

City of West Des Moines

**PUBLIC NOTICE**

**Mini-Pumper or Attack Fire Apparatus**

**CITY OF WEST DES MOINES  
FIRE DEPARTMENT**

Electronic bids will be received by the City of West Des Moines, Iowa, on or before 2:00 p.m., Central Time, on Wednesday, November 2, 2016 for the following:

Bid Item: **Mini-Pumper or Attack Fire Apparatus**

Bidders shall submit their bids electronically by Email to:

[Ryan.Jacobson@WDM.IOWA.GOV](mailto:Ryan.Jacobson@WDM.IOWA.GOV)

Please include “**Mini-Pumper or Attack Fire Apparatus**” in the subject line of the Email.

The preferred list of equipment may be secured at the Fire Department Administrative Offices, 3421 Ashworth West Des Moines, Iowa, or by contacting Craig Leu, Fire Chief by email - [craig.leu@wdm.iowa.gov](mailto:craig.leu@wdm.iowa.gov) or phone - 515-222-3420.

The City reserves the right to accept or reject any or all bids and waive irregularities and technicalities as determined to be in the best interest of said City.

Published in the Des Moines Register October 21, 2016.

**CITY OF WEST DES MOINES, IOWA**  
**2016**  
**Mini-Pumper or Attack Fire Apparatus**

**A. INTENT**

It is the City's intent to purchase an attack fire apparatus or mini-pumper. Due to the timeline of this purchase, the city will allow and encourage that proposals include demonstrator or stock units.

A successful proposal shall include a fire apparatus with the preferred equipment **delivered to the City** on the timeline specified. The City reserves the right to reject all proposals.

**B. GENERAL**

The City of West Des Moines is requesting proposals for a mini pumper or attack unit on a commercial 4-wheel drive chassis. The unit will have a 10 ft "rescue" aluminum body with roll-up doors that is capable of carrying firefighting tools and medical equipment. The unit will be designed for the fire service and have a water tank, pump and foam injection unit.

Due to the timeline of this project, the City will be accepting proposals that include demonstrator units or stock units. All proposed units must have under 10,000 miles on the entire unit. Proposals cannot include refurbished or repurposed apparatus parts. The fire apparatus to be furnished in meeting these specifications must be the product of an established reputable fire apparatus manufacturer. Proposals should be accompanied by a list of equivalent type trucks of the specified design sold and in service by the manufacturer.

The general construction of the apparatus shall give due consideration to the nature and distribution of the load to be sustained and the general character of the service to which the apparatus is to be subjected when placed in service.

The intent of the preferred equipment list (Section D) is to describe the minimum quality acceptable. Any brand name and/or model number mentioned is intended to be descriptive and not restrictive to any proposal. Any submittals must state the brand of any item provided which is a substitute for the brand or model specified for evaluation by the buyer. The buyer reserves the right to require a bidder to provide proof in each case that a substituted item is equal to that specified. The buyer shall be the sole judge in determination of acceptable substitutes. The buyer reserves the right to initiate and/or consider negotiations in construction which will be in the best interest of the City of West Des Moines with the approval of the purchasing agent once the bid has been awarded.

**C. DELIVERY**

The finished apparatus will be delivered to the West Des Moines Fire Department (3421 Asworth Road - West Des Moines, Iowa) within 30 calendar days of contract execution if the optional SCBA mounting system is not accepted.

**D. PREFERRED EQUIPMENT**

**Chassis:**

• **F550 Crew Cab 4x4**

2014 or newer Ford F550 Crew cab XL 4x4 dually, 6.7L Power Stroke V8 diesel, Engine block heater, 6-speed automatic transmission, 4.88 limited slip rear-end, PTO provision, Power windows and locks, Air conditioning, AM/FM stereo/clock, Cruise control, Payload plus upgrade to 19,500# GVWR, 60" cab to axle, 176" wheelbase, Trailer brake controller, Vermillion red clear coat, Extra duty alternators, Power/heated mirrors, Grey vinyl interior, 40/20/40 front seat, 80/20 rear seat, black rubber flooring throughout, 40 gallon fuel cell.

**Chassis Options:**

• **Console**

There shall be a custom console installed in the chassis cab between the front bucket seats. A master disconnect switch shall be installed on the driver's side floor board.

• **Rear Receiver**

A Class V 2" receiver tube shall be installed at the rear of the apparatus with two safety chain attachment points. The receiver tube shall be rated up to 15,000 lbs gross trailer weight and 1,500 lbs tongue weight. A label shall be placed near the receiver stating the maximum trailer weight rating. A 7-pin trailer connector will be installed in the area of the receiver.

• **Ground Lights**

LED strip lights shall be installed beneath the apparatus in areas where personnel may be expected to climb on and off of the apparatus. These areas shall include, but not be limited to the cab doors or running boards, and the rear step area. The ground lighting shall be switched at the console with the options to be activated when the park brake is set, steady burn, or off.

• **Running Board Steps**

Running boards shall be mounted to the chassis cab with stainless steel bolts.

• **Chassis Wheels**

Alcoa polished aluminum wheels will be installed instead of the OEM steel wheels

• **Front Push Bar**

A brush guard/push bar will be mounted to the factory front bumper.

• **Chevron for Small Rescue Body**

Chevron reflective graphics will be installed on at least 50% of the rear of the fire body.

• **Back-up Alarm**

The backup alarm shall be an electronic 97-decibel rated alarm installed at the rear of the vehicle. This alarm shall alert personnel any time the transmission is shifted into reverse gear.

**Warranty:**

• **Body Warranty**

The Rescue style body shall carry a (10) Ten-year structural warranty from structural defects. There shall be a (1) One-year electrical warranty from any electrical defects. Chassis warranties to be covered by manufacturer, Ford Motor Company.

**Rescue Body:**

• **Rescue Body- 122”L x 60”Tx 96”W (Approx.)**

The body shall be constructed entirely of 6061-T6 corrosion resistant aluminum fully welded.

All compartments shall be of sweep-out type with no lip at bottom edge. The bottom of all compartments and shelving trays shall have Turtle Tile installed.

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

Compartment interior walls will be finished with Grey high impact rubberized finish.

Rear bed area will be finished with black high impact rubberized finish.

All compartments shall have LED strip lighting inside with the doors and a brushed aluminum finish.

All wheel wells will have an inner liner installed to protect from rocks, mud and debris from contacting the underbody. Heavy-duty polished aluminum fenderettes will be installed on the rear wheel well area.

Any association of dissimilar metals shall be designed so the two metals do not contact each other. There will be an isolation barrier installed to prevent dissimilar metal reaction/electrolysis.

All exposed ferrous metal shall be painted.

All stop, tail, turn, corner, back up and DOT lights shall be LED.

A flush mount fuel fill will be provided at the rear of the fire body.

Mud flaps will be mounted behind the rear tires.

A lighted license plate holder shall be provided at the rear of the apparatus.

Reflectors shall be installed on the apparatus in accordance with federal motor vehicle safety standards.

• **Compartment #1-D1**

Driver’s side front compartment will be non-transverse, compartment dimensions will be approximately 27” W x 57”T x 21”D.

Compartment door opening shall be supplied with two LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

• **Compartment #2-D2**

Driver's side middle compartment will be non-transverse, compartment dimensions will be approximately 50" W x 37" T x 21"D. This compartment will have one (1) fully adjustable shelf installed.

Compartment door opening shall be supplied with two (2) LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

• **Compartment #3-D3**

Driver's side back compartment will be non-transverse, compartment dimension will be approximately 39"W x 54"T x 21"D. This compartment will have two (2) fully adjustable shelves.

Compartment door opening shall be supplied with two LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

• **Compartment #4-P3**

Passenger's side back compartment will be non-transverse, compartment dimensions will be approximately 39" W x 54"T x 21"D. This compartment will have one (1) fully adjustable shelf installed in the upper portion and an single action slide tray mounted in the bottom portion. Slide tray will have DOT reflective tape on front and sides for illumination while extended.

Compartment door opening shall be supplied with two LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

• **Compartment #5-P2**

Passenger's side middle compartment will be non-transverse, compartment dimensions will be approximately 50" W x 37"T x 21"D. This compartment will have one (1) out & down slide tray installed, with DOT tape installed on the front and sides for illumination.

Compartment door opening shall be supplied with two (2) LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

• **Compartment #6-P1**

Passenger's side front compartment will be non-transverse, compartment dimensions will be approximately 27" W x 57"T x 21"D.

Compartment door opening shall be supplied with two (2) LED lighting strips mounted vertically on the inside of the openings and activated by an automatic switch located at each door.  
A 4" stainless louver will be installed to help prevent moisture build up in all compartments.

## **Body Options:**

### **• Body Paint**

Portions of the fire body will be painted to match the chassis.

### **• Mount Body**

The aluminum body shall be separated from the steel chassis frame rails by a 3/4" rubber separator for flexing and to resist galvanic dissolution.

### **• LED D.O.T. Marker Lights**

LED clearance lights and reflectors shall be installed in conformance to the latest Federal D.O.T. standards.

### **• Turtle Tile**

Turtle Tile matting shall be provided with the completed apparatus. This style of matting is composed of 1/2" pliable black PVC with a grid style surface providing maximum drainage and traction.

Matting shall be installed in the following areas of the apparatus:

All body compartment floor(s) and shelving.

*NOTE: Matting shall be excluded in compartments utilizing a pump, booster reel and/or rollout frame.*

### **• SCBA Bottle Storage**

There will be two (2) SCBA bottle storage compartments installed in the wheel well areas of the body, one on each side. Each compartment will be large enough for storage of one (1) standard SCBA bottle.

### **• Grab Handles and Steps**

Two (2) each rubber infused grab handle bars and one (1) lighted folding step will be mounted at the rear tailboard area of the fire body for ease of egress.

### **• Adjustable Shelves**

Four (4) adjustable shelves will be installed in said compartments; (1) in D2, (2) in D3, (1) in P3. Shelves will have a 2" lip on all four sides with black tread lock around top edge for safety.

There shall be shelf slide brackets installed in all compartments for possible future shelving.

### **• Compartment Slides**

A 600# rated 100% extension slide will be installed in the lower portion of the D1 & P3 compartments.

A 250# rated out & down slide will be installed in the upper portion of the P2 compartment.

### **• Hose Bed**

A rear hose bed will be installed over the hose reel and booster tank. Hose bed will be capable of holding approximately 300ft of 3" dead-lay supply line and 200ft of 1 3/4" pre-connect.

## **Polypropylene Tank:**

### **• Polypropylene Water Tank**

A custom polypropylene water tank shall be mounted on the bed with the capacity of three hundred (300) gallons. The tank shall be provided with a fill tower and removable screen. Tank shall have an appropriate sized vent and a 3" overflow. Tank shall have an appropriate sized tank suction to allow full use of the water in tank. The tank shall have a lifetime warranty.

### **• Foam Cell**

A twelve (12) gallon polypropylene foam cell shall be integrated into the main water tank and baffled with a fill tower, lid vent, overflow protection and have a lifetime warranty.

## **Tank Level Gauges:**

### **• Tank Gauges**

There shall be water and foam tank level gauges installed as follows; one (1) each, large water and foam gauge on the driver's side pump panel and one (1) each, mini water and foam gauge on the passenger side pump panel.

## **Pump:**

### **• Pump**

The apparatus will have a water pump with a minimum flow rate of 250gpm @ 150psi. An FRC Pump Boss governor will be installed on the driver's side panel for pump controls. \*Pump has 'Pump & Roll' capabilities.

## **Plumbing:**

### **• Plumbing Package**

A welded stainless steel plumbing package to include; 1- 1" reel discharge, 1- 1" recirculation discharge, 1- 1 1/2" rear pre-connect discharge, 2- 1 1/2" discharges (one (1) on the driver's side pump panel, one (1) passenger's side pump panel), 2- 2.5" suction intakes (one (1) on the driver's side pump panel, one (1) passenger's side pump panel), 1- 2.5" tank to pump, all plumbed using fire service Akron or Elkhart valves. All discharges will be supplied with a pressure gauge and appropriate drains.

## **Foam:**

### **• Foam Proportioner**

A computer controlled Class A foam concentrate proportioning system will be installed in-line in the plumbing system and be capable of supplying Class A foam to all discharge outlets. Foam controls will be installed on driver's side pump panel.

## **Firefighting Reel:**

### **• Hannay Steel Booster Reel**

Installed Hannay 200' capacity, 1" painted steel booster reel with a single stainless steel roller assembly; Model #38-23-24. Booster reel will be installed at the rear of the body and have the capacity to house 200ft of 1" rubber booster hose. Booster reel will be electric rewind and have a 40amp breaker installed in-line.

## **Emergency Lighting Package:**

### **• Whelen Rescue Truck Light Package**

A Whelen Freedom Series 55" super LED Rota-Beam light bar, permanently mounted on cab roof over the B-post. Red and blue LED's with white front take-downs and side alley lights. Four (4) 400V series LED lights mounted on the top portion of the fire body; one (1) located driver's side upper left/front Model 4v3r- red, one (1) located driver's side upper right/rear Model 4v3r-red, one (1) located passenger's side upper left/rear Model 4v3r- red, one (1) located passenger's side upper right/front Model 4v3r- red; all with chrome flanges.

Two (2) LINZV series LED lights mounted on front brush guard; one (1) located driver's side, outward facing Model LINV2R-red, one (1) located passenger's side, outward facing Model LINV2R-red; both with chrome flanges.

Two (2) LINZ6 series LED lights mounted on front brush guard; one (1) located driver's side, forward facing Model LINZ6R-red, one (1) located passenger's side, forward facing Model LINZ6R-red; both with chrome flanges.

Two (2) LINZV series LED lights mounted in wheel well areas; one (1) located driver's side Model LINV2R-red, one (1) located passenger's side Model LINV2R-red; both with chrome flanges.

Two (2) 400v series LED lights mounted on the rear of the body; one (1) located lower left driver's side Model 4v3r-red, one (1) located lower right passenger's side Model 4v3r-red; both with chrome flanges.

Two (2) M series Super-LED lights mounted in the rear Quad Stack assembly, one on each side Model M6A; amber in color.

Two (2) Quad stack S/T/T/R light assemblies Model M6FCV4, mounted on the rear of the body; lights to be Models M6BUW, M6T, M6BTT.

One (1) Whelen 295DA lighting and siren/control center, mounted in console.

One (1) 100 watt Model SA315P black speakers, mounted on grill guard.

## **Scene Lighting:**

### **• Surface Mounted**

Two (2) Whelen M series surface mount super LED scene lights with chrome flanges will be mounted on the truck, Model M6ZC. The lights will be mounted in the center of the upper portion of the box, one on each side.



Two (2) Whelen Pioneer Plus Model PCPSM1C surface mount LED scene lights will be mounted on the rear of the truck, one on the upper driver's side and one on the upper passenger side.

## **Electrical:**

- **Electrical**

All wiring shall be color and function coded and run in loom where exposed. All wire ends not fixed in connectors shall be sealed with a heat shrink material. All wiring routed into or exiting the cab shall be routed through sealed bulkhead connectors to protect against water and dirt intrusion into the cab.

- **Kussmaul Auto Eject**

A Kussmaul Model 091-56-12 Auto Charge 1000 automatic battery charger shall be installed and connected to the chassis battery system to maintain the vehicle in a constant state of readiness.

- **Auto Eject Shoreline Receptacle**

A flush mount Kussmaul model 091-55-20-120 Super Auto Eject 120-volt shoreline receptacle shall be installed on the left side of the apparatus and connected to the charging system.

### **E. OPTIONAL ITEMS:**

- **SCBA Mounting**

A proposal for mounting 4 SCBA's on the apparatus. The mount system should be universal and a timeline for the option should be included.