



EMERGENCY MEDICAL  
SERVICES  
KURT ZELLMANN  
INTERIM DEPUTY CHIEF



CITY of WEST ALLIS  
FIRE DEPARTMENT

## **Supporting documents for the purchase of a used 1999 Pierce Fire Engine**

### **Need Identification**

The WAFD unfortunately has an acute need to rectify deficiencies in both our front line and reserve apparatus fleet. Acquisitions of apparatus have been delayed in past budget cycles resulting in excessive times in front line service for very complex and critical public safety vehicles. Mechanical failures in front line equipment has forced reserve equipment in to front line service for extended periods of time. This has resulted in failures of the reserve apparatus due to the high utilization of aged equipment. We have encountered a number of occurrences where three of four front line companies are in reserve apparatus and we have no back up apparatus. Even more common is to have two of three front line companies in reserve equipment while front line equipment awaits repair. In fact at a critical point this summer we were not able to provide enough apparatus for the IndyFest event and had to rely on a neighboring department to provide an Engine for two days of the event. This resulted in the WAFD losing the revenue generated by two days of engine rental to the event.

The complexity and age of the equipment as well as the increased utilization of fire apparatus on EMS runs has led to significant maintenance costs and unacceptable levels of down time for apparatus due to obsolete on non-stocked repair components. The West Allis City Yards provides excellent service to the WAFD and a tremendous value to the city. If these complex repairs were to be done by a vendor the costs would be exorbitant.

After numerous conversations regarding apparatus maintenance and availability Fleet Services Director and I began evaluating the availability and pricing of used apparatus on market. We found many of the used apparatus were newer models than what was in our fleet with less mileage. At that point, we decided to investigate the availability of used apparatus further to see if we could find a viable candidate to economically reduce the average years of service and increase the reliability of both the front line and reserve fleet.

## A quick review of the WAFD Fleet

### Front Line

**Eng 1-** 2005 Pierce (9-y/o) **Eng 2-**1994 Pierce (20-y/o) **Eng 3-** 2010 Pierce 2010 (4-y/o) **Truck 2-**2003 Pierce (11-y/o) **Average Front Line Age 11 Model Years Old**

### Reserve Fleet

**Eng 4-**1985 Ford/3D (29-y/o) **Eng 5-**1990 Pierce (24-y/o)  
**Truck 3-**1991 (23-y/o) Seagrave- **Average Reserve Fleet Age 25 Model Years Old.**

*Four of Seven emergency response vehicles are eligible for WI Collectors Plates.*

## Identification of a viable used Engine

### Original Add



The screenshot shows the website for Brindlee Mountain Fire Apparatus, LLC. The header includes the company logo, a 'Sign In Or Register' link, social media icons, and a toll-free phone number: 866.285.9305. The navigation menu contains: HOME, FIRE TRUCKS FOR SALE, RECENT DELIVERIES, TESTIMONIALS, SERVICE, ABOUT US, and CONTACT. A large image of a fire truck is displayed on the left. On the right, there are five menu items: 'BUYING A USED FIRE TRUCK?', 'SELLING YOUR USED FIRE TRUCK?', 'NEED WORK ON YOUR USED FIRE TRUCK?', 'OUR COMPANY DIRECTORY', and 'FIRE TRUCK FINDER'.



#### 1999 Pierce Quantum Pumper

1999 Pierce Quantum Pumper  
Pierce Chassis  
Seating for 6 with 5 SCBA Seats  
Detroit Series 60 500 HP Diesel Engine  
Allison 4000 Automatic Transmission  
Waterous CMU 1500 GPM Side-Mount Pump  
750 Gallon Polypropylene Tank  
Driver's Side Discharges: 2 - 2.5"  
Driver's Side Suction: 1 - 5"  
Officer's Side Discharges: 2 - 2.5" 1 - 4"  
Officer's Side Suction: 1 - 2.5" 1 - 6"  
Front Suction: 1 - 5"  
Rear Discharges: 2 - 2.5"  
1 - Electric Booster Relief  
2 - 2"X500' Crossovers  
Air Conditioning  
Interior Medical Cabinet  
Ground Ladders: 14' Roof, 24' Ext  
Engine Hours: 7,874  
Mileage: 77,203  
**Additional Equipment not included with purchase.**  
Overall Length: 39'6"  
Overall Height: 9'8"  
Wheelbase: 17'0"

#### Seller's Information About this Truck:

This truck has been well maintained with a bi-annual Preventive Maintenance program. Lifetime Guarantee on 750 gallon poly tank.

**\$99,000**

For Additional Information,  
Contact Brindlee Mountain at

or  
"Ask More Questions About This Truck"

[Print this page](#)

## **Supporting documents for the purchase of a used 1999 Pierce Fire Engine**

After becoming aware of the availability of the 1999 Pierce shown above, I contacted the sellers and found that the rig was in Illinois. I then arraigned for an inspection of the rig where it is has been a reserve unit for the Mount Prospect Illinois Fire Department for the past five years. Assistant Chief of Fire Operations Gary Streicher and Fleet Superintendent Jim Leu also attended the inspection of the rig at the Mount Prospect IL City Yards. The rig was placed on a service hoist and lifted in the air upon our arrival per our request. We were able to examine the all of the major systems of the rig efficiently from the bottom up. The MPFD made available all of the rigs service records from when it was purchased new by the MPFD as well as the fleet superintendent and the mechanic assigned to maintain the MPFD fleet. Jim Leu was able to ask questions of both individuals and examine the service records and history of the rig. The MPFD personnel were forthcoming with what they thought the current or pending issues were with the rig and both Jim and I were able to examine them closely. We found no other major issues with the rig other than what the MPFD personnel identified to us.

The most prominent problem reported is a cold issue of hesitation on initial startup after a 24 hour period of non-operation. A slow leak within the transmission torque converter causes an approximately five second delay in forward motion of the rig upon initial engagement of the transmission after a cold start. Once the rig has moved the issue will not re-appear until the rig sits for at least 24 hours. The cause of this issue is a known problem with a valve body in the transmission. The manufacture has addressed this issue with an updated valve body design. The transmission must be removed from the vehicle to replace the old design valve body with the new design. On a subsequent test drive the reported issue did not occur and no other issues were observed. The rig operated appropriately on the test drive and is in far better condition than any current WAFD reserve unit.

Because of the “minor” nature of the transmission issue and the significant amount of work required to repair it, MPDF has elected not to perform the repair. From their stand point the rig is at the end of its service life with their department and they are not interested in investing in the repair. The MPFD keeps all of their apparatus ten years in front line service and five years in reserve status. They have already purchased a replacement for this engine.

The other maintenance issues identified during the inspection are all wear related and easily rectified by the West Allis city yards. The rig needs a set of front tires, a muffler and interior seat repair. Cosmetically, there is one large area of corrosion on the aluminum body and a number of small areas of bubbling under the paint on the bed of the rig.

The issues identified during the inspection and test drive are not out the ordinary for a rig of this age and service history. The general size and layout of the rig is very similar to rigs currently in service with WAFD and the minor differences in this unit will not impact WAFD tactics or strategies. Overall the rig is deemed to be a good fit for WAFD operations.

The WAFD operational plan for this Engine if acquired would be to address all of the mechanical, wear and cosmetic issues on the engine and then place it into front line service with the WAFD as Engine #2. The current Engine #2 is a 1994 model year and has been in front line service for the WAFD for twenty years. The 1994 Engine would be moved to reserve status and a current reserve unit either the 1990 Pierce Javelin or the 1985 Ford would be removed from the reserve fleet.

### **Purchase and Remediation Projected Costs**

An initial asking price of **\$99,000** for the MPFD engine as seen in the Add above was deemed inappropriate for the unit. I researched previous sales of comparable units during the past year to better determine a value for the unit. The MPFD when approached indicated their lack of interest in rectifying the known issues with the rig and they preferred an as is sale. Subsequently, a cost estimate of the needed repairs was compiled by Jim Leu and is itemized below.

Needed Service:

Removal & replace transmission with a warranted remanufactured unit. \$8500.00

Replace and balance two front tires. \$975.00

Replace Muffler \$300.00

Seat Repair \$225.00

Body corrosion repair, WAFD lettering & warning/scene lighting upgrading \$5000.00\*\*

*\*\* To be performed off site by subcontractor.*

**Estimated total remediation cost \$15,000.00**

## **Purchase Cost**

A two part offer was extended to the MPFD once it was determined that the engine would be a good fit for our fleet and was in acceptable shape to provide some years of valuable service to the WAFD.

The two part offer was a very aggressive on the part of WAFD. The first offered price for the rig was \$65,000.00 with all known and identified issues, transmission, tires, muffler, seats and body corrosion to be repaired by MPFD prior to delivery to WAFD.

The second part of the offer was for the rig in as is condition with WAFD assuming responsibility for the known repairs. The offered price in this condition was \$50,000.00

MPFD countered with a complete rejection of the offer of MPDF assuming the cost of the identified repairs. But the MPFD extended a counter offer of \$55,000.00 for the rig in as is condition to WAFD. This offer will actually net the MPFD \$50,00.00 for the rig because they are required to pay a 10% listing fee of \$5,000.00 to the advertising broker they retained for the sale.

Based on the recent sales of similar models I sincerely feel that this purchase price is a relative bargain for the WAFD even with the investment of the needed remediation.

For reference, the current estimated cost of a new similarly equipped Fire Engine is estimated at \$450,000.00 or approximately 85% less than the purchase of a new Engine.

Comparable available used units from same dealer with current asking prices.

### *Brindlee Mountain Fire Apparatus*

1999 Pierce Quantum – Asking \$116,000 (No front intake/Higher Miles/Distance)

1997 Pierce Lance – Asking \$95,500 (Bigger/Longer/Less Miles\*/Distance/Old Model Motor)

2000 Pierce Contender – Asking \$110,000 (No front intake/Small Motor/1K H2O – To much)

1999 ALF Asking \$95,000 – (Higher Miles/1K H2O/Manufacture out of business – Parts?)

## **Summary**

Based on inspection and negotiation the by the WAFD a roughly 45% decrease was negotiated in the agreed upon purchase price of the rig from the asking price. With the additional investment by WAFD to address all known issues with the rig and prepare it for front line first due service with the WAFD as Engine #2 an additional \$15,000 should be invested in the rig. Bringing the total acquisition cost to \$70,000.00 and 30% under the original asking price of the as is rig. Based off of the current capital replacement schedule we expect to keep this vehicle in our fleet as follows; 1 year front line and 5 years in reserve.

Respectfully Submitted,



### **Captain Kurt W. Zellmann**

Interim Deputy Fire Chief of Fire Prevention Urban Affairs & EMS

Office (414) 302-8910

Cell (262) 483-2573

E-mail: [kzellmann@westalliswi.gov](mailto:kzellmann@westalliswi.gov)

### **City of West Allis Fire Department**

7332 W National Ave

West Allis, WI 53214

Website: <http://www.westalliswi.gov/fire>

---

**From:** Steven Bane  
**Sent:** Tuesday, November 11, 2014 4:02 PM  
**To:** Mark Wyss  
**Subject:** FW: E4-4203/E5-4202 expenses

Mark,

Here are the costs of maintaining our two current reserve engines.

Steven Bane  
Fire Chief  
West Allis Fire Department  
7332 West National Avenue  
West Allis, WI 53214  
[sbane@westalliswi.gov](mailto:sbane@westalliswi.gov)  
414 302-8901 Office  
414 302-8927 Fax



**From:** Kurt Zellmann  
**Sent:** Friday, November 07, 2014 4:12 PM  
**To:** Steven Bane; Gary Streicher; Jay Scharfenberg; Mason Pooler  
**Subject:** E4-4203/E5-4202 expenses

Hi all,

I had Jim give me the numbers for parts and labor into the two reserve engines for the last year. (See below)  
Wow...

We really need to keep an eye on these numbers and also the days in service vs out of service for the rigs. I think with that simple data, justification of replacement becomes much better and we can really determine when expense out weighs value.

The city putting \$32K into a rig that could barely bring \$15K on the open market or \$3K at auction is an issue. Especially when plotted against days available. The cost of ownership becomes prohibitive fairly quickly. I wish I had the data to show what that would come out to per response for a rig... I think it would be an interesting graph to have...

I'm certain we could figure out a way to do it starting at the first of the year for each rig.

KZ

Sent from Kurt Zellmann's Mobile Device.

----- Original message -----

From: Jim Leu  
Date: 11/07/2014 12:20 PM (GMT-06:00)  
To: Kurt Zellmann  
Subject: 4203/4202 expenses

Kurt,

We did some research and got you expenses from January 2013 thru present.

4202 E5	Parts \$18,686.73
	Labor \$13,446.53
	TOTAL \$32,133.26

4203 E4	Parts \$3,789.47
	Labor \$3,417.42
	TOTAL \$7,206.89