



# Cottage Grove Fire Department



## Engine Three (CGE3) Replacement Summary

**Purpose:** The Cottage Grove Fire Department is providing the following information at the request of the Cottage Grove Joint Fire Commission in regard to the scheduled replacement of Cottage Grove Engine Three (CGE3).

**Background:** Engine Three was purchased collectively by the Town and Village of Cottage Grove in 1996 and scheduled for replacement in fiscal 2022. Engine Three served in a “first due” capacity as the primary response engine from 1996 to 2008. In 2008, Engine Four (CGE4) was purchased utilizing funds received through the first Pleasant Springs Contract. At that time, Engine Three moved to a more reserved roll for vehicle fires/accidents and interstate calls. It has remained a primary response apparatus for structure related emergencies (commercial buildings, residences, agricultural facilities, etc.) and hazardous materials responses in both the Town and Village of Cottage Grove as well as the Town of Pleasant Springs. The last few years, the reliability of Engine Three has waned. The most recent issues include: electric pump control, failed pump test, leaf springs, primer valve assembly, primer valve motor and several electrical actuators. All have caused the apparatus to be placed out of service for repairs and diagnosis of issues.

**Process:** The six member committee, led by Fire Chief Nick Archibald, contacted representatives from five apparatus manufacturers: Custom Fire Apparatus, Inc., E-One, Pierce Manufacturing, Inc., Rosenbauer America, and Seagrave Fire Apparatus, LLC. Custom Fire, Pierce, and Rosenbauer responded with full onsite presentations, apparatus specifications and financial proposals. All manufacturers were provided with initial specifications determined by the committee. The initial specifications matched those specifications of the existing Engine Three. In meeting with the manufacturers, some items were obsolete and no longer available or have been replaced with updated or new components/systems. After meeting with them, the three responding manufactures were provided with final specifications to formulate financial proposals.

**Discussion:** The committee discussed and considered department and municipal priorities during its process: Fiscal Responsibility, Community Growth, Emergency Preparedness, Communications and Present/Future needs. As a high dollar capital expense, this apparatus is expected to be in service through 2040. Non-necessary electronics and a truck mounted generator were eliminated, a radio signal booster was added, tank size and pump capacity are increased to meet current and expected future flow rates as well as maintain the current ISO rating. Manufactures use components from many of the same vendors (engine, seats, lights, etc.). The main difference noted during this process was the chassis. Each manufacturer has different options for sizes, design and layout. The committee chose the chassis that was most consistent with current apparatus while also providing the most room for personnel and equipment.



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## Review by Manufacturer:

**Custom Fire Apparatus:** Custom Fire Apparatus does not fabricate their own chassis. Their chassis are furnished by Seagrave/Sutphen which is why their prices tend to be higher than other manufacturers. Construction is solid and performance well documented. The downfall is the complex wiring system. Engine 3 has had many problems with the electrical system. In 2007, the main light bar had to be replaced due to excessive load on the electrical system which was causing breakers to trip. Interior electrical lighting had to be converted to LED to continue shedding load. These repairs had to be done on both Engine 3 and Squad one.

**Pierce Manufacturing:** Pierce is the largest manufacturer of fire apparatus in the world and they custom manufacture the entire truck. We currently have one apparatus by this manufacturer (Engine 4) and it has been very reliable. Further, Pierce is located in Wisconsin (Appleton) and the dealer's service center is located an hour from our station.

**Rosenbauer America:** Rosenbauer also custom manufactures the entire truck. Overall performance varies. A number of departments have purchased apparatus from Rosenbauer only to revert back to Custom Fire or Pierce. Their service center is located out of state. We currently do not have any apparatus from this manufacturer in our fleet. Of the seven (7) fire apparatus we have, there are presently five (5) manufacturers: Custom Fire, E-One, Pierce, Monroe Truck, and Midwest Fire.

## Results:

Manufacturer	Custom Fire Apparatus, Inc.	Pierce Manufacturing, Inc.	Rosenbauer America
Home Location	WI	WI	SD
Service Representative	Custom Fire Apparatus, Inc.	Reliant Fire Apparatus	Jefferson Fire & Safety
Repair Facility	Osceola, WI	Appleton, WI	Lyons, SD
Onsite Maintenance	No	Yes	No
Onsite Pump Test	No	Yes	No
Currently in CG Fleet	Yes	Yes	No
Build Timeline (Months)	12	10.5-11.5	12
Fabricates Own Chassis	No	Yes	Yes
Meets All Specifications	Yes	Yes	Yes
Base Price (No Discounts)	<b>\$727,000.00</b>	<b>\$689,160.00</b>	<b>\$712,604.00</b>
Discounts Available*	\$0.00	\$11,218.00	\$13,020.00
Additional Equipment (+/-)	\$10,000	\$10,000	\$10,000
<b>Final Price</b>	<b>\$737,000.00</b>	<b>\$682,942.00</b>	<b>\$704,584.00</b>

Notes:

Pricing is based on order being placed in Fiscal Year 2020 and delivery in Fiscal 2021  
 Base Price will increase by 3% according to industry average in January 2021

\*Discounts Available: Credit given when progress payment received upon chassis completion. Pierce offers an additional \$20,000.00 discount if the apparatus is paid for up front.

**Recommendation:** The committee recommends replacing the current Engine Three with a new apparatus provided by Pierce Manufacturing, Inc. Pierce, and it's dealer, has delivered the best service coupled with proven performance.