificate shall be made out to the purchaser. The Certificate of Insurance shall endeavor to provide that owner be given 30 days advance notice of cancellation or nonrenewal change in coverage.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.15 ISO Compliance

The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 1.16 NFPA Standards

This unit must comply with the NFPA standards effective January of 2013, specifically, NFPA 1901, Standard for Automotive Fire Apparatus, 2009 edition. Reference any item not specifically described in this document to NFPA 1901 or appropriate standard.

**We recognize that NFPA 1901 is a minimum standard and encourage the manufacturer to exceed the minimum requirements where practical.**

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_



A plate that is highly visible to the driver while seated shall be provided. This plate shall show the overall height, length, and gross vehicle weight rating.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications. An official of the company shall designate in writing who is qualified to witness and certify test results.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **1.17 Pump Test**

The pump shall be tested, approved and certified by Underwriter's Laboratory at the manufacturer's expense. The test results along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horse power curve and the manufacturer's record of pump construction details shall be forwarded to the Naugatuck Fire Department.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **1.18 Pre-construction Meeting and Inspection Trips**

A pre-construction conference shall be held at a mutually agreeable location. The conference shall be scheduled during normal business hours, Monday - Friday. The conference shall be held prior to the commencement of any work being done on the apparatus.

Factory sales and engineering personnel shall participate in the conference as needed to ensure that the apparatus fulfills all the requirements of the accepted bid. Authorized representatives from both the purchaser and manufacturer shall approve and sign any changes made during these meetings prior to the commencement of any work being done on the apparatus.

The bidder shall provide two (2) factory inspection trips for three (3) Naugatuck Fire Department representatives. The inspection trips shall be scheduled at times mutually agreed upon between the manufacturer's representative and the NFD. All costs such as travel, lodging and meals shall be the responsibility of the bidder and included in the bid price.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**1.19 Table of Contents**

A table of contents shall be provided with all proposals, for ease in locating items which shall be provided by the bidder.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**1.20 Maximum Overall Height**

The maximum overall height of the apparatus, including any mounted equipment, shall not exceed 11 feet. No exceptions

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**1.21 Maximum Overall Length**

The maximum overall length of the apparatus shall not exceed 33.5 feet. No exceptions.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**1.22 Warranty**

The pumper shall be warranted to be free from defects in materials or workmanship under normal use and service. Each manufacturer shall supply, as a part of their bid package, a copy of the warranty or warranties that they propose to provide, with options for extended warranties.

Manufacturer of apparatus (body and chassis) shall provide a 3-year bumper to bumper warranty with an option for a five (5) year warranty, if offered.

All other warranties, as outlined in these specifications shall be provided in writing as a part of the bid package.

Failure to provide the warranties as outlined throughout these specifications shall be cause for rejection of the bid package.

Each proposal will include a copy of all proposed warranties and all extended warranties that are standard with the individual components.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **1.23 Bid Bond**

All bidders shall provide a bid bond as security for the bid in the form of a 10% bid bond, to accompany their bid. This bid bond shall be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond shall be issued by an authorized representative of the Surety Company and shall be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond shall include language which assures that the bidder/principal shall give a bond or bonds, as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. The bidder's bonded warranty shall extend to the chassis and body, regardless of the manufacturer.

Proposals received from bidders who do not manufacture the chassis shall provide a warranty which shall be issued jointly and severally by, and signed by, both the bidder and the chassis manufacturer.

If the successful bidder does not manufacture the chassis, the bidder shall supply a separate warranty bond, in addition to their performance bond, along with their signed contract. This warranty bond shall guarantee all terms and conditions of the warranty and names both the bidder and chassis manufacturer as co-principals. This warranty bond shall be issued for the contract amount and shall remain in force for a term which is consistent with the term of the warranty quoted in the bid.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **1.24 Performance Bond**

The successful bidder shall provide, within thirty (30) days after award of contract, and along with a signed copy of the contract, a performance bond, which guarantees performance of all terms and conditions of the contract and warranty agreement. The performance bond will specifically cover the performance of the contract according to its terms and conditions, as well as payment of all related bills and encumbrances. This performance bond shall be issued by a surety company who is listed by the U.S. Treasury Department's list of approved sureties, as published in Circular 570, as of the bid date. The performance bond shall be issued in an amount equal to 100% of the contract amount and shall be dated concurrent to, or subsequent to, the date of the contract.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Section 2  
Scope of Work

## **Chassis and Vehicle Components NFPA 1901 Chapter 12**

### **2.1 General Scope of Work**

This proposal is to design, construct, and deliver to the Borough of Naugatuck (CT) Fire Department one (1) complete Class A rescue-pumper that conforms to the applicable requirements, current at the date of manufacture, of the National Fire Protection Association (NFPA) NFPA 1901, "Standard for Automotive Fire Apparatus. The apparatus will be delivered under its own power to Naugatuck, CT. The proposed apparatus will include:

### **2.2 Cab and Chassis Description**

The chassis will be a new, single rear axle, tilt-type custom fire apparatus. It will be designed and manufactured for heavy-duty service, with adequate strength and capacity for the intended load to be sustained for the type of service required.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Body constructed of extruded marine grade aluminum, 3/16" thickness. Aluminum grade used must have high resistance to corrosion.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

No preference or penalty given to cab and chassis manufactured in-house or supplied by a third party.

Chassis to be supplied with independent front suspension and front disk brakes. Manufacturer will provide front axle weight rating with the bid.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

4 door cab with full doors for the driver and front seat passenger, full doors for the rear passengers.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Single engine exhaust, exiting in front of rear wheels on passenger side. The NFD will supply a magnetic mount and transmitter for the department's Nederman building exhaust system.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Naugatuck Fire Department Rescue Pumper Engine Specifications-FINAL VERSION

Raised roof of at least 6". Roof not to exceed the height of the body.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Side Roll Protection: An advanced side roll protection system shall be provided.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Air bag protection system for front and rear seat passengers.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Automatic chassis lubrication will be installed.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Cabinet behind drivers and officers seat (in place of rear facing seats), each with hinged and painted door on exterior and roll up door on the interior.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Include rear fender liners (metal)

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Digital or analog speedometer mounted and visible to the front seat passenger while vehicle is in motion.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Manufacturer will supply certification as to crab angle and turning radius of chassis.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Interior surfaces of the cab, where practical, will have a padded covering. A sprayed on covering is not acceptable.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Design of cab to allow checking of transmission and motor oil without raising the cab.

Naugatuck Fire Department Rescue Pumper Engine Specifications-FINAL VERSION

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Tow hooks shall be ft the loop design and exit through the front bumper.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Fuel tank a minimum of 55 gallons.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.3 Dimensions

Total apparatus dimensions will not exceed: 11 feet in height with empty water tank, 33.5 feet in length, and minimum 95” cab width with a maximum width of 118” (no exception) between outside edges of any body components (i.e. mirrors, handles, etc). The rear roof of the cab should be at the same height as the top of the body.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.4 Tires / Wheels

All tires to be rated to axle capacity. Front axle tires will be highway tread and rear axle tires of a non-lugged design, Michelin brand preferred. Wheels will be polished aluminum disc, sized to match tires, with stainless steel hub covers and nut covers provided. An oil level viewing window will also be provided.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

One (1) set of single tire roller style chains.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.5 Mud Flaps

Mud flaps will be installed behind the front and rear wheels of the apparatus.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.6 Wheel Chocks

There will be one (1) pair of wheel chocks, with mounting brackets, located in front of the rear tires on each side of the vehicle.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.7 Anti-Lock Brake System

The vehicle will be equipped with an anti-lock braking system.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.8 Air Inlet/Outlet

One (1) air inlet/outlet will be installed with the male coupling located in the driver side lower step well of the cab. The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure. A mating female fitting will be provided with the loose equipment.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.9 Engine

The chassis will be powered by an electronically controlled diesel engine with a minimum of 450 horsepower at 1800 rpm and minimum torque of 1250 lb-ft at 1200 rpm. Engine to have an electric self-priming fuel pump

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.10 High Idle

A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.11 Engine Brake

An engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.12 Transmission and Rear End

A heavy duty Allison automatic transmission rated for emergency services will be provided.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Heavy duty rear end rated for emergency service. Bidder shall specify weight rating of rear axle with bid. Drive axle traction control or no-spin differential required.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.13 Front Bumper with Hose Tray**

Front bumper will include a hose tray, constructed of aluminum, placed in the center of the bumper. Cover shall be of aluminum construction that when opened, does not interfere with removing hose from compartment.

The tray will have a capacity of 150' of 2" double jacket cotton-polyester hose, drain holes along with black rubber grating will be provided in the bottom of the tray.

Discharge will be mounted on top of bumper with a swivel.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.14 Paint and Lettering**

Apparatus paint scheme will be two (2) tone with a primary color red. Paint break will be below the window line on the cab with white on the upper side, body will be all red except for compartment doors. One quart of touch-up paint for each color will be provided. Exact shades will be determined at pre-construction meeting.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Decal with Naugatuck Fire Department logo on driver side and passenger side rear doors. Decal to be provided by NFD.

Lettering to consist of "Naugatuck" on front of cab either under or above windshield, 3" high, yellow with black drop shadow.

Driver and passenger front doors to be lettered "Engine" in arched text with the number 3 under the arch. 3" high, yellow with black drop shadow.

Rear roll up door, "E 3", 6" high, yellow with black drop shadow.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.15 Reflective Stripes**

Reflective striping meeting NFPA 1901 is to be provided. Primary color of striping is to be white. Exact placement to be determined at pre-construction conference.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Rear reflective striping is to be red and fluorescent yellow green and include the rear compartment.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_



## Low Voltage and Warning Systems NFPA 1901 Chapter 13

### 2.16 Light Tower

Wilburt Nightscan 3.0 Powerlight NS-10 roof mounted with controls accessible by the officer in the cab and from the pump panel.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.17 Spare Circuits

Spare 12VDC circuits will be provided for customer installed devices such as computer, radio, chargers, etc.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.18 Floodlights

There will be seven (7) halogen floodlights provided with zoned (Front, DSide, PSide, Rear) switch control in the cab and on the pump operator panel. The lights will be located: one (1) centered front visor; two (2) on each side of the body, as high as possible, one front and one rear; two (2) on the rear body, as high as possible, one on each side.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Switches to operate lights shall be able to be operated by both the driver and officer and at the pump panel.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Floodlights shall be operated off the vehicle electrical system and be able to be used while vehicle is in motion.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.19 Rear View / Backup Camera

Rear view / backup camera with audio will be provided and easily viewed and controlled by the driver.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.20 Air Horn Controls

Air horns will be actuated by the horn button in the steering wheel, a button at the pump panel, and a foot switch on the officer side.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## 2.21 Sirens

A Federal Q2B will be located on the front bumper and actuated by foot switches on the officer and driver side. The siren brake switch will be located for easy reach by the driver and officer.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Electronic siren, Whelen model 295SL, with two (2) 100 watt rated speakers and Whelen Howler option.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## 2.22 NFPA Emergency Lighting

LED lighting will be used for the NPFA emergency lighting requirements. System will also include an Opticom signaling device mounted on the roof of the cab.

A Whelen Freedom model FN\*\*QLED light bar shall be mounted on the cab roof.

The length of the light bar shall be 72"

The light bar shall include the following:

- Four (4)) red flashing forward facing LED modules.
- Two (2) clear flashing forward facing LED modules.
- Two (2) red flashing front corner LED modules.
- One (1) red flashing driver side facing LED module.
- One (1) red flashing officer side facing LED module.

All the lenses shall be clear.

One (1) switch located in the cab, on the switch panel, shall control this lightbar.

The clear warning lights shall be turned off when the parking brake is set.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **HEADLIGHT FLASHER**

The high beam headlights shall flash alternately between the left and right side, with a control switch located on the cab instrument panel.

Alternating function shall be controlled by the programming of the ECU.

The flash mode shall automatically cancel when the hi-beam headlight switch is activated and when the parking brake is set.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**INTERIOR CAB DOOR WARNING LIGHTS**

Four (4) Whelen 500 LED flashing lights shall be provided. One (1) light shall be located inside of each cab and crew cab door pan. Each light shall be activated by the door jam switch of the associated door. The color of the lights shall be amber. The lights shall alternately flash whenever the corresponding door is open. These lights shall be mounted in a Whelen flange.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**SIDE ZONE LOWER LIGHTING**

Six (6) Whelen model 60\*02F\*R flashing "Super" LED lights shall be located at the following positions:

Two (2) lights, one each side on the bumper extension - red Super LED/red lens each side.

Two (2) lights, behind Crew Cab door, C1 - red Super LED/rd lens each side.

Two (2) lights, N/A - red Super LED/red lens each side.

The above six (6) lights will meet or exceed the lower level optical warning and optical power requirements of NFPA 1901.

The lights shall be controlled by a lighted switch on the cab instrument panel.

These lights shall be with three (3) pair of flange kits.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**REAR ZONE LOWER LIGHTING**

Two (2) Whelen model 60\*02F\*R flashing "Super" LED warning lights shall be located at the rear of the apparatus, required to meet or exceed the lower level optical warning and optical power requirements of NFPA 1901.

The color of these lights shall be red Super LED/red lens.

One (1) switch in the cab on the switch panel shall control these lights.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

**WARNING LIGHTS (Rear of Hose Bed)**

Two (2) Whelen model B6TM rotators with Super LED flashing warning lights shall be provided at the rear of the truck, one (1) each side.

Each light shall include a halogen light with dual rotating reflector and a model 70\*02F\*R Super LED flashing light mounted in a polished aluminum housing.

The beacons shall be provided with both domes red.

The color of the Super LED flashing lights shall be amber Super LED/clear lens.

The beacons shall be controlled by a switch in the cab, the LED lights shall be activated with the rear upper warning switch.

The rear warning lights shall be mounted on top of the compartments with all wiring totally enclosed. The rear deck lights shall be mounted on the beavertails high as possible.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **Driving and Crew Area NFPA 1901 Chapter 14**

### **2.23 Mirrors**

Driver and passenger side mirrors will be heated and adjustable with a remote control convenient to the driver. Extended "bus" type mirrors not acceptable.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.24 Electric Window Controls**

Each cab entry door will be equipped with an electrically operated window. The driver control panel will contain a control switch for each cab door window. All other door control panels will contain a single switch to operate the window within that door.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.25 Cab Heater/Air Conditioner**

The cab will have a heavy-duty heater and air conditioner system.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.26 Seating**

Three (3) Bostrom Battalion Crew SCBA back seats mounted against back wall of cab, facing forward.

The driver and officer seats will be cam action type with air suspension. Officer seat will be a Bostrom Battalion Crew SCBA back, driver's seat shall be a Bostrom model 911 Universal Drivers Seat 175656

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.27 Steering Wheel**

The steering wheel shall be able to tilt and telescope.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.28 Helmet Holder**

Five (5) helmet holder brackets will be provided. The bracket locations will be determined at time of final inspection.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.29 Intercom System**

A Firecom two (2) radio interface intercom system for five (5) positions will be provided with headsets and headset hangers located in the cab for the driver and officer. The driver and officer seat positions will have radio transmit capability.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **Body, Compartments, and Equipment Mounting NFPA 1901 Chapter 15**

### **2.30 Radio Equipment Location / Wiring**

The NFD will provide the following radio for installation: One (1) Motorola CDM-1250

The manufacturer will provide mounting locations and install the required radio interface cables in the cab within reach of the officer's seat, flush mount preferred.

One radio remote head with speaker at pump panel with option to plug in a headset.

There will be one (1) antenna mounting base, NMO style, located on the cab roof. Coax cable and antenna will be provided by the NFD for installation.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.31 Hose Bed**

Hose bed will accommodate from DS to PS: 400' of 3" / 1200' of 4.0" / 400' of 3" with two (2) adjustable hose bed dividers for separating hose. All hose is synthetic double jacketed.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.32 Hose Bed Cover

Vinyl hose bed cover with elastic (bungee) type hold downs. Snap or twist type hold downs are not acceptable.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 2.33 Compartments on Body

Maximum compartment space will be provided, minimum depth of 20" on all side compartments. Compartment flooring will be of the sweep out design. All compartments will be provided with adequate lighting on all levels.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

All body compartments will have a minimum of one (1) set of automotive style, dust resistant louvers pressed into the wall. The louvers will incorporate a one-way rubber valve that provides airflow out of the compartment and prevents water and dirt from gaining access to the compartment. All compartments will include a drip pan below the roll of the door and mounting tracks for supporting adjustable shelves.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Four (4) full height roll-up door compartments will be provided, two (2) on each side, one (1) before and one (1) behind of the rear wheels. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

One (1) roll up door compartment will be provided, located above the rear wheels, on the driver's side.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

One (1) or two (2) roll up compartments, located above rear wheel, on officer's side, refer to 2.35, Ladder Rack.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

One (1) roll up door compartment will be provided above the rear tailboard. All roll up compartment doors natural color (not painted). Closing of the doors will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand while wearing fire fighters gloves.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Lath sections will be interlocking rib design and will be individually replaceable without complete disassembly of the door. Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartment.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

All mechanical components of the doors will be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All roll up doors will be warranted against blistering, peeling, bubbling, lack of adhesion or any other manufacturing or material defect for a period of six (6) years and all roll up doors will be warranted against corrosion perforation for a period of ten (10) years. Ribbed rubber matting will be provided on all compartment floors.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.34 Powered Compartment Ventilation**

To achieve maximum moisture control, the six (6) side body compartments will be provided with a powered ventilation system that operates anytime shoreline power is connected. A control switch will also be provided in the cab.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.35 Pull-Out Tray**

There will be one (1) slide-out tray, without sides, and a capacity in the extended position of 500 pounds. Tray will slide out past compartment opening for its full depth. Locate in left rear compartment behind the wheels. It is the intention of the NFD to mount a Hurst hydraulic power unit, two 100' hydraulic hose reels, and a Hurst cutter and spreader in the rear compartments. Refer to 3.7, Miscellaneous Equipment

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.36 Adjustable Shelves**

There will be four (4) adjustable shelves with capacity of 500 pounds in the following locations: one (1) drivers side compartment in front of rear wheels; one (1) drivers side compartment behind rear wheels; one (1) passenger side compartment in front of rear wheels; one (1) passenger side compartment behind rear wheels. White reflective stripping on all exterior shelf edges.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.37 Hard Suction**

Two (2) lengths of hard suction hose with 6" diameter with 6" male and female NST couplings, Poly-Lite hose or equivalent.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Suction hose to be stored in a compartment(s) either in the rear of the apparatus in the hose bed OR on hydraulic ladder rack.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.38 Air Bottle Storage**

Storage for 6 (six) SCBA cylinders (Scott 30 minute, 4500 PSI) compartments will be provided with standard configuration in front and rear of rear wheels.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.39 Ladder Rack and Storage**

Hydraulic ladder rack, single arm design on passenger side. Rack capable of holding one (1) 28' 2-section extension and one (1)16' straight roof ladder, and one 10 foot folding "attic" ladder (Duo-Safety or Alco-Lite). Option for mounting two (2) lengths of hard suction hose.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.40 Booster Reel**

Booster Reel: One (1) plumbed aluminum hose reel (Haney) with electric rewind and 200' of Boostlite 1" hose to be mounted above pump panel with necessary rollers to provide easy deployment from either side of the apparatus. Control switch for operating the rewind function to be located mid ship on each side of the body.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.41 Long Handle Tool Compartment**

One (1) compartment for a minimum of two (2) long handle tools will be provided with access from the rear.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.42 Top Access Steps**

Fold down steps for access rear of hose bed. Steps will not interfere with deploying hose or opening rear compartment.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_



### 2.43 Cross Lay Hose Beds

Three (3) side by side cross lays capable from holding (from front to rear) 200' of 2" double jacketed hose, 200' of 2" double jacketed hose, and 300' of 2" double jacketed hose with nozzles stored on top of the cross lay inside the bed.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Cross lay hose bed shall have a hinged aluminum tread plate cover with magnetic locking mechanism when raised.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Bottom of hose bed for cross lay no higher than 60" from ground.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## Pump NFPA 1901 Chapter 16

### 2.44 Pump

Pump (Waterous or Hale) will be Class A type, 1250 gpm single stage mid-ship mounted, pump panel on drivers side, design and specifications as described in NFPA 1909, Chapter 16.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Pump drive shall be PTO, split shaft design (no pump and roll capability)

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Pump primer to be dry or oil-less design.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Pump panel, located on drivers side, to be aluminum or stainless steel. Main gages 6" diameter with individual discharge gages 2" in diameter. Pump panel gages and levels to be color coded.

Pump to include pressure or RPM type relief valve.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.45 Ball Intake Valves**

Two (2) TFT ball intake valves will be provided on the two side main pump inlets. Intake or cap shall not extend past the side board. Valves to have 6" male thread and removable reducer/adaptor to a 4" Storz connector.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.46 4" Discharge Outlet**

In addition to the standard discharge outlets, one (1) discharge outlet on the passenger side of the apparatus will be a 4" with 30 degree elbow, ending with a 4" Storz cap. Discharge and cap shall not extend past the side board.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.47 Front Discharge Outlet**

Must be capable of flowing 200 GPM to front pre-connect line. The discharge will have a 90-degree swivel and terminate with 1 1/2" NST.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.48 Side Discharge Outlets**

Two (2) 2 1/2 discharges on the pump panel and one (1) 2 1/2" discharge on the passenger side. Discharges to have 45 degree elbow and cap with reducer to 1 1/2 male thread.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.49 Rear Discharge Outlets**

Discharges for the 3" hose in each forward corner of the hose bed, both discharges with a 2 1/2 threaded male coupling. Each discharge tested to 500 GPM flow.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **Water Tank NFPA 1901 Chapter 18**

### **2.50 Water Tank**

Booster tank will have a capacity of 500 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Inc.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.51 Water Level Gauges**

One (1) lighted water level gauge at pump panel and two (2) high visibility color coded gauges mounted on the cab or body.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **Foam System NFPA 1901 Chapter 20**

### **2.52 Foam System**

A foam proportioning system will be provided that is suitable for all types of Class B foam concentrates, including high viscosity alcohol resistant Class B foams. One (1) 50 gallon foam tank (minimum) will be provided. Bypass educator style. Upon delivery, foam tank to be full with Universal Gold 1%-3% foam.

In addition, include ten (10) 5 gallon pails of Universal Gold 1%-3%. The foam system will be capable of supplying foam to the front bumper discharge only at a flow of 120 GPM through 200" of 1 3/4" hose.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

## **Line Voltage Electrical NFPA 1901 Chapter 22**

### **2.51 Generator**

Generator unit, minimum of 10KW PTO\hydraulic powered with a circuit panel located in forward compartment to right of pump panel. One (1) 100 foot cord reel (electric rewind) with power cord and junction box with four (4) 120VAC outlets with 15A twist lock outlets.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **2.52 Battery Charger / Shoreline Power**

A battery charger with internal battery saver will be provided and powered by shoreline. A shoreline receptacle will be located in the driver side lower step well of the cab that will operate any dedicated 120-volt circuits on the truck. A pilot light next to the receptacle will confirm proper operation. Automatic eject required.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

Section 3

## Equipment List

### 3.1 Tools and Equipment Supplied by the Dealer or Manufacturer

Unless otherwise noted, the manufacturer or dealer shall supply the equipment listed below and shall provide and install such brackets or compartments as are necessary to mount the equipment. A representative of the NFD will approve all equipment mounting locations prior to installation.

Using the FAMA equipment weight spreadsheet, we are estimating 3,900 pounds of equipment being carried on this vehicle.

### 3.2 Ground Ladders.

Supplied by manufacturer of the pumper. All ground ladders carried shall meet NFPA 1931. At a minimum, the following ladders shall be carried on the apparatus:

1. One straight 16' ladder equipped with roof hooks
2. One 28' extension ladder
3. One 12' attic ladder

Ladders to be aluminum fire service type, either Duo-Safety or Alco-Lite

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### 3.3 Suction and Supply Hose

Twenty (20) feet of hard suction hose (two 10-foot sections) with a suction strainer shall be furnished by manufacturer of the apparatus. The friction and entrance loss of the combination suction hose and strainer shall not exceed the losses listed in NFPA 1901. Hard suction hose supplied by vehicle manufacturer.

The Naugatuck Fire Department will supply the soft suction hose (4" with Stortz couplings) prior to delivery.

Compartment immediately to the right of the pump panel to hold (1) 25' and (1) 50' rolled 4" soft suction, supplied by the NFD.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **3.4 Nozzles (can be bid separately)**

Three (3) hand line nozzles (1 for front bumper, 2 for cross lays), TFT Dual Force, P/N HD-VPGL, 1 ½” thread or equivalent

One (1) TFT detent valve w\grip, P/N H-VOI and New York stack tip, P/N FSNYSTACK, 1 ½” thread or equivalent

One (1) TFT Foam Jet aspirator for front bumper line or equivalent

One (1) play pipe, with shutoff and 1 in., 1 1/8 in., and 1 1/4 in. tips, 2 ½” thread, TFT P/N H-2VPP and FS-3STACK or equivalent

One (1) 2 ½ adjustable nozzle, TFT P/N HD-2VPGI or equivalent

One (1) TFT Blitz-Fire combination package, P/N XXC-52 with XX-B storage bracket, mounted rear hose bed on driver’s side, 2 ½” thread or equivalent or equivalent

One (1) TFT P/N DQS40 1” thread, 40 GPM for booster line or equivalent

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **3.5 Fire Equipment (can be bid separately).**

Supplied by manufacturer or dealer, unless otherwise specified.

Two 8 lb flathead axe with “Pro Bar”, one set mounted in a cabinet and one set mounted in cab.

One 6 lb pick head axe mounted in a bracket fastened to the apparatus.

One 10 lb sledge hammer mounted in a bracket fastened to the apparatus

One 3’ “closet hook” mounted in a bracket fastened to the apparatus

One 6 ft pole with “NYC multi-hook” mounted in a rear cabinet (see 2.37)

One 8 ft pole with “NYC multi-hook” mounted in a bracket fastened to the apparatus (see 2.37)

Five (5) portable hand lights mounted in brackets fastened in the cab, Brightstar Model 500222 and four (4) Fire Vulcan LED Model C4 with power connections for all chargers..

One approved dry chemical Amerex model 423 portable fire extinguisher with a minimum 10A, 120-B:C rating mounted in a bracket fastened to the apparatus

## Naugatuck Fire Department Rescue Pumper Engine Specifications-FINAL VERSION

One 2 1/2 gal or pressurized water extinguisher mounted in a bracket fastened to the apparatus, Amerex model 240.

One AFFF Amerex model 250 AFFF foam extinguisher mounted in a bracket fastened to the apparatus.

Spanner wrench sets (3) for both sides and rear of apparatus ... Storz & standard

Two adjustable hydrant wrenches mounted in brackets fastened to the apparatus

One rubber mallet, suitable for use on suction hose connections, mounted in a bracket fastened to the apparatus

Two salvage covers, each a minimum size of 12 ft x 14 ft with gromets

One street broom

One long handle spade

One long handle flat shovel

One 6' pry bar

One 30" bolt cutters

One K-Tool with pouch

One A-Tool

One LDH squeegee/roller

Three hose / ladder straps

One 125gpm in-line, adjustable %, foam eductor w/ matching nozzle & aerator

Two wheel chocks, mounted in readily accessible locations, each designed to hold the apparatus as per NFPA 1901.

One traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, *Standard for High-Visibility Public Safety Vests*, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front

Five fluorescent orange traffic cones not less than 28 in. in height, each equipped with a 6 in. retro-reflective white band no more than 4 in. from the top of the cone, and an additional 4 in. retro-reflective white band 2 in. below the 6 in. band

Five illuminated warning devices such as highway flares, unless the five fluorescent orange traffic cones have illuminating capabilities

Two (2) 100' hydraulic reels for Hurst rescue tools, with Streamline connectors and pigtail to connect to a Hurst Simo power unit. Mounting location in left rear compartment.

Bidder Complies or Agrees: Yes\_\_\_ No\_\_\_

### **3.6 Hose Adapters (can be bid separately)**

Kocheck brand:

- 1 - 1 1/2" x 1 1/2" double male NST adapter
- 1 - 1 1/2" x 1 1/2" double female NST adapter
- 1 - 1 1/2" female x 1" male reducer NST
- 1 - 1" female x .75" male reducer NST
- 1 - .75" female NST x male garden hose reducer
- 2 - 2 1/2" x 2 1/2" double male adapter NST
- 2 - 2 1/2" x 2 1/2" double female adapter NST
- 1 - 2 1/2" male x 1 1/2" female bushing NST
- 2 - 4 1/2" female NST x 4" Storz adapter
- 1 - 4" Storz x 5" Storz adapter
- 1 - 4" Storz x 2 1/2" male NST adapter
- 2 - 2 1/2" hydrant gate valve NST (stem type)
- 1 - 2 1/2" NST x 4" Storz hydrant gate valve (stem type)
- 1 - 2 1/2" x 2 1/2" double siamese NST
- 1 - 2 1/2" x 2 1/2" gated wye
- 1 - 4" Storz x 2 1/2" x 2 1/2" NST water thief
- 2 - 2 1/2" x 1 1/2" reducer NST
- 2 - 2 1/2" x 1 1/2" gated wye NST
- 2 - 2 1/2" x 2 1/2" in-line armored pressure gauge

### **3.7 Rescue Equipment (can be bid separately)**

1) One low pressure rescue bag set consisting of two (2) lifting bags with minimum 10,000 pound lifting capability, manifold, controller, air hoses and related accessories.

2) Two (2) thermal imager cameras, designed for use in a firefighting environment with the following features:

A) Camera shall have a vanadium oxide micro-bolometer

B) Operates on rechargeable and removable NiMH battery with the capability to use AA batteries. Camera rated to operate a minimum of two hours on a fully charged battery.

C) Two (2) vehicle mounting brackets with battery charger. The mounting locations will be selected during the pre-construction conference.

- 3) One (1) Stihl Fire/Rescue chain saw with guide
- 4) One (1) Hydra-Ram forcible entry tool

### **3.7 Miscellaneous Equipment Supplied by NFD**

The NFD will provide one (1) hydrant assist valve and mounting bracket for installation on rear or apparatus. Mounting location to be determined at pre-construction meeting.

One (1) automatic external defibrillator (AED with adult and pediatric pads and first aid kit.

The NFD will provide five (5) SCBA units, complying with NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services, for each assigned seating position, prior to delivery. Four mounted in seat brackets and one for the driver in a cabinet.

The NFD will supply one (1) spare SCBA cylinder for each SCBA carried, each one stored in a specially designed storage space (see 2.34)

With the exception of the hard suction and booster line, all hose will be provided by the Naugatuck Fire Department prior to delivery.

One (1) Hurst Simo gasoline powered power unit, one (1) JL-500 cutter, one (1) JL-27 spreader, and three (3) rams for mounting in rear compartment. Power unit and spreader on slide out tray-refer to section 2.35, Slide Out tray.