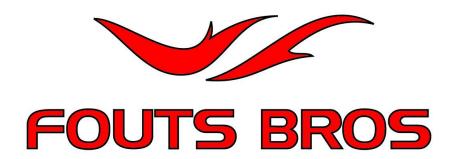
One (1)

== ADMINISTRATIVE - MINI-PUMPER - 6.100 11/19/20 == One (1) 00-BD-0140



# MINI-PUMPER

Fouts Bros. 2158 Atlanta Road Smyrna, GA 30080 1-800-948-5045

One (1) 00-BD-1009

### **SCOPE AND GENERAL REQUIREMENTS**

It is the intent of the manufacturer to provide a new fire apparatus that will withstand the continuous use encountered in the emergency fire fighting service. The apparatus shall be of the latest type, symmetrically proportioned and constructed with due consideration of the load to be sustained.

All parts not specifically mentioned herein, but which are necessary in order to furnish a complete fire apparatus, shall be furnished and shall conform to the best practices known to the fire apparatus industry.

The unit is to be of current year manufacture, and is to be new and unused. The bid price shall not include any local, State, or Federal taxes. The Bidder shall not be liable for any State or Federally mandated tax or program after the sale of this apparatus.

These specifications shall be construed as minimum. Should the manufacturer's current published data or specifications exceed these, they shall be considered minimum and be furnished.

### PRIME BIDDER, MANUFACTURER

The manufacturer shall be prime bidder and shall identify the location of their facility.

### **BIDDERS BACKGROUND**

Bids are requested from responsible manufacturers who are engaged in the manufacture of fire apparatus. To insure reliable and complete acceptance of the apparatus, bidder shall have been in operation for a minimum of twenty (20) years in the manufacturing of fire apparatus.

The manufacturer of the apparatus must be fully owned and managed by a Parent Company, Corporation, or Individual(s) that is 100% held by United States of America based Company, Corporation, or United States citizen(s).

Proposals from any manufacturer that is fully or partially owned and/or operated by a foreign company, Corporation or Individual(s) under any type of ownership, partnership, or any similar type of agreement will be immediately rejected.

If the manufacturer of the apparatus, or if any owner, shareholder, or immediate relative of an owner or shareholder that has previously been involved in or held ownership in any company that has filed bankruptcy or any other type of reorganization plan, it must be clearly stated in the bid proposal. The statement must include details and dates of all occurrences.

### **FAMA COMPLIANCE**

The apparatus manufacturer must be a current member of the Fire Apparatus Manufacturer's Association (FAMA) and must provide certificate of membership.

### FAIR, ETHICAL AND LEGAL COMPETITION

In order to ensure fair, ethical, and legal competition the apparatus manufacturer shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

### **PROPRIETARY PARTS**

It is the intention of the purchaser for all bidders to furnish the apparatus with major parts commonly used by the heavy-duty truck manufacturers and open market vendors where as replacement parts are more readily available and at reduced cost. The use of proprietary parts may not be acceptable to the purchaser.

### MANUFACTURER'S DISCRETION

Materials, parts, or procedures used are subject to change at manufacturer's discretion at any time to provide equal or better products.

One (1) 00-BD-1016

#### MANUFACTURING LOCATION

The apparatus shall be manufactured in La Grange, Texas. One (1) 00-BD-1020

### PRODUCT QUALITY AND WORKMANSHIP

The components provided and workmanship performed shall be of the highest quality available for this application. Special consideration shall be given to the following areas:

- A). Accessibility to various components that require periodic maintenance or lubrication checks.
- B). Ease of vehicle and pump operation.
- C). Features beneficial to the intended operation of the apparatus.

Construction of the complete apparatus shall be designed to carry the loads intended to meet the road and terrain conditions and speed requirements desired when specified by the purchaser.

Welding shall not be employed in the assembly of the apparatus in a manner that will prevent the removal of any major component part for service and/or repair.

One (1) 00-BD-1030

### **PAYMENT TERMS**

Full payment for the apparatus shall be made at time of delivery of the completed vehicle. Due to insurance liability, the apparatus will not be left at the purchaser's location without full acceptance and payment or prior agreement between the Purchaser and Bidder.

Final delivery price shall not include any Local, State or Federal taxes. The manufacturer shall not be liable for any State or Federal mandated tax or program after sale or delivery of the apparatus.

One (1)
90-99-9996

#### VEHICLE ACCEPTANCE AND DELIVERY

The customer shall pickup the vehicle at the manufacturing facility and shall supply evidence of sufficient insurance coverage to transport the vehicle.

One (1) 90-99-0215

### **FUEL TANK FILLED AT DELIVERY**

The fuel tank and DEF tank (if applicable) shall be filled upon final delivery at the factory. One (1)

== WARRANTY- MINI PUMPER - 6.100 11/19/20 == One (1) 00-WT-1001

### ONE YEAR APPARATUS WARRANTY

The complete apparatus detailed herein shall be warranted against defects in materials and workmanship for a period of twelve (12) months, effective upon pick up or delivery of the completed apparatus to the purchaser, as detailed in the respective warranty documents. Any unauthorized alterations or modifications to the apparatus shall void this warranty.

Other warrantees, as provided by individual component manufacturers may extend beyond this warranty.

One (1) 00-WT-1007

### APPARATUS BODY WARRANTY, TEN YEAR

The apparatus body as detailed herein shall have a structural warranty against defects in materials and workmanship for a period of ten (10) years, effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the body shall void this warranty.

One (1) 00-WT-1010

### PLUMBING WARRANTY, TEN YEAR

A Stainless Steel Plumbing/Piping warranty shall be provided by the apparatus manufacturer for products of its manufacture to be free from defects in material and workmanship, under normal use and service, for a period of ten (10) years effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the plumbing shall void this warranty.

One (1) 00-WT-1016

## PAINT WARRANTY, FIVE YEAR

The finish paint as used on the proposed apparatus shall be warranted against defects in materials and workmanship for a prorated period of five (5) years, effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the apparatus shall void this warranty.

One (1) 00-WT-1107

### APPARATUS ELECTRICAL WARRANTY, TWO YEAR

The apparatus electrical system as detailed herein shall have a electrical warranty against defects in materials and workmanship for a period of two (2) years, effective upon final payment in full by the Purchaser, and pick up or delivery of the completed apparatus to the Purchaser. Any unauthorized alterations or modifications to the electrical system shall void this warranty.

One (1)

== DIMENSIONS - MINI-PUMPER - 6.100 11/19/20 == One (1) 03-01-1115

### **APPARATUS DIMENSIONS**

These are standard truck dimensions. Changes in configuration or additional options may affect these dimensions. The contract specification shall contain the exact dimensions.

One (1) 03-01-1128

#### **OVERALL HEIGHT**

The overall height shall be less than 96.00". One (1) 03-01-1155

### **OVERALL LENGTH**

The overall length shall be no longer than 26.00'. One (1) 03-01-1180

### **OVERALL WIDTH**

The overall width of the body shall be 96.00" wide; chassis mirrors will extend out past this width. One (1) 03-01-2015

### ANGLE OF APPROACH

The angle of approach for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901/ 1906.

One (1) 03-01-2115

### ANGLE OF DEPARTURE

The angle of departure for the apparatus shall not be less than eight (8) degrees as specified by the current edition of NFPA 1901/ 1906.

One (1)

== NFPA 1906 REQUIREMENTS - BRUSH/ WILDLAND/ LD RESCUE - 6.100 11/19/20 == One (1) 02-01-1050

### **COMPLIANCE**

The fire apparatus shall be built to the purchaser's requirements in compliance to all State, Local, and Federal highway safety requirements. The vehicle is not intended to meet any or all standards of the NFPA.

One (1) 10-10-9176

### **CAB SAFETY SIGNS**

The following safety signs shall be provided in the cab:

- One (1) FAMA 10 sign shall be visible to the driver. "Flying Object Crash Hazard. All
  equipment required to be used in emergency response must be securely fastened. Loose
  items may injure or kill during a crash."
- One (1) FAMA 07 sign shall be visible from each seat. "Crash Hazard. Occupants must be seated and belted when vehicle is in motion. Use only OEM approved belts. Unbelted occupants
- One (1) FAMA 15 sign shall be visible from each seat. "Crash Hazard. Do not wear helmet while seated. Serious head or neck injury may result from helmet use in cab. Failure to comply may injureor kill."
- "Do Not Move Apparatus When Light Is On" sign adjacent to the warning light indicating a hazard if the apparatus is moved (as described in subsequent section).

One (1) 10-10-9202

### "NO RIDE" LABEL

A label shall be located on the vehicle at the rear step areas, and at any cross walkways, if they exist. The label(s) shall warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

One (1)

== CHASSIS, COMMERCIAL - FORD/ RAM - 6.100 11/19/20 == One (1) 03-06-4023

### COMMERCIAL CHASSIS SPECIFICATION

### **CHASSIS PROVIDER**

The chassis, as detailed in these specifications, shall be ordered and supplied by the apparatus manufacturer.

One (1) 03-07-7403

### **CHASSIS**

One (1) new FORD F-550 rear axle drive 4x4, dual rear wheels (DRW), four (4) door crew cab and chassis with XL trim.

Wheelbase: 179.70" Cab to Axle: 60.00"

One (1)

03-07-9120

GVWR: 19,500 pounds

Steering: Hydraulic power-assist re-circulating ball

Driving Front Axle and Suspension: HD front package, firm ride suspension package, mono-beam non-indenpendent front suspension, anti-roll bar, HD front shocks, HD front coil springs

Rear Axle and Suspension: wide track, rigid rear axle, HD rear suspension package, anti-roll bar, HD rear leaf springs, HD rear shocks

Braking System: four (4) wheel disc brake system with front and rear vented discs and Anti-Lock (ABS)
One (1)
03-08-6378

Transfer Case: Electronic Shift-on-the-fly cab controlled high and low range HD front package, stabilizer bar, front shocks, with auto/manual locking hubs and rotary switch on dash.

One (1)
03-08-7460

#### SKID PLATE

Transfer Case Skid Plate Shield One (1) 03-08-2650

#### **POWERTRAIN**

Powerstroke 6.7L V-8 OHV direct diesel injection 32 valve intercooled turbo diesel engine.

Rated Brake Horsepower: 300 HP @ 2800 RPM

Rated Torque: 660 lb.-ft. @ 1,600 rpm

Stationary Elevated Idle Control, SEIC

Exhaust System: horizontally mounted, discharge on right side aft of wheels

One (1) 03-08-344W

Transmission: Six speed automatic with overdrive.

One (1) 03-08-3480

### FIRE/ RESCUE PREP PKG w/EPA SPECIAL EMISSIONS (LPO)

Includes 7,000 lbs. max front springs/GAWR rating for configuration selected. Incomplete vehicle package - requires further manufacture and certification by a final stage manufacturer. Ford urges Fire/Rescue Vehicle manufacturers to follow the recommendations of the Ford Incomplete Vehicle Manual and the Ford Truck Body Builders Layout Book (and pertinent supplements). NOTE 1: Stationary Elevated Idle Control (SEIC) has been integrated into the engine control module. NOTE 2: Engine calibration significantly reduces the possibility of depower mode when in stationary PTO operation. NOTE 3: Operator commanded regen allowed down to 30% of DPF filter full, instead of 100%. NOTE 4: Must meet the definition of an Emergency Vehicle, an Ambulance or Fire Truck per 40 CFR 86.1803.01 in the Federal Register. NOTE 5: California Code of Regulations allows for the sale of Federally certified emergency vehicles in California. Includes:

- Dual Extra Heavy-Duty Alternators (Total 377-Amps)
- Operator Commanded Regeneration (OCR) Includes active regeneration inhibit.

One (1) 03-08-7416

### MANUAL REGENERATION

A push button switch on the dash to initiate manual DPF regeneration. One (1) 03-08-3560

Fuel Tank: 40 gallon aft-axle with auxiliary fuel tap, to provide fuel to an auxiliary truck body mounted diesel engine (if applicable).

One (1) 03-08-3622

### **REAR AXLE RATIO**

The ratio of the rear axle shall be 4.88 limited slip. One (1) 03-08-2870

Engine Block Heater One (1) 03-08-3952

#### **CAB TYPE**

Conventional, engine forward, four (4) door crew cab

Construction: Welded steel

#### Accessories:

- Solar Tinted glass in all windows
- Dual sun visors
- Electric windshield washer
- Dome light
- Fresh air heater and defroster
- Dual electric horns
- Driver and passenger air bags
- Gray Vinyl Upholstery
- Roof Clearance Lights
- Black vinyl full floor covering
- 12V Auxiliary Power Point
- Black Fender Moldings

Headlamps: dual beam jewel effect

Climate Controls: controls for heat, defroster, and air conditioning

Mirrors: black manually telescope fold-away in/out for view adjustment.

#### Instrumentation:

- Tachometer
- Speedometer
- Turbo boost (diesel only)
- Oil pressure
- Coolant temperature
- Fuel gauge
- Transmission temperature gauge
- Indicator lights & Message Center/odometer, trip odometer, engine hour meter & warning messages.

One (1) 03-08-4802

### **POWER EQUIPMENT GROUP**

The electrical power equipment group shall be provided on the chassis. The option package shall include power door locks, power side windows and a momentary down driver's window.

One (1)

03-08-7951

### **CAB SEATING**

The front seating shall consist of a heavy duty vinyl 40/20/40 split front bench seat w/center armrest, cup holder, storage and manual driver-side lumbar support

One (1) 03-08-7971

### **REAR CAB SEATING**

The rear seating shall consist of a heavy duty vinyl 60/40 bench flip-up/fold-down rear seat. One (1) 03-08-6404

### **XL VALUE PACKAGE**

Tilt Steering Wheel One (1) 03-08-7251

### **AUDIO**

AM/FM stereo, single CD/ MP3 Player w/digital clock & 4-speakers.

Auxiliary audio input jack One (1) 03-08-7301

### **GRILLE**

Black painted One (1) 03-08-7315

### **BUMPER**

Chrome Steel with grained MIC top cover. One (1) 03-08-7419

Cruise control One (1) 03-08-7019

### **WHEELS**

Six (6), 10-hole Disc, 19.50" x 6.00" RW Steel One (1) 03-08-7205

### **TIRES**

Six (6) 225/70Rx19.5G black side wall traction tires shall come supplied from ford with the chassis. One (1) 03-08-7900

#### FORD SUPERDUTY WARRANTY

Description	Months/Distance
Basic	36 month/36,000 miles
Powertrain	60 month/60,000 miles
Corrosion Perforation	60 month/unlimited mileage
Roadside Assistance	60 month/60,000 miles
Diesel Engine	60 month/100,000 miles
One (1) 10-11-7600	
10-11-7600	

### **CHASSIS PAINT COLOR**

The cab shall be painted a single color by the chassis manufacturer.

Color: Ford Race Red

Paint Number: PQ

One (1)

== CHASSIS MODS - MINI PUMPER - 6.100 11/19/20 == One (1) 10-12-0009

### CHASSIS MODIFICATIONS

The following modifications and installations shall be performed on the chassis upon delivery to the apparatus manufacturer:

One (1) 04-01-4457

#### STEP BARS

One (1) set of black powder coated steel step bars shall be mounted to each side of the chassis. There shall be a slip resistant step pad located bellow each chassis door.

One (1)
04-02-5300

### FRONT MOUNTED WINCH

A WARN model M12000 electric winch with 12,000 pound (5,440 kg) rated line pull shall be installed in the brush guard. The winch shall be equipped with 125.00' of 3/8" diameter wire rope, clevis hook

and a 4-way roller fairlead. The winch shall be operated through a 12.00' pendant with a hand held control. The winch shall include an automatic mechanical cone brake. It shall feature an easy to use free-spooling rotating ring gear clutch.

The installation shall maintain access to the winch controls. One (1) 04-01-7020

### **GRILLE GUARD**

A Warn model 98090 Trans4mer Gen II grille guard shall be provided and installed on the front of the chassis. The grille guard kit shall be provided with a <u>black finish</u>.

### **HEADLAMP GUARD**

A Warn model 98095 Trans4mer Gen II headlamp guard kit shall be installed. The headlamp guard kit shall attach to the grille guard. The headlamp guard kit shall be provided with a <u>black finish</u>.

One (1)
04-01-7040

### WINCH CARRIER - LARGE FRAME - BLACK FINISH

A Warn model 90110 large frame winch carrier shall be installed in grille guard. It shall be capable of carrying Warn winch models 16.5ti, M15, M12, and M8274-50.

The winch carrier shall have a powder coated <u>black</u> finish. One (1) 04-05-6500

### **TOWING HITCH RECEIVER**

A trailer towing hitch receiver with safety chain anchors shall be installed at the rear of the apparatus.

The hitch receiver shall be constructed of heavy steel tubing and reinforced to the apparatus framework. The hitch receiver shall have a Class V rating of 16,000 pounds towing and 1,600 pounds tongue weight when used with a weight distributing hitch assembly.

The receiver shall accept a 2.00" hitch. One (1) 04-05-7050

One (1) 7-prong connector with a weatherproof cover shall be supplied and mounted near the rear receiver tube.

One (1) 10-10-9262

### TIRE PRESSURE MANAGEMENT

There will be a RealWheels LED AirSecure™ tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.

One (1)
04-01-6462

### WHEEL COVERS

Each wheel shall have one (1) stainless steel wheel cover installed. One (1) 10-14-7090

### **CHASSIS TOW HOOKS**

The front tow hooks shall be provided as detailed in the chassis specifications. One (1) 10-14-7204

### **REAR TOW PLATES**

Two (2) rear tow plates with 1.50" I.D. holes, constructed with 1.00" steel plate shall be provided on the apparatus. These shall be located below the apparatus body and fastened to the rear chassis frame rails.

One (1) 10-14-7301

### FRONT MUD FLAPS

A pair of black rubber mud flaps shall be provided as detailed in the chassis specifications. One (1) 10-14-7312

### **REAR MUD FLAPS**

A pair of black rubber mud flaps, with the Manufacturer's logo, shall be provided and installed behind the rear wheels.

One (1) 10-12-1170

### **CENTER CONSOLE**

A center console fabricated from aluminum shall be furnished and shall be located between the driver and officer's seats.

The forward area of the console shall have a mounting surface for emergency lighting switch panels and/or electronic siren control boxes within reach of the driver or officer.

One (1) CS-HV-2015

### **SIREN MOUNT**

A bracket shall be supplied with the console to mount the specified Whelen 295SLSA1 siren head. One (1) CS-JT-6025

#### **CUP HOLDERS**

Two (2) cup holders shall be provided and installed in the console. One (1) 10-14-8811

### **ROCKER SWITCH PANEL - SIX (6) POSITION**

A lighted six (6) position rocker type switch panel shall be installed to provide the ability to de-activate individual lighting units. The switches shall be Carling Contura II series rocker switches.

A rocker switch with a blank legend installed directly below shall be provided for any position without a switch and legend designated by a specific option. The non-specified switches shall be two-position, black switches with a green indicator light. Each blank switch legend can be custom ordered by the department once the apparatus is in service. All switch legends shall have backlighting provided.

One (1) EL-ES-1025

### **SWITCH PANEL LOCATION**

The switch panel shall be located on the center console. One (1) 10-10-9225

### **BATTERY SYSTEM**

The battery system shall be supplied with the chassis.

One (1) 10-49-0008

#### MASTER BODY DISCONNECT SWITCH

A master body disconnect on/off switch shall be provided in the cab, near the driver's door. The switch shall disconnect the power to the apparatus body when the ignition switch is in the off position.

One (1) reset breaker shall be installed between the solenoid output and any electrical load. One (1)

10-49-0020

One (1) indicator light shall be provided to indicate the apparatus 12-volt system is on. The light shall be located in the chassis cab and be visible from the driver's positions. The light shall be green in color and labeled "Master Battery".

One (1) 10-56-1015

### BATTERY CHARGER, BUILT-IN BATTERY SAVER

One (1) Kussmaul Auto Charge #1000 Series Model #091-215-12, 15 amp battery charger and 3 amp Battery Saver shall be installed. The charger shall include a Model #091-199-001 remote digital display.

The Auto Charge 1000 with Parasitic Load Compensation (PLC) is a compact, microprocessor controlled, completely automatic, single channel battery charger designed for vehicles with a single battery system. The PLC charger is designed to withstand the shock and vibration encountered by vehicle mounted equipment.

The Battery Saver component shall eliminate drain on vehicle's battery system when vehicle is not in use. The system shall automatically disconnect auxiliary vehicle loads from battery when the charger is energized.

Parasitic Load Compensation feature is designed especially to meet the heavy duty requirements of emergency vehicles. Parasitic load compensation allows you to input the total number of parasitic load amps on the vehicle. Then the charger will shift the absorption stage set point so the battery voltage will drop to the float voltage when the desired current is reached. This will lead to a longer battery life and no overcharging or overheating.

The charger shall have the following operational specifications:

- a) 120 volts AC input at 3.5 amps
- b) Battery Charger: 12 volts DC output at 15 amps

- c) Battery Saver: 3 amps 12 volt DC output
- d) 8 Pin Selector Switch on front panel
  - a. Battery Type: Lead-Acid, Gel Cell, AGM or Odyssey
  - b. Float / 3-Step
  - c. Battery Saver ON/OFF
  - d. Parasitic Load Compensation
- e) AC power applied light on front panel
- f) System LED Status Indicator on front panel
- g) Dimensions of: 9.35" high x 5.9" wide x 4.725" deep and weighs 11 lbs.

### 120 VOLT SHORELINE CONNECTION - "SUPER" AUTO EJECT

One (1) Kussmaul "Super" Auto Eject model 091-55-20-120, automatic, 120 volt, 20 amp shoreline disconnect shall be provided for the on board, 110 volt battery charging systems.

The disconnect shall be equipped with a NEMA 5-20P female receptacle, which shall automatically eject the shoreline when the vehicle starter is energized. The mating connector shall be included with the auto eject and shall be provided as loose equipment.

One (1)

10-56-1091

#### **BATTERY CHARGER DISPLAY/ COVER**

One (1) Kussmaul model 091-55-234-YW universal single battery bank voltage display/ auto eject cover shall be supplied with the charger.

The cover shall be Yellow in color. One (1)

10-56-3510

#### **ELECTRICAL INLET LOCATION**

An electrical inlet shall be installed near the wheel well, on the left hand side of the body. One (1)

10-49-0011

#### **BACK-UP ALARM**

One (1) 97 DB back up alarm shall be provided and installed at the rear of the unit. It shall be wired to activate when the transmission is placed in reverse.

One (1)

== CET SKID - MINI PUMPER - 6.100 11/19/20 == One (1) 10-23-0020

### **REAR PUMP "DROP IN"**

The pump shall be mounted at the apparatus rear, mounted in the open rear cavity of the body. One (1) 10-16-0060

### **ELECTRIC START WIRING TO CHASSIS**

The 12 volt positive and negative cables shall be provided from the chassis battery to the fire pump area, wired through the master disconnect solenoid system.

One (1)
10-16-1950

### PORTABLE PUMP, GASOLINE

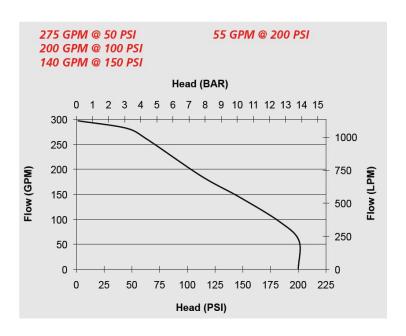
The pump shall be a CET DI-PFP-20hpHND-MR single stage centrifugal pump, bolted directly to the engine, with a 2.50" Victaulic suction inlet, and a 1.50" flange discharge outlet.

The volute and pump head shall be a lightweight, high strength, seawater resistant, aluminum alloy. The impeller shall be a bronze enclosed type for maximum efficiency, fully machined and balanced. The engine crankshaft shall serve as the pump shaft, with the impeller mounted directly on the crankshaft. The shaft seal shall be self-adjusting, self-lubricating, and mechanical type.

The pump piping shall be flexible to prevent any breakage caused by vibration.

The pump shall be capable of a maximum discharge volume of 275 GPM. at 50 PSI, and a maximum discharge pressure of 200 PSI while pumping 55 GPM.

The performances are based on a maximum altitude of 500ft and any higher elevation will lower the pump performance. The standard engine performance drops 3% for every 1000 ft.



### **PUMP ENGINE**

The pump shall be driven by a 4-stroke Honda gasoline powered, 20 horsepower engine. The engine shall be air-cooled, 12-volt electric start.

One (1)

00-WT-1024

### THREE YEAR FIRE PUMP WARRANTY

A three (3) year warranty for the CET fire pump shall be provided. One (1) 10-16-3397

### REMOTE FUEL TANK

The pump engine shall be supplied by an external 3.00 gallon fuel tank. It will be large enough to run the pump motor for one (1) hour at its rated capacity and pressure as per NFPA 1906, 8.10.1. Tank will be mounted with ease of filling in mind.

One (1) 10-16-3830

#### PRIMER- EXHAUST

The pump engine shall be equipped with an quieter exhaust venturi type primer capable of 15.00' – 20.00' lift for fast positive priming. The control for the primer shall be capable of being operated by a person operating controls at the primary pump operator's position.

One (1)

10-16-3635

### **PUMP CONTROLS**

A control panel shall be supplied and installed on the pump. The controls shall consist at a start switch, throttle and choke cable controls, hour meter, 2.50" diameter discharge pressure gauge and a work light.

One (1) 10-25-2000

### **HOSE THREADS**

All hose threads shall be NST on all base threads on the apparatus intake and discharges, unless otherwise specified.

One (1) 10-25-2010

#### **LABELS**

All controls, inlets, and discharges shall be clearly labeled. The labels shall comply with applicable NFPA standards.

One (1) 10-25-3015

#### SUCTION PIPING

All piping on the suction side shall be made of stainless steel (welded joints), painted red. The suction piping, the pump and the discharge shall be tested to 400 PSI.

One (1)

10-25-3020

The suction piping shall consist of a 2.50" tank to pump line with a 2.50" flexible rubber hump hose to minimize flex and vibration between the pump and the tank.

#### RIGID PIPING SHALL NOT BE ACCEPTABLE.

Between the tank and the pump there shall be a 2.50" industrial valve. This valve shall remain open to pump from the tank.

This pipe shall have a tee into the suction side of the pump and shall continue to the rear of the truck for overboard suction where there shall be an additional 2.50" Industrial Valve.

The overboard suction connection shall have a 2.50" NST male adapter and a 2.50" NST-F cap with retaining cable.

To draft, the tank to pump valve shall be closed, a suction hose connected to the overboard suction connection and placed in a static water supply, and the primer activated.

One (1) 10-25-3050

The overboard suction connection shall have a 2.50" NST male adapter and a 2.50" NSTF cap with retaining cable.

One (1) 10-25-3135

### **DISCHARGE PIPING**

All piping shall be stainless-steel piping or high-pressure flexible hose. A 2.50" X 2.50" square stainless-steel manifold shall be piped directly to the discharge outlet of the pump. Attached to this discharge manifold, by means of welded stainless-steel pipe nipples, shall be all the discharge valves. All piping shall be painted red to match the pump.

The discharge shall be equipped with a drain valve at the lowest point. One (1) 10-25-3150

#### **TANK FILL**

There shall be a 1.00" valve piped from the discharge manifold as a means for refilling the tank. The valve shall be an industrial quarter turn valve handle and 1.00" NPT threads, and shall be connected to the tank fill port by 1.00" high pressure flexible hose.

One (1)
10-25-3185

# One (1) 2.50" DISCHARGE TO REAR

There shall be One (1) 2.50" valve piped from the discharge manifold to the rear of the truck for connection of forestry hose. Each valve shall be an industrial valve with handle and terminate with a 2.50" male NST threads. Each valve shall be furnished with a 2.50" NST cap and chain.

One (1)
10-25-3560

### 1.50" DISCHARGE TO PRECONNECTED HOSETRAY

There shall be One (1) 1.50" valve piped from the discharge manifold to the hosetray One (1) discharge line(s). The valve(s) shall be an industrial valve with handle and be connected to the hosetray(s) by high pressure flexible plumbing.

One (1)

30-AC-3350

The pre-connected discharge shall terminate with a chicksan swivel adapter with 1.50" male NST threads.

One (1) 10-25-3720

### DISCHARGE TO BOOSTER REEL

There shall be a 1.00" valve piped from the discharge manifold to the booster reel. The valve shall be an industrial, quarter turn valve handle and 1.00" NPT threads, and shall be connected to the reel by 1.00" high pressure flexible hose.

One (1) 10-26-0003

#### **BOOSTER HOSE REEL**

One (1) HANNAY painted steel booster reel with electric rewind shall be supplied and installed. The reel shall be capable of carrying 150.00' of 1.00" booster hose.

The reel shall have a 1.00" Female NPT inlet connection with a 90 degree ball bearing swivel joint. The reel shall have a 1.00" Male NST outlet.

The reel shall have an auxiliary gear-driven crank rewind that shall be easily accessible. One (1) 10-26-2510

### **REEL LOCATION**

The booster hose reel shall be installed on the center top of the water tank so the hose will exit either the right or left sides of the apparatus.

One (1) 10-26-3502

Two (2) hose reel rewind switches shall be installed, and properly labeled. Each switch shall be a weather-resistant momentary push button switch. They shall be located one (1) each side of the body, above the rear wheel well.

One (1) 10-26-4003

The reel shall have side facing guides and rollers to reduce hose wear, and shall be capable of pulling off the left and right hand side of the unit.

One (1) 10-26-4070

Two (2) polished aluminum roller assemblies shall be provided, one (1) on each side of the apparatus body on top of the side compartments. The rollers shall be designed to allow hose from the center

mounted hose reel to be unloaded to either side of the vehicle without snagging equipment on the apparatus. The distance between the rollers shall not exceed the width of the hose reel.

One (1)

10-26-5003

### **BOOSTER REEL HOSE**

The booster reel shall be supplied with 150' of 1.00" <u>red</u> Reel Lite booster lightweight woven TPU forestry reel hose. The hose shall have a minimum proof test pressure of 600 PSIG. The hose shall be coupled in 50.00' sections.

One (1) 30-17-0100

### **NOZZLE WITH SHUTOFF**

One (1) Task Force Tips model # DS1024P ball shut off nozzle shall be provided. The selectable, dual gallonage nozzle shall be furnished with flow settings of 10 and 24 GPM at 100 PSI and produce fog/straight stream patterns. An integral pistol grip handle shall be positioned directly below the valve handle. The nozzle shall have a "twist off" position for positive shut off. The nozzle shall be furnished with a 1" female NH swivel rock lug inlet.

One (1) 30-19-0025

### **NOZZLE MOUNT**

The hose reel discharge shall have a PAC Jumbo Lok bracket installed to hold the nozzle in place. One (1) 10-25-4800

#### FOAM SYSTEM - CLASS A

There shall be a Scotty model 4171 around the pump foam eductor / mixer installed integral to the pump. The eductor shall be plumbed from the foam cell with 0.50" flexible reinforced tubing to throughout he eductor to a suction fitting on the pump impeller housing. The eductor shall be calibrated to educt foam concentrate of 0% to 3.75% at flow rates from 15 to 125 at 100 psi. One (1)

10-30-9430

### **BOOSTER TANK**

The tank shall have a capacity of 300 US gallons / 249 Imperial gallons / 1136 liters.

The tank shall be manufactured by CET. One (1) 10-30-9500

#### **WATER TANK**

The water tank shall be constructed of 0.50" thick polypropylene sheet. The material shall be of a certified, high quality, non-corrosive, stress relieved thermos plastic, black in colour with a textured finish, and UV stabilized for maximum protection. The skid type booster tank shall be of a standard configuration and shall be so designed to have complete modular slide in capability. All joints and seams are to be fully welded and electronically tested for maximum strength. The unit shall incorporate transverse partitions manufactured for 0.50" polypropylene which shall interlock with a series of longitudinal partitions constructed of 0.50" polypropylene. All swash partitions shall be so designed to allow for maximum water and air flow between compartments and are fully welded to each other as well as to the inside of the tank.

The passenger side rear wall of the tank shall have a standard built in sight gauge 2.00" in width, and 70% transparent.

Tank will be baffles in accordance with NFPA bulletin 1906 requirements, latest version.

### **FILL TOWER & TANK COVER**

The tank shall be equipped with a combination vent/overflow and manual fill tower. The fill tower shall be an 8.00" round by 6.00" high with a moulded drop-on type cover. The cover shall be fastened to the tower with a tether to prevent loss. The tower shall be located in the right rear corner of the tank. There shall be a vent / overflow installed inside and to the extreme rear of the tower approximately 2.00" down from the top. This vent / overflow shall be of a standard schedule 40 polypropylene pipe with minimum ID of 3.00". The vent / overflow shall be piped internally and exit out at the passenger side tank wall with a 1.00" extension past the wall.

The tank cover shall be constructed of 0.50" thick polypropylene, black in color, UV stabilized.

### **SUMP**

The floor of the tank shall be manufactured from 0.75" polypropylene. There shall be one (1) sump as standard per tank. The sump shall be integral to the tank floor and be a minimum of 0.625" deep recessed into the floor. The sump shall not be visible from or protrude through the bottom of the tank.

### **TANK OUTLETS**

There shall be two standard tank outlets located in the same vertical plane on the driver side rear wall of the tank. One (1) 2.50" female NPT tank to pump suction fitting and one (1) 1.50" female NPT tank fill fitting with flow deflector

### 1.00" TANK DRAIN

There shall be a 1.00" tank drain to the rear side of the tank with a plug.

### TANK MOUNTING BLOCKS

The cover shall incorporate two (2) booster reel mounting blocks that shall be to accommodate two (2) each sliding nut fasteners. These mounting blocks shall be welded to the covers running from the rear edge of the tank forward.

#### SKID BASE

There shall be a full width skid base manufactured of 0.75" polypropylene welded to the tank. This base shall be 48.00" wide by 96.00" long and shall extend 34.00" past the tank in the rear to allow for pump mounting. The pump mounting area shall be supported by 0.50" polypropylene gussets 15.00" high by 32.00" long. The gussets shall be equipped with 2.00" holes to assist in lifting the unit. One (1) 10-32-9020

### CET WATER TANK WARRANTY LIMITED LIFETIME

CET Fire Pumps, Mfg. warrants each CET water and/or foam tank to be from manufacturing defects in material and workmanship for the service life of the original vehicle. Every CET tank shall be thoroughly inspected and tested for leaks before leaving our facility and must be installed in accordance with the CET Fire Pumps, Mfg. installation guidelines.

CET will repair or, at its option, replace the tank with a new tank. CET will cover customary and reasonable costs to remove and install the tank. This warranty will not cover the tanks that have been improperly installed, misused, or abused. The serial number must not have been altered, defaced or removed. CET will not cover any unauthorized third party repairs or alterations. Any of these actions may void the warranty.

There are no warranties, expressed or implied, which extend beyond the description of the face, hereof. There is no express or implied warranty of merchantability or a warranty of fitness for a particular purpose. Additionally, this warranty is in lieu of all other obligations or liabilities on the part of CET Fire Pumps, Mfg.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly canceled. CET Fire Pumps, Mfg. neither authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

In no event will CET Fire Pumps, Mfg. be liable for an amount in excess of the currently published retail price plus installation and removal cost of the tank, for any loss or damage, whether direct or indirect, incidental, consequential, or otherwise arising out of failure of its product.

This warranty gives you the specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

The warranty is transferable within the United States and Canada at the discretion of CET Fire Pumps, Mfg. by notifying CET Fire Pumps, Mfg. within thirty (30) days of the vehicle transfer date. At that time, CET will, at it discretion, provide a transfer of ownership form.

One (1)

# FOAM TANK - 10 US GALLONS - CLASS A

A foam tank shall be installed inside the main water tank. The foam tank shall have a capacity of <u>10</u> <u>U.S. gallons</u> for Class A foam.

One (1)

== RESCUE BODY - 108.00", 1/8" ALUMINUM, OPEN CARGO AREA - 6.100 11/19/20 == One (1) 10-39-0100

#### **APPARATUS BODY**

### **BODY DESIGN**

10-31-5120

The body shall be modular in design, allowing it to be removed and remounted on a new chassis.

The fabrication of the body shall be formed sheet metal. Formed components shall allow the Purchaser to have the body repaired locally in the case where any object has struck the body and caused damage. The use of proprietary extrusions will prevent the Purchaser from such repair and shall NOT be used.

#### **BODY CONFIGURATION**

The apparatus body shall have three (3) compartments on both sides, and a rear cargo area.

### **SUBFRAME**

The body shall be attached to and supported by a heavy duty, spring loaded, aluminum subframe u-bolted to the truck frame. The subframe shall be spring mounted to the chassis frame to allow for independent flexing of the body in relation to the chassis frame.

#### **BODY CONSTRUCTION**

The body shall be fabricated using aluminum extrusions, angle, smooth aluminum sheet and aluminum treadplate providing a durable, corrosion resistant, and lightweight body.

The entire body shall be a welded into a one piece module, assembled and painted prior to mounting on the chassis.

### COMPARTMENT CONSTRUCTION

The compartments shall be constructed of .125" 5052-H32 Aluminum. Divider walls between compartments shall be of single wall construction with a minimum wall thickness of 0.125", with double 90 degree bends on the outside to form a channel. Compartment floors shall have a minimum of a 0.50" lip above bottom of the door opening, providing a sweep out design.

The rear compartment floor shall be constructed of .125" 3003-H22 Aluminum Tread Plate.

For adequate ventilation and air displacement, each compartment shall be properly louvered with square vents. The rearmost wall of the rear compartments, shall have full height removable panels, constructed of aluminum, to cover and protect all 12 volt electrical accessories mounted on the walls. The panels shall be removable to provide access to those components.

### **FENDER PANELS**

Side fender panels above the rear wheels shall be 0.125" 5052-H32 Aluminum.

### SIDE BODY HEADER

On the upper area of the apparatus body, directly above the side compartment door openings, a header is to be fabricated from smooth, aluminum sheet. This area shall be painted the same color as the apparatus body.

#### FRONT BODY PROTECTION PANELS

Aluminum tread plate overlays and panels shall be installed on the front of the body compartment from the lower edge to the top of the compartment doors.

### WHEEL WELL PROTECTION PANELS

Aluminum tread plate overlays and panels shall be installed on the side fender panels, above the rear wheels.

### **REAR LOWER BODY PROTECTION PANEL**

Aluminum tread plate overlays and panels shall be installed the full width of the body, in the area below rear compartment and above the tailboard.

#### COMPARTMENT TOP PROTECTION PANELS

Aluminum tread plate overlays and panels shall be installed the full length of the compartment tops. One (1) 10-38-8108

### **BODY CONFIGURATION**

The apparatus body shall be 108.00" long. One (1) 10-38-8152

### **BODY WIDTH**

The apparatus body shall be 93.00" wide. One (1) 10-38-8183

#### **BODY HEIGHT**

The overall height of the apparatus body shall not exceed 64.00".

(The above overall height is for the body only, it does not include any upper hose trays or coffin boxes, if applicable to this specification.)
One (1)
10-39-2160

### **ROLL-UP DOORS**

All lower compartment doors shall be equipped with AMDOR brand roll-up doors. The slats shall be 1.00" double wall aluminum with continuous ball and socket hinge joints designed to prevent water ingression and weather tight recessed dual durometer seals.

The interior door curtains shall be smooth to prevent equipment hang-ups. The door tracks and side frames shall each be one-piece aluminum. Each side seal shall be recessed, and non-marring with UV stabilizers to prevent warping.

The bottom panel flange shall have cut-outs for ease of access with gloved hands. The door strikers shall provide support beneath the lift bar to prevent door curtain bounce and potential false door ajar indications.

One (1)

10-39-2180

### **COMPARTMENT SHELF TRACKS - ALUMINUM**

Heavy-duty aluminum Uni-Strut tracks shall be provided in the compartments as specified. The tracks shall not be welded to the apparatus body. The Uni-strut tracks shall allow the shelving to be positioned at any location in the compartment by simply loosening a bolt on each end of the shelf, pushing inward on the bolt, and sliding the shelf to the desired location.

One (1) 10-39-2185

### COMPARTMENT SHELVING - SIDE COMPARTMENTS

Adjustable shelving shall be installed in the side compartments as identified later in this specification. Each shelf shall be made of 0.125" smooth aluminum with a 2.00" high perimeter retaining lip with welded corners.

One (1) RB-11-81L1

### LEFT SIDE COMPARTMENT IN FRONT OF REAR WHEELS, L1

There shall be a full height compartment located ahead of the rear wheels on the left side of the apparatus body. This compartment shall be designated as L1 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 34.75" wide x 57.625" high x 21.50" deep

- Door Opening: 28.25" wide x 53.125" high

Usable Width: 34.75"Usable Depth: 19.50"

One (1) DR-AM-4110

The compartment shall have a roll up door. The door shall have a satin finish.

One (1) MD-O5-8070

### COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment. One (1)

MD-O5-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1) MD-O5-1010

### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation.

One (1)

MD-O5-1149

### ADJUSTABLE SHELF(S)

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1)

RB-11-81L2

### LEFT SIDE ABOVE WHEEL COMPARTMENT, L2

There shall be a standard height compartment located above the rear wheels on the left side of the apparatus body. This compartment shall be designated as L2 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 47.00" wide x 27.625" high x 21.50" deep

- Door Opening: 44.50" wide x 23.125" high

- Usable Width: 47.00"

- Usable Depth: 19.50" One (1)

One (1) DR-AM-4120

The compartment shall have a roll up door. The door shall have a satin finish.

One (1) MD-O5-8070

COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment.

One (1)

MD-O5-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1)

MD-Ò5-1020

### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation. One (1)

MD-O5-1149

## ADJUSTABLE SHELF(S)

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1) RB-11-81L3

### LEFT SIDE COMPARTMENT BEHIND REAR WHEELS, L3

There shall be a standard height compartment located above the rear wheels on the left side of the apparatus body. This compartment shall be designated as L3 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 26.25" wide x 57.625" high x 21.50" deep

- Door Opening: 19.75" wide x 53.125" high

- Usable Width: 23.50" - Usable Depth: 19.50"

One (1) DR-AM-4130

The compartment shall have a roll up door. The door shall have a satin finish.

One (1) MD-O5-8070

### COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment. One (1) MD-O5-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1) MD-O5-1010

### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation. One (1)

MD-O5-1149

## ADJUSTABLE SHELF(S)

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1) RB-11-81R1

### RIGHT SIDE COMPARTMENT IN FRONT OF REAR WHEELS, R1

There shall be a full height compartment located ahead of the rear wheels on the right side of the apparatus body. This compartment shall be designated as R1 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 34.75" wide x 57.625" high x 21.50" deep

- Door Opening: 28.25" wide x 53.125" high

Usable Width: 34.75"Usable Depth: 19.50"

One (1) DR-AM-4110

The compartment shall have a roll up door. The door shall have a satin finish.

MD-O5-8070

### COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment. One (1)

MD-Ò5-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1) MD-O5-1010

#### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation.

One (1) MD-O5-1149

### ADJUSTABLE SHELF(S)

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1) RB-11-81R2

### RIGHT SIDE ABOVE WHEEL COMPARTMENT, R2

There shall be a standard height compartment located above the rear wheels on the right side of the apparatus body. This compartment shall be designated as R2 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 47.00" wide x 27.625" high x 21.50" deep

- Door Opening: 44.50" wide x 23.125" high

Usable Width: 47.00"Usable Depth: 19.50"

One (1) DR-AM-4120

The compartment shall have a roll up door. The door shall have a satin finish. One (1)

MD-O5-8070

### COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment.

One (1)

MD-05-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1) MD-O5-1020

#### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation. One (1)

MD-O5-1149

### ADJUSTABLE SHELF(S)

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1) RB-11-81R3

### RIGHT SIDE COMPARTMENT BEHIND REAR WHEELS, R3

There shall be a standard height compartment located above the rear wheels on the right side of the apparatus body. This compartment shall be designated as R3 within these specifications and any ensuing paperwork or drawings after contract execution.

- Dimensions: 26.25" wide x 57.625" high x 21.50" deep

- Door Opening: 19.75" wide x 53.125" high

Usable Width: 23.50"Usable Depth: 19.50"

One (1) DR-AM-4130

The compartment shall have a roll up door. The door shall have a satin finish.

One (1) MD-O5-8070

### COMPARTMENT LIGHT(S)

One (1) full height Luma Bar LED strip light(s) shall be installed inside the compartment. One (1)

MD-O5-8601

The compartment light(s) shall be controlled by a magnetic "On-Off" switch located on each compartment door.

One (1) MD-O5-1010

#### ADJUSTABLE SHELVING TRACKS

There shall be vertically mounted uni-strut shelf trac for shelving installation.

One (1) MD-O5-1149

## **ADJUSTABLE SHELF(S)**

There shall be One (1) adjustable shelf constructed of 0.125" aluminum with a 2.00" upward bend at front and rear, and side supports.

One (1) 10-39-2695

### REAR BODY CONFIGURATION, OPEN

One (1) 10-39-2374

The cargo area of the apparatus body shall be left uncovered for the installation of a skid unit. One (1)

10-41-5010

# **UPPER BODY SIDE PRE-CONNECT HOSE TRAY, LH SIDE**

One (1) upper body pre-connect hose tray shall be provided atop the left side of the body with dimensions of approximately 108.00" long x 21.00" wide x 8.00" tall. The hose tray shall contain the pre-connect listed in the plumbing section.

The hose tray shall be constructed entirely of .125" aluminum tread plate on all exterior surfaces and shall be enclosed on three sides with an open rear area with a hose securement safety strap.

The hose tray shall have a lift-up door installed, that shall open towards the outside of the body. The door shall have a stainless steel hinge and a gas shock strong enough to hold the door open at 90 degrees. Two (2) draw style latches shall be installed to hold down the door.

One (1) 10-70-1365

There shall be a vinyl cover installed at the rear of tray. The cover shall be secured with a black shock cord/ hook system on the bottom and permanently secured on the top.

The cover shall be black in color. One (1) 10-41-5130

### **UPPER BODY SIDE COMPARTMENT, RH SIDE**

One (1) coffin box approx 108.00" L x 21.00" W x 8.00" T shall be mounted atop the right side of the body.

The compartment shall be constructed entirely of .125" aluminum tread plate on all exterior surfaces.

The compartment shall have a lift-up door installed, that shall open towards the outside of the body. The door shall have a stainless steel hinge and a gas shock strong enough to hold the door open at 90 degrees. Two (2) draw style latches shall be installed to hold down the door.

One (1)
10-39-8025

## **FUEL FILL W/ ACCESS DOOR**

One (1) Cast Products aluminum fuel fill with a hinged access door shall be installed in the left hand side wheel well rear of the axle. It shall be labeled "Ultra Low Sulfur Diesel Fuel Only".

One (1)
10-39-8135

### **DEISEL EXHAUST FLUID FILL**

The deisel exhaust fluid fill shall be located in between the body and the chassis on the left hand side. It shall be labeled "Diesel Exhaust Fluid Only".

One (1) 10-44-2001

### **REAR TAILBOARD**

A rear tailboard shall be provided and installed at the rear of the body. The rear tailboard shall be a minimum of 12.00" deep and constructed of aluminum Grip Strut. The outside edges of the rear tailboard shall be trimmed with bright diamondplate aluminum.

The tailboard shall meet the NFPA 1901/1906 recommended requirements for non-slip surfaces.

The rear tailboard shall be the full width of the body. One (1) 10-44-6002

### **EXTERIOR GRAB RAILS**

Each grab rail shall be non-slip, 1.25" diameter extruded polished aluminum grab rails with rubber inserts designed to provide maximum gripping ability, strength, and durability. The rails shall comply with NFPA 1901.

One (1) 10-44-6024

# **GRAB RAILS, REAR STEP, VERTICAL**

Two (2) extruded aluminum non-slip grab rails shall be provided and vertically mounted on the rear of the apparatus, one (1) on each side of the body.

One (1)

== 12V ELECTRICAL SYSTEM - MINI PUMPER - 6.100 11/19/20 == One (1) 10-48-0070

#### 12 VOLT ELECTRICAL SYSTEM

The truck shall have a 12-Volt electrical system. All wiring will be run in convoluted high temperature plastic loom. The wiring shall be color-coded, numbered, and function imprinted for permanent identification. All wiring devices shall be rated to carry 125% of the maximum ampere load for which the circuit is protected. All added electrical equipment shall be served by circuits separate and distinct from the chassis circuits. All solenoids, relays, and terminal blocks will be located in an easily accessible area. All circuits provided shall have properly rated low voltage over current protective devices. All electrical will be accordance with modern automotive wiring standards. All under side terminal junctions shall be fully enclosed in sealed plastic weather proof boxes.

### **ELECTRICAL SYSTEM (CHASSIS OEM)**

The commercial chassis electrical system shall be furnished and installed by the chassis manufacturer and shall not be altered in any way so as to void or diminish the manufacturer's warranty responsibilities. Body builder wiring interface harnesses shall be specific to the chassis being utilized and the apparatus specifications with all such harnesses, circuits and connections being documented by the body builder and made part of the electrical schematics provided with the completed apparatus.

### **ELECTROMAGNETIC INTERFERENCE PROTECTION**

The apparatus shall incorporate modern electrical system design, installation procedures, grounding techniques and wave generating components to provide the highest level of protection against electromagnetic (EMI) and radio wave frequency (RFI) interferences.

The apparatus shall be designed to operate and correctly function in congested municipal environments as well as industrial or concentrated commercial scenes without adverse effects from either EMI or RFI. Communications equipment installed after the apparatus is delivered shall be immediately tested by the installer for reception and transmission signal quality.

One (1)

10-49-0012

### LOW VOLTAGE ALARM

One (1) Kussmaul 091-85-12 Low Voltage alarm system shall be supplied and installed with a Cole Hersee 4112-RC light/buzzer located in the cab. The system shall detect when the battery voltage drops below 11.8 volts and remains low for 120 seconds.

One (1)

10-49-0151

### **CHASSIS GROUND LIGHTS**

Four (4) LED ground lights with outward facing angle brackets shall be installed, one (1) under each chassis door.

One (1) 10-49-0155

### FRONT OF BODY GROUND LIGHTS

Two (2) LED ground lights with outward facing angle brackets shall be installed under the front of the body. One (1) light shall be located on the driver side and one (1) light shall be located on the officer side of the apparatus.

One (1) 10-49-0160

#### REAR STEP GROUND LIGHTS

Two (2) LED ground lights with outward facing angle brackets shall be installed under the rear step of the apparatus, one (1) each side.

One (1) 10-49-0166

### **GROUND LIGHT SWITCHING**

The cab and body ground lights shall activate by engaging the parking brake.
One (1)
10-49-0017

### **HAZARD LIGHT**

One (1) Whelen model 0SR00FCR flashing red LED light, located in the driving compartment, the light shall be illuminated automatically whenever any compartment door is ajar.

The hazard light shall be marked with a sign that reads "Do Not Move Apparatus When Light is On".

The warning light shall be interlocked to the parking brake and shall only alert the driver when the parking brake is released. The light shall also be used to signal that other ancillary equipment such as racks light towers etc. are not in their "ready for transport" position.

One (1)

10-50-7000

## **BRAKE, TAIL, TURN LIGHTS**

One (1) pair of flush-mount round 4.00" red LED combination brake/ tail/ turn lights shall be provided at the rear of the body, one (1) each side, outboard of the reverse lights. The lights shall be attached with a rubber grommet.

### **BACK UP LIGHTS**

One (1) pair of flush-mount round 4.00" clear LED back up lightsshall be provided at the rear of the body, one (1) each side, inboard of the B/T/T lights. The lights shall be attached with a rubber grommet.

One (1) 10-50-7250

### DOT MARKER LIGHTS AND REFLECTORS

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements. All marker lights shall be incorporated into the headlight circuit of the cab/chassis.

One (1)

10-50-7340

### MARKER LIGHTS

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements. The side and rear of the body will be provided with reflectors. All marker lights shall be incorporated into the headlight circuit of the cab/chassis

One (1)

10-50-7400

Two (2) amber reflectors shall be provided on the apparatus body lower side, as far forward and low as practical, one (1) each side if the apparatus is 30 feet long or longer.

One (1)

10-50-7410

Four (4) red reflectors shall be provided on the apparatus rear, one (1) each side and two (2) on the rear

One (1) 10-50-7500

### LICENSE PLATE LIGHT

A license plate bracket with LED light shall be provided and installed on the rear of the body. It shall be wired to come on with the headlights.

One (1) 10-52-8009

## **WORK LIGHT, PUMP AREA, 12V**

One (1) 12V adjustable 4.00" round LED work light shall be mounted at the rear of the skid unit to provide light during nighttime operations. The light(s) shall have a black housing with a black rear cover. The light(s) shall have six (6) ultra-bright white LEDs, and shall operate at 12 volts DC, draw 0.60 amps, and generate 700 lumens.

One (1)

LX-58-1026

### **WORK LIGHT SWITCH**

The pump area work light shall be wired to the electric start on the pump. One (1) 10-59-2050

### NFPA AUDIBLE AND LIGHTING WARNING PACKAGE

The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901/ 1906. The lighting as specified shall meet

the requirements for both "Clearing Right of Way" and "Blocking Right of Way" which includes disabling all white warning lights when the apparatus is in "Blocking Right of Way" mode.

One (1)

10-50-0020

### WARNING LIGHT FLASH PATTERN

All of the perimeter warning lights shall be set to the default NFPA flash pattern as provided by the warning light manufacturer.

One (1) 10-50-1206

### **LIGHTBAR**

One (1) WHELEN model JE2NFPA 56.00" LED lightbar shall be supplied and mounted. The lightbar shall have clear lenses and contain the following modules:

Four (4) RED LIN6 LED modules, two (2) on each corner.

Four (4) RED CON3 LED modules, across the front

Two (2) WHITE CON3 LED modules, on the front

One (1) 10-50-2700

The forward facing white lights shall be automatically disabled for the "Blocking Right of Way" mode. One (1)

LX-65-1100

### LIGHTBAR SWITCHING

One (1) rocker switch with indicator shall be installed on the switch panel in the cab to control the light bar. The switch shall be labeled "LIGHT BAR".

One (1) LX-99-8000

### LIGHTBAR MOUNTING BRACKET

The lightbar shall be mounted with the Whelen model MKEZ7 1.50" permanent mount.

Two (2) 10-50-4240

### LOWER FRONT WARNING LIGHTS

One (1) pair of Whelen model M4R LED warning lights shall be installed, one (1) each side on the front of the chassis cab.

The lights shall be red in color with red lens.

Two (2) 10-55-9016

The light(s) shall be supplied and installed with a chrome bezel.

Two (2) 10-50-4340

#### INTERSECTION WARNING LIGHTS

One (1) pair of Whelen model M4R Super LED warning lights shall be installed, one (1) each side of the chassis cab.

The lights shall be red in color with red lens.

Two (2) 10-55-9016

The light(s) shall be supplied and installed with a chrome bezel.

Two (2) 10-50-4450

#### LOWER MID-BODY WARNING LIGHTS

One (1) pair of Whelen model M7R LED warning lights shall be installed, one (1) each side of the apparatus, mid-body.

The lights shall be red in color with red lens.

Two (2) 10-55-9070

The light(s) shall be supplied and installed with a chrome bezel.

Two (2) 10-50-4665

### LOWER REAR WARNING LIGHTS

One (1) pair of Whelen model M7R LED warning lights shall be installed, one (1) each side on the lower rear of the apparatus body.

The lights shall be red in color with red lens.

Two (2) 10-55-9070

The light(s) shall be supplied and installed with a chrome bezel.

One (1) LX-65-3100

### LOWER WARNING LIGHT SWITCHING

One (1) rocker switch with indicator shall be installed on the switch panel in the cab to control the lower warning lights. The switch shall be labeled "LOWER WARNING".

One (1)
10-50-6010

### **ELECTRIC SIREN AND CONTROL**

One (1) Whelen model #295SLSA1 electronic siren shall be mounted in the cab. This unit shall feature an electronic air horn, wail, yelp, hi-lo and shall have a hard wired PA microphone.

One (1)
10-50-6094

#### SIREN LOCATION

The electronic siren control shall be located in the center console. One (1) 10-50-6204

### **ELECTRONIC SIREN SPEAKER**

One (1) Whelen model SA315P 100 watt speaker shall be provided. The speaker shall have a nylon composite black housing with front loaded, powder coated speaker driver. The speaker shall produce a minimum sound output of 120 dB at 10 feet to meet current NFPA 1901/1906 requirements. The speaker shall be wired to the electric siren located in the cab.

The speaker shall be located on the left hand side of the bumper. One (1) 10-50-6810

The speaker shall be mounted using a Whelen model # SAK9 bracket. One (1)

== PAINT/ PREP/ STRIPE - MINI PUMPER - 6.100 11/19/20 == One (1) 10-70-3380

### **BODY PAINT PROCESS**

All bright metal fittings, if unavailable in stainless steel shall be heavily chrome plated. Iron fittings shall be copper plated prior to chrome plating.

All seams shall be caulked both inside and along the exterior edges with a urethane automotive sealant to prevent moisture from entering between any body panel.

The body and all parts shall be thoroughly washed with a grease cutting solvent (PPG DX330) prior to any sanding. After the body has been sanded and the weld marks and minor imperfections are filled and sanded, the body shall be washed again with (PPG DX330) to remove any contaminants on the surface.

The first coating to be applied is a pre-treat self etching primer (PPG DX1787) (.5 to 1.0 dry film build) for maximum adhesion to the body material. The next two to four coats (depending on need) shall be an acrylic urethane primer surfacer (PPG K36). The film build shall be 4-6 mils when dry. The primer surfacer coat, after appropriate dry time, shall be sanded with 320-600 grit sandpaper to ensure maximum gloss of the paint. The last step is the application of at least three coats of PPG Delfeet polyurethane two-component color (single stage). The film build being 2-3 mils dry. The single stage poluurethane, when mixed F3270 catalyst (PPG F3260) shall provide a UV barrier to prevent fading and chalking.

All products and technicians are certified by PPG every two (2) years. One (1) 10-70-3450

#### CHASSIS PAINT

The chassis shall be painted by the OEM Chassis Manufacturer. One (1) 10-70-3508

#### **PRIMING**

All surfaces to be painted shall be primed with three (3) parts PPG F3993 Primer mixed with one (1) PPG F3996 Primer Harnder, and a half (.5) part PPG Thinner F3320.

Two (2) applications of primer shall be applied. The first application shall be four (4) coats and the second application shall be three (3) coats.

A final application of sealer shall be applied using Primer Filler. One (1) 10-70-3510

### **PAINT FINISH**

The body shall be painted with a PPG Delfleet Evolution Paint System.

As part of the curing process the painted body shall go through a baking process. The painted components shall be baked at 185 degrees for 3 hours to achieve a complete coating cure on the finished product.

After bake and ample cool down time, the coated surface shall be sanded using 3M 1000, 1200, and or 1500 grit sandpaper to remove surface defects. In the final step, the surface shall be buffed with 3M Super-duty compound to add extra shine to coated surface. No more than .5 mil shall be removed in this process.

All products and technicians shall be certified by PPG every two (2) years. One (1) 10-70-4165

### SIDE COMPARTMENT FINISH, ZOLATONE

The apparatus side compartment interiors are to be coated with Zolatone, a polychromatic, modified nitrocellulose coating with a flat background color with accenting fleck colors. The compartments shall be cleaned with a grease remover, and then the surface sanded and prepared for painting. The Zolatone finish is washed and waxed like paint, and is resistant to man solvents and wear.

One (1) 10-70-4615

### APPARATUS BODY COLOR

The apparatus body paint shall be "cross referenced" from the chassis paint, and shall be painted to match the main chassis color as close as possible.

The apparatus shall be painted (FORD PQ RED). One (1) 10-70-5405

### REFLECTIVE STRIPING

Reflective striping shall be applied to the perimeter of the truck. Size and design shall be determined by the department.

One (1) 10-70-5451

### **CHEVRON STRIPING**

At least 50% of the rear of the unit shall be covered with Red and Yellow alternating 6" stripe in an inverted Chevron pattern.

One (1) 18-15-0050

#### **LETTERING**

Reflective lettering shall be applied to the cab doors at the direction of the purchaser.

Photos or drawings of the lettering and striping layout shall be provided by the purchaser prior to construction.

One (1)

== LOOSE EQUIPMENT - BRUSH/MINI/ RESCUE - 6.100 11/19/20 == One (1) 21-10-1200

### **LOOSE EQUIPMENT**

The following items shall be provided and shipped loose with the completed apparatus at the time of delivery: