The City of BARRIE

STAFF REPORT RPF012-14
September 22nd, 2014

File: T00-GE
Pending #: P1/10

TO:	**GENERAL COMMITTEE**
SUBJECT:	**ADDITION TO 2014 CAPITAL PLAN - ACQUISITION OF A FIRE PUMPER TRAINING AND TEST TRAILER**
WARDS:	**All**
PREPARED BY AND KEY CONTACT:	**B. PIRIE** **MANAGER OF FLEET SERVICES (Ext. 4856)** **R. MONKMAN** **DEPUTY FIRE CHIEF (Ext 3264)**
SUBMITTED BY:	**D. FRIARY** **DIRECTOR OF ROADS, PARKS, AND FLEET**
GENERAL MANAGER APPROVAL:	**R.J. FORWARD, M.B.A., M.Sc., P.Eng.** **GENERAL MANAGER, INFRASTRUCTURE & GROWTH MANAGEMENT**
CHIEF ADMINISTRATIVE OFFICER APPROVAL:	**C. LADD** **CHIEF ADMINISTRATIVE OFFICER**

RECOMMENDED MOTION

1. That the purchase, of a used fire service pumper training / testing trailer, be added to the 2014 Capital Plan and funded, in an amount not to exceed $33,900.00 including applicable taxes, from the Tax Capital Reserve.

PURPOSE & BACKGROUND

2. Fleet Services and the Training Branch of Barrie Fire and Emergency Service (BFES) are seeking permission to purchase a used Pumper Training / Testing Trailer from Carrier Emergency in Brantford. The purchase of this type trailer has been researched by both Fleet and BFES for a number of years but has been deferred due other pressing Capital purchases. Carrier Emergency has purchased a new and larger unit and is selling the older unit as surplus. The original asking price was $45,200.00.

3. The request to purchase this trailer at this time is due to its becoming available at this time and the vendor would like to liquidate this asset as soon as possible. This type of trailer is very unique and opportunities to purchase a used one do not present itself often at this price.

4. BFES and Fleet Services have inspected the unit and found it to be in excellent shape. Upon completion of the inspection Carrier Emergency offered the unit to The City of Barrie for a total of $33,900.00.

ANALYSIS

5. Fleet Services is responsible for the annual pump testing of all BFES apparatus as required by NFPA and the Corporations Insurance Underwriters. The current practice for testing is to set up on the waterfront and draft water from Kempenfelt Bay. As this procedure is generally done in the warmer months to prevent freeze up there is always a lot of interest shown by the public who usually approach the crews performing the test potentially exposing themselves to trip hazards or being hit by high pressure water. Closing the area during testing inconveniences the public especially vehicles wishing to launch boats and park their vehicles.

6. The Fire Underwriters Survey recommends the yearly testing of fire truck pumps.

7. The trailer is a mobile pump testing unit. Training and testing can be performed in the yard at the Operations Centre on Ferndale Drive or at the Fire Stations away from the general public eliminating the potential of accidental injury while enhancing the public's safety.

8. Utilizing the trailer for training or testing at the Fire Stations or at the Operation Centre allows for the trucks to remain in service due to the quick disconnect features of the unit which helps ensure community safety at all times.

9. The Pump Test Trailer is self-contained so the use of potable water from the City's water system; both training purposes and pump testing is limited to a few thousand liters as opposed to over 14 million litres as currently estimated. This represents a significant amount of water conservation.

10. Drafting water from the lake exposes the pumps to debris and continued testing in this type of environment sand blasts the pump impeller with each test. During annual testing pump capacity is decreased slightly due to impeller wear. If combined over the life of the apparatus, pump capacity may not meet ULC and NFPA standards which would require maintenance.

11. An average fire truck pump replacement is $10,000.00 prior to any labor/installation costs.

12. Utilizing the pump test trailer would significantly reduce the amount of water required, ultimately wasted during the pump testing process which would be consistent with the City's objective to encourage water conservation throughout the City.

ENVIRONMENTAL MATTERS

13. Currently the BFES Training Division utilizes potable water from fire hydrants pumping approximately 14,670,000 liters of water into the storm drains.

14. Staff in the Environmental Services Water Department have expressed their concern with regard to the amount of potable water being used by BFES and has asked if another process could be utilized.

15. As the Pump Test Trailer is a sealed closed loop system it allows for the same water to be used over and over minimizing the dumping of potable water into the storm drains which would eventually end up in Lake Simcoe.

ALTERNATIVE

16. The alternative would be to continue to use potable water for training and continue to perform pump testing at the lakefront which could present a safety risk to the public. This is not recommended.

17. The deferring of this purchase to be considered in the 2015 Capital budget is not recommended as this vehicle may not be available, post budget deliberations.

18. Staff considered 3 alternatives which included:

    a) Purchase a new unit at a cost of approximately $113,000.00
    b) Capital lease to own, on the used trailer at a cost of $36,100.00
    c) Purchase the used trailer at $33,900.00

19. Of the 3 alternatives, the purchasing of the used trailer was the most fiscally responsible as it presents the lowest cost to the Corporation while still meeting the operational needs of both Fleet and BFES.

FINANCIAL

20. The cost to purchase a new unit would be approximately $113,000.00

21. With the reduction in the usage of potable water from the City's water distribution system there would be a cost saving to both the Water and Wastewater Branches. Based on 2013 calculations of $1,100.00 per megalitre; both purifying fresh water, before entering the City water distribution system and then treating the wasted water that went into the storm sewers would equate to costing the Corporation $16,137.00. With less water wastage, this would realize a cost saving in the first year.

22. Currently Fleet Services is utilizing a third party to perform pump tests at an average cost of $5,000.00 annually. The Pump Test Trailer would eliminate the need to bring in outside resources, as Fleet would be conducting the testing, at the Operations Centre.

23. The cost to maintain the trailer per year would be approximately $100.00. There are no associated costs to operate the trailer. There would be no overtime exposure to the Fleet Service budget as staff would be conducting the testing during their normal hours of operation.

24. Another option for the unit would be a potential opportunity to generate revenue through rental to other local Fire Departments or offering to perform pump testing utilizing Fleet Services Staff. It may also generate revenue by renting the unit to area fire service for the training of their firefighters in pumper operations. Therefore reducing potable water usage in their respective Municipalities, similar to what is found within Barrie. This opportunity will be explored in 2015.

25. Given the costs of water treatments and apparatus maintenance, the Pump Test Trailer would payback within the first year.

26. The savings to the Corporation associated with the treatment of water would be $16,137.00, this for purification of the water prior to entering the City's water distribution system and treatment before returning the runoff to the lake.

27. The savings for the testing of the fire pumps annually would be $5,000.00.

28. The savings in purchasing a used trailer as compared to a new one would be $80,000.00.

LINKAGE TO COUNCIL STRATEGIC PRIORITIES

29. Manage growth and protect the environment by minimizing the amount of treated water that is pumped into the storm drains.

30. Strengthen Barrie's financial condition by minimizing the use of potable water, using a third party for testing and eliminating harmful sand from damaging the pump impellers extending pump life of the Fire Apparatus.

31. Create a vibrant and healthy waterfront by eliminating the need for Fire Apparatus to restrict access to the public.