

REQUEST FOR PROPOSALS  
Refurbishment of Charleston Fire District Apparatus  
1991 Pierce Arrow Fire Engine ID#: 91-819

BACKGROUND - Charleston Rural Fire Protection District (CRFPD) is a municipal corporation, formed under Oregon Revised Statutes, Chapter 478 Rural Fire Protection Districts, and Oregon Revised Statutes 198 Special Districts Generally. The Charleston Rural Fire Protection District is a local organization serving Coos Bay, Oregon, operating out of three fire stations with a staff of primarily volunteer fire fighters. The Charleston Rural Fire Protection District mission is to provide life safety, property protection, emergency medical response, mitigating protection from hazardous materials events and begin the recovery process from large scale disasters whether natural or man-made. These tasks are accomplished through the District's budget process, constant training, and the professionalism and dedication of our District fire fighters to the best of our ability to protect the persons and property within the District.

PURPOSE OF REQUEST FOR PROPOSALS - The Charleston Rural Fire Protection District is soliciting proposals for the refurbishment of Engine 91-819, a 1991 Pierce Arrow Engine Job Number: E6558-03.

TIME AND PLACE FOR RESPONDING - Responses must be received on or before September 12, 2018 3:00 p.m., and should be addressed to:

Charleston Rural Fire Protection District  
Attn: Mick Sneddon, Fire Chief  
92342 Cape Arago Hwy.  
Coos Bay, OR 97420

Or hand delivered to Charleston Rural Fire Protection District; 92342 Cape Arago Hwy.  
Coos Bay, OR 97420

**The intent of this proposal effort is to provide an opportunity for fire apparatus manufacturers and service centers to provide a quote on the project to refurbish an existing fire engine to NFPA 2012 Level II (2016 edition) requirements. The Fire District Management will make the determination from these quotes to proceed with the refurbishment.**

Phone: 541-435-7071  
Fax: 541-435-7075  
Email: [chief.mick@charlestonfire.net](mailto:chief.mick@charlestonfire.net)

# Project Scope

Refurbishment of a 1991 Pierce Arrow Engine Job Number: E6558-03 per the following.



# Quote Requirements

## Name

### 1. Condition & Scope

#### 1.01 Quote requirements

Quotes are required to be addressed to:  
Charleston Fire District  
Attn: Chief Mick Sneddon  
92342 Cape Arago Hwy  
Coos Bay, OR 97420  
Due Date: September 5, 2018

#### 1.05 Level II Refurbishment

The fire apparatus shall be refurbished to the Level II standards of the NFPA 1912 Standard for Fire Apparatus Refurbishing 2016 Edition.

#### 1.10 Break down apparatus

The apparatus shall be disassembled including removal of all bolt on items, interiors, and major components.

#### 1.15 Incoming Inspection

Upon arrival, the apparatus shall be inspected, road tested, and pumped (if applicable) per the NFPA 1911 Standard for Inspection, Maintenance and Testing of In-Service Automotive Fire Apparatus. A complete inspection checklist shall be completed and system/component deficiencies identified which are not scheduled to be repaired/replaced shall be communicated to the District.

#### 1.20 Shipping

Vendor shall pick up and deliver the apparatus from and to Charleston Fire District location, (92342 Cape Arago Hwy, Coos Bay, OR 97420).

#### 1.25 Weights

As part of the incoming inspection, the apparatus shall be weighed (both axles). Upon completion of the refurbishment, the apparatus shall be weighed again (both axles) to ensure the refurbished apparatus does not exceed the GAWR and GCWR, or GVWR, of the chassis when carrying the estimated in service weight of the unequipped apparatus as defined in NFPA 1912 Section 4.8.2.

### 2. Frame

#### 2.01 Inspect & Advise

All parts of the frame shall be inspected for wear, broken or loose bolts or other fittings, bent or damaged members, or other problems. Vendor shall notify the district in writing of any problems or abnormal conditions discovered during the inspection.

### 3. Drive Train

#### 3.01 Inspect & Advise

The original drivetrain or associated components that are not scheduled to be replaced (such as drive shaft, end yokes or flanges, universal joints, and associated mountings) shall be inspected for wear, balance, stress cracks, or other damage. Vendor shall notify the District in writing of any damage discovered during the inspection.

### 4. Engine

#### 4.05 Inspect & Advise

If the engine and related accessories are not scheduled for overhaul, then the engine shall be inspected for wear, fluid leaks, loss of power, and other potential problems. Vendor shall notify the District in writing of all necessary repairs and services needed to bring the engine and related accessories within the engine manufacturers' original specifications. Fluid samples for past 3 years available at vendors request.

#### 4.10 Belts, hoses and filters

All engine belts, hoses and filters shall be replaced.

#### 4.30 Injectors

All injectors shall be replaced and the fuel system properly adjusted for optimum operation.

#### 4.60 Engine Insulation

The engine insulation shall be completely removed and replaced with new, heavy duty aluminized insulation. The insulation shall be installed using a high heat adhesive and aluminum tape shall be used to seal the seams.

#### 4.70 Air Intake System

The air intake filter shall be replaced with a new one meeting OEM specifications.

### 5. Cooling System

#### 5.01 Inspect & Advise

The original cooling system is not scheduled to be repaired or replaced, however a thorough inspection shall be performed including inspecting for leaks, blockages, wear, or other problems that could affect vehicle after cooling. Vendor shall notify the District in writing of any problems discovered during the inspection.

#### 5.05 System Flush

The cooling system shall be flushed, and new coolant meeting the engine manufacturer's specifications shall be added. The cooling fins will be cleaned of all debris.

#### 5.10 Air intake system for cooling

A tunnel through the cab for improved airflow to the radiator with a custom stainless steel grill centered in the front of the cab. (Item to be priced as an option in quote.)

## **6. Lubrication System**

### **6.01 Inspect & Advise**

The lubrication system is not scheduled to be repaired or replaced, a thorough inspection shall be performed including inspecting for leaks, blockages or other problems that could affect vehicle lubrication. Vendor shall notify the District in writing of any problems discovered during the inspection.

### **6.10 Oil and fluids**

All chassis fluids shall be replaced including engine oil, transmission fluid, coolant, gear oil, transfer case oil, and window washer fluid.

## **7. Fuel & Air Systems**

### **7.01 Inspect & Advise**

Fuel & air systems shall be inspected, a thorough inspection shall be performed including inspecting for leaks, wear or other problems that could affect the performance of the system. Vendor shall notify the District in writing of any problems discovered during the inspection.

### **7.05 Fuel System Components**

The fuel filter shall be replaced with new. Fuel level sending units shall be tested for proper operation.

### **7.10 Fuel Tank Overhaul**

The fuel tank shall be removed and inspected for damage and corrosion. The fuel tank shall be cleaned and reconditioned. The fuel tank straps shall be replaced if necessary. Gas tank ahead of the left rear wheel will be removed and not reinstalled.

### **7.21 Air Lines**

All air lines shall be replaced with new including braking systems, valve operation systems and general air systems from the compressor to each component..

## **8. Exhaust System**

### **8.01 Inspect & Advise**

A thorough inspection of the exhaust shall be performed including inspecting for leaks, loose hangers, rusted tubing, wear or other problems that could affect the performance of the exhaust system. Vendor shall notify the District in writing of any problems discovered during the inspection.

Additionally, the Ward Diesel "No-Smoke" system shall be inspected and tested for proper operation.

## 9. Axles

### 9.01 Inspect & Advise

The axles are not scheduled to be repaired however a thorough inspection shall be performed including inspecting for wear, leaks, loss of performance, and other problems that could affect the performance of the axles. Vendor shall notify the District in writing of any problems discovered during the inspection.

## 10. Braking System

### 10.05 Replace Brake Chambers, Shoes, Drums, Slack Adjusters

The front brakes shall be replaced to include to brake chambers, shoes, drums and slack adjusters. The components shall meet OEM specifications. The rear brakes and drums are new, read brakes shall be inspected for wear. The rear brake chambers and slack adjusters shall be replaced.

## 11. Suspension, Wheels and Tires

### 11.01 Inspect & Advise

A thorough inspection of the wheels, tires, springs, hangers, mountings, and suspension system accessories shall be performed including inspecting for wear, stress cracks, sagging, improper bolt torque and other problems. Vendor shall notify the District in writing of any problems discovered during the inspection.

The axles shall be removed and the centering pins replaced,

## 12. Steering

### 12.01 Inspect & Advise

A thorough inspection of the steering box, steering gear, drag links, power steering pump, hose, and accessories shall be performed including inspecting for wear, leaks, loss of performance and other problems. Vendor shall notify the District in writing of any problems discovered during the inspection.

Flush and replace all fluids.

Replace all hoses in power steering system.

### 12.05 Tie Rod Ends

The tie rod ends shall be replaced with new meeting OEM specifications

## 13. Transmission

### 13.01 Inspect & Advise

A thorough inspection of the transmission shall be performed including inspecting for wear, damage, and fluid leaks. All fluid levels will be checked and filters shall be replaced. Vendor shall notify the District in writing of any problems discovered during the inspection.

### Drive Line

Lock tabs on driveline are missing in some areas, replace

## 14. Low Voltage Electrical Systems & Warning Devices

### 14.07 Battery Charger with Onboard Air Compressor

A new Kussmaul 40 amp Auto Charge 2000 with remote display (091-187-12-Remote) battery charger shall be installed. Remote display shall be mounted rear of driver's side front door or other suitable location. Additionally, a Kussmaul auto pump system shall be installed to keep the chassis air charged.

Mounting location for auto pump to be approved by District.

### 14.08 Auto Eject

A new Kussmaul 120 volt 20 amp Super Auto Eject (091-55-15-DC) shall be installed rear of the driver's side front door. The cover shall be red.

### 14.10 Heavy Gauge Wiring

The wiring from the batteries to the starter shall be replaced with new meeting OEM specifications.

### 14.11 Chassis Wiring Harness

The chassis wiring harness shall be inspected to including the condition of the wires, connectors, relays, fuses and/or circuit breakers and related components. The chassis wiring system shall be repaired including chaffing, shorts, loom, frayed wires, bad connections, and faulty components.

### 14.12 Body Wiring Harness

The body wiring harness shall be inspected to including the condition of the wires, connectors, relays, fuses and/or circuit breakers and related components. The body wiring system shall be repaired including chaffing, shorts, bad connections, and faulty components.

### 14.13 Load Manager

A new Kussmaul LoadManager2 shall be installed on the apparatus. The load priorities shall be determined by the District.

### 14.135 Warning Lights Master control

The master control shall be moved from the siren control head to the switch bank on the upper dash in position #1. Master control switch will operate a remote mounted relay meeting the continuous duty specifications needed to run all warning systems including warning lights and electronic siren.

### 14.14 Warning Lights - Zone A Upper

The existing lightbars shall be retained and re-utilized.

#### **14.16 Warning Lights - Zone A Lower**

The forward facing emergency lights shall be replaced with two (2) Whelen 600 Super LED light heads. The LED color and lens color shall be red. The light heads shall be mounted either in a common bezel with the front turn signal or in a separate chrome bezel.

#### **14.17 Warning Lights - Zones B/D Upper**

The upper B/D zone emergency lights shall be covered the light bar and rear beacons.

#### **14.18 Warning Lights - Zones B/D Lower**

The side facing emergency lights shall be replaced with six (6) Whelen 600 Super LED light heads. The LED color and lens color shall be red. The light heads shall be mounted in a chrome bezel.

#### **14.19 Warning Lights - Zone C Upper**

The rear upper warning lights shall be replaced with two (2) Whelen L3I Series Super LED Beacons. The LED color and lens color shall be red. The light head shall be mounted on compartment tops or on a pedestal.

#### **14.20 Warning Lights - Zones C Lower**

The rear facing emergency lights shall be replaced with two (2) Whelen 600 Super LED light heads. The LED color and lens color shall be red. The light heads shall be mounted either in a common 4 pack chrome bezel with the rear brake turn and tail lights or in a separate chrome bezel.

#### **14.23 Clearance/Marker Lighting**

The clearance/marker lighting shall be replaced with new LED light heads similar in shape and size to the original clearance lighting.

#### **14.24 Brake, Reverse & Turn Signals**

Remove and weld plates into the large holes that are behind them from the prior lights.

#### **14.25 Reflectors**

The red and amber reflectors shall be replaced with new meeting DOT standards.

#### **14.27 Go Lights**

Two (2) new Go Lights Stryker Model 30204 LED remote controlled spot lights shall be installed on each side of the cab roof. The Go Lights shall be mounted on pedestals behind the light bars, one above each front seat. The remote controls shall be accessible to the driver and Officer on corresponding sides. The original spot lights shall be removed and holes properly concealed.

#### **14.28 Ground Lighting**

Ten (10) new 4" round white LED constant duty light heads shall be installed under the apparatus in stepping areas. The lights shall be mounted in a angled bracket below the cab doors (4), below the pump panels (2), below the rear of the body on the drivers and passengers sides (2), and below the rear of the apparatus (2).

#### **14.29 Compartment and pump panel Lighting**

The compartments shall have 4" round LED lights installed in place of existing lighting. The compartment lights shall be illuminated when the compartment door is open and turn off when the compartment door is shut.

The Pump panel lighting on both sides of the vehicle will be replaced with acceptable LED lights as recommended by vendor



### **14.33 Air Horn**

The air horns shall be removed and rebuilt with new seal kits. The air horns shall be polished and re-installed.

### **14.34 Siren Federal Signal Q2B**

A new Federal signal Q2B mechanical siren shall be installed on the front bumper. A floor switch shall be installed at both the driver and officer positions.

### **14.36 Back Up Alarm**

A new ECCO 87dB backup alarm shall be installed on the apparatus and be activated when the apparatus is put into reverse.

### **14.39 Scene Lighting - Brow**

A new Whelan Pioneer Slim Line Dual Panel white LED brow light shall be installed at the front of the apparatus. The brow light shall be operated by a switch located in the cab.

## **15. Line Voltage Electrical 120/240**

### **15.10 AC Electrical system**

A new 5 kw Honda gas generator has been newly installed by the District in the dunnage area above the pump house.

A new load center and one receptacle shall be installed on either side of the apparatus and connected properly to the generator.

## **16. Communications Systems**

### **16.10 Communications System - Wireless**

A Firecom, 4-station, 2-radio, wireless intercom system shall be provided and installed by the apparatus manufacturer.

Four (4) intercom stations, two (2) ear headsets with microphones, wireless gateway, and apparatus mounted battery charger and all necessary cables and connectors shall be provided to make the system operational in accordance with the manufacturer's installation requirements. The intercom system shall interface with the installed two-way radio system and be confirmed for no radio or electrical interference.

## **17. Driving & Crew Compartments**

### **17.01 Cab**

The cab shall be inspected including the condition of the mountings for wear, damage and corrosion. Vendor shall notify the District of any damaged components that are discovered during the inspection.

### **17.10 Windshields**

The windshields shall be removed and replaced with a new ones meeting OEM specifications. The rubber gaskets shall be replaced.

### **17.11 Windshield Washer**

The windshield washing system shall be overhauled to include new blades, new hoses, nozzles (if necessary) and fluid

### **17.28 Driver's Seat**

The driver's seat shall be replaced with a new H.O. Bostrom Sierra Air ride seat with gray durawear material.

### **17.29 Officers Seat**

The officers' seat shall be replaced with a new H.O. Bostrom Mechanical seat with gray durawear material.

### **17.30 Rear Facing Crew Seats**

The rear facing crew seats (2) shall be replaced with a new H.O. Bostrom Tanker 450 SCBA seat with gray durawear material.

### **17.32 SCBA Mounting**

The SCBA seats (2) shall have Securall SCBA locking systems installed.

### **17.35 Cab interior**

The vinyl on the doors, engine dog house and dash shall be replaced. The cab roof shall be replaced with an exterior black carpet (District to provide material)

### **17.50 Heating**

The cab heater system shall be inspected for proper operation. Heater hoses shall be replaced with new. If the heating system is not functioning correctly, Vendor shall notify the District in writing of any problems discovered during the inspection.

### **17.40 Cabin Air Conditioner**

The Cabin Air conditioner shall be reconditioned and returned to working order. System currently does not cool.

### **17.45 Mirrors**

The cab mirrors (2) shall be replaced with new west coast style remote controlled, heated mirrors.

### **17.50 Diamondplate**

All non-welded interior aluminum diamondplate shall be removed from the apparatus. The diamondplate shall be chemically cleaned, de-oxidized and machine polished to a mirror like finish. Upon re-installation of diamondplate, a new gray seam seal bead shall be applied to prevent water intrusions behind the diamondplate.

All welded interior aluminum diamondplate shall be chemically cleaned, de-oxidized and machine polished to a mirror like finish.

### **17.51 Air Conditioning**

The air conditioning system shall be inspected, evacuated, and recharged. A new dryer shall be installed and a/c lines shall be replaced as needed. A new A/C compressor shall be installed.

### **17.55 Cab door handles**

Cab door handles are worn out and loose. Replace all exterior and interior handles, clean and lubricating latch systems. Clean window registers and replace all window crank handles

## **18. Body, Compartment, & Equipment Mounting**

### **18.01 Entire Body, Subframe & Hosebed**

The entire body, subframe and hosebed shall be inspected for wear, cracking, damage and corrosion. Vendor shall notify the District in writing of any problems discovered during the inspection.

### **18.10 Grab Rails**

All grab rails will be replaced with rails meeting current NFPA standards for fire apparatus grab handles

### **18.20 Pump Panel Access**

The passenger's side pump panel shall be modified with new quick release quarter turn style locks to accommodate for easy removal of pump panel. The top half of the panel shall be hinged for quick access without removal of the entire panel. Design to be approved by District.

### **18.42 Dry Deck**

The compartment floors and shelving shall have new dry deck flooring installed.

### **18.56 Hose bed cover**

A new aluminum diamondplate clamshell type hosebed cover shall be fabricated and installed above the hosebed. The hose bed cover shall be supported with structural frame work and heavy duty gas shocks.

### **18.58 Hose Bed Divider**

Two (2) new full length hose bed divider shall be fabricated of 1/4" aluminum and mounted.

### **18.70 Ladder rack**

The ladder rack shall be tested for proper operations. Lift cylinder(s) shall be inspected for leaks. The ladder rack will have blocking installed to provide proper nesting of the present ladders

### **18.90 Diamondplate**

All non-welded exterior aluminum diamondplate shall be removed from the apparatus. The diamondplate shall be chemically cleaned, de-oxidized and machine polished to a mirror like finish. Upon re-installation of diamondplate, a new gray seam seal bead shall be applied to prevent water intrusions behind the diamondplate.

### **18.20 Operators Side front wing door**

Front wing door operator's side was damaged and warped during a fire from excess heat. The door or door skin will be replaced with an OEM quality piece.

## **19. Paint & Graphics**

### **19.05 Steam Cleaning**

Prior to body work and prepping, the apparatus shall be completely steam cleaned to remove all debris, dirt, oils, grease and other contaminants.

### **19.10 Body work**

The cab and body shall be inspected for damage and imperfections. Minor dents, and scratches shall be filled, smoothed and sealed. Minor cracks shall be rewelded, ground and sealed. Surface rust shall be treated and sealed. Major body work and corrosions shall be identified and reported to the District.

### **19.20 Interior**

All painted surfaces in the cab including seat bases shall be refinished in a durable matte black finish.

### **19.25 Frame rail**

The frame rail shall be inspected and surface rust shall be treated. Bare metal shall be spot coated to protect from corrosion, similar color to original.

### **19.30 Compartments**

The compartment interiors shall have all mounting brackets removed. Holes that are not to be re-used shall be welded and ground down. The compartment interiors shall be re-finished with a heavy duty gray Rhino Liner finish. Compartment shelving shall be refinished with gray Rhino Liner. Interior of compartment doors shall remain job color.

### **19.35 Paint Surface Preparation**

Prior to paint preparation, all bolt on components shall be removed including but not limited to; door handles, lighting, bezels, grab rails, steps, trim, front grill, side grills, mirrors, pump panels, diamondplate, hose beds, water tank, fenderettes, D rings, rub rails, ladder rack, etc. The body will be finish sanded using a multi-step sand process and prepared for final paint. Upon completion of final preparation, the body will be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint will be applied in multiple coats to ensure proper paint coverage with a high gloss finish. The entire body will be buffed and detailed.

### **19.40 Primer and Preparation**

After finish sanding, the body shall be sealed and a primer coat shall be applied. After priming, the painting surface shall be finished sanded in preparation for final coat.

### **19.45 Cab**

Upon completion of final preparation, the cab will be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint will be applied in a minimum of three coats to ensure proper paint coverage with a high gloss finish. The entire cab will be color sanded, buffed and detailed.

### **19.50 Body**

Upon completion of final preparation, the body will be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint. Finish paint will be applied in a minimum of three coats to ensure proper paint coverage with a high gloss finish. The entire cab will be color sanded, buffed and detailed.

### **19.55 Pump and plumbing**

The pump enclosure and plumbing shall be steam cleaned and bare surfaces shall be spot color coated to protect from corrosion

### **19.65 Paint Codes**

The paint will match customer furnished paint code and layout. The paint code will be as indicated below:

#### **PRIMARY PAINT COLORS**

Cab & Body: Color: Red - Paint Code # Sikkens LV650 FLNA3021

Cab roof extending from trim line upward: Color: Grey – Sikkens LV650 FLNA94457

### **19.70 Reflective striping**

A six (6) inch high "Scotch-Lite" stripe will be provided, 6" middle with 1" above and below with 1" spacing. The stripe will be applied on a minimum of 60 percent of each side of the unit, 60 percent on the rear of the unit and 40 percent on the front of the unit. The Scotch-Lite stripe layout will be the same as the last unit, a picture will be provided. The Scotch-Lite will be white in color.

### **19.75 Chevrons**

At least 50% of the rear facing vertical surface will be covered with alternating strips of reflective scene square striping. The reflective scene square striping shall be highly reflective diamond grade ruby red and safety lime green. The back side of the compartments and the upper rear compartment door.

### **19.80 Lettering & graphics**

Scotch-Cal without drop shadow lettering shall be provided on the cab driver's and officer's doors per the District requirements. Lettering provided on the driver's and officer's cab doors shall be 3" high.

## 20. Fire Pump & Associated Equipment

### 20.10 Waterous

The fire apparatus has a Waterous Model **CMU YBX 1,500** GPM pump. The serial # is: **22781WI/227792T**

### 20.11 Waterous Inspect & advise

Prior to disassembly, the pump will go through a preliminary test for proper operation and performance. The exterior of the pump shall be cleaned. It is understood that quote does not include pump overhaul, pricing to be provided as an option in the quote.

### 20.15 Pump Gearbox Yoke

Will be inspected, recommend replace seal

### 20.28 Pump test

The pump shall be dynamically tested for leaks and to insure the performance meets the checked for correct operation within the manufacturers operating parameters. A pump certification will be provided when the work is complete.

### 20.35 Master Gauges

Master pressure gauges shall be replaced with new.

### 20.36 Discharge pressure gauges

Discharge pressure gauges shall be replaced with new.

### 20.40 Engine & Fuel Gauges

Pump panel gauges shall be replaced with new include engine hours and temperature gauges.

### 20.45 Water level gauges

Two (2) new water level gauges shall be installed on the passenger's side pump panel, and on the rear. The gauges shall be Class I ITL40 LED water level gauges, "multicolor" LED indicators. The Driver's side and sending unit are new and have been installed by District.

## 22. Water Tank

### 22.01 Inspect & advise

The water tank shall be filled and inspected for leaks in place. The District shall be advised of the findings.

### 22.05 Water tank size (list as optional when bidding including price)

The existing tank shall be increased to 1,000 gallons (option for cost to replace with poly tank of this or larger size requested as part of the quote)

## 26. General

### 26.01 Assembly

Upon completion of mechanical overhaul and paint processes, items previously removed and not specifically addressed in the above statement of work shall be re-installed on the vehicle including grab rails, rub rails, emergency lighting, DOT lighting, scene lighting, diamondplate, steps, bumpers, tow hooks/eyes, doors, cab interiors, antennas, radios, water tank, hose bed, hose bed dividers, reels, monitors, brackets, shelving, ladder rack, hard suction mounts, door handles, door hardware, panels, mirrors, windshields, speakers, air horns, fenderettes, and grills.

### 26.02 Wash & Detail

Prior to delivery, the vehicle, the interior and exterior be cleaned and detailed. The finalization process detailing will include installation of NFPA required labels, checking fluid levels, sealing and caulking required areas of the cab and body, rust proofing, paint touch-up, etc.

### 26.03 Testing & Delivery Requirements

a. The refurbished apparatus shall be completely tested and certified by the company providing the refurbishment, as per NFPA 1912, 2011 edition, Including:

- i. Pump testing
- ii. Pumping Engine Overload Test
- iii. Pressure Control Device Test
- iii. Priming System
- iv. Test Vacuum Test
- v. Water Tank-to-Pump Flow Test
- vi. Water Tank Capacity Test
- vii. Low-voltage Electrical System Test
- viii. Line-voltage Electrical System Test
- ix. Test cab for leaks
- x. Road Test
- xi. Delivery Acceptance Testing - will be conducted on the manufacturer's site prior to delivery of the apparatus. A representative of the fire district shall witness final acceptance testing

### 26.10 Vehicle site inspections and team review

District will send two (2) members to inspect and review the project three times at District expense. Each time District personnel will have a meeting with the project leader at minimum

Trip 1: Inspect unit post tear down to confirm requirements for refurbishment and items not requiring work or requiring removal from the vehicle permanently.

Trip 2: Pre-paint inspection to ensure items have been completed as per agreement.

Trip 3: Final inspection and acceptance prior to shipping.