

COMMITTEE OF THE WHOLE - OCTOBER 24, 2005

ANTI-TAMPERING DEVICES ON FIRE HYDRANTS

Recommendation

The Commissioner of Engineering and Public Works, in consultation with the Acting Fire Chief, recommends that:

1. The pilot project previously approved by Council to install anti-tampering devices on fire hydrants, proceed using plastic hydrant banding to a means of affixing the anti-tampering unit to the fire hydrant; and,
2. Should the pilot project be deemed successful, the installation of anti-tampering devices for fire hydrants, using plastic banding, become a mandatory requirement in all areas of new construction, with the cost associated with such devices being borne by the developer(s).

Economic Impact

The cost of installing an anti-tampering device is approximately \$75 per hydrant, including material and labour. The City would purchase and install up to 100 units for use in two pilot project areas, resulting in an estimated expenditure of \$7,500. If the project is successful, the long-term goal is for the developers to pay for, install and maintain these devices on the hydrants.

Purpose

To update Council on the matter of installing anti-tampering devices on fire hydrants.

Background - Analysis and Options

In a report to the Committee of the Whole meeting of June 27, 2005, Public Works in consultation with Vaughan Fire and Rescue Service (VFRS) committed to investigate the installation of anti-tampering devices on fire hydrants as a deterrent to the unlawful use of City water.

Over the summer months, staff equipped several fire hydrants at the Joint Operations Centre with anti-tampering devices for demonstration and testing purposes. These devices were strapped to the hydrants using both plastic and steel banding.

As previously reported, VFRS is opposed in principle to the use of hydrant anti-tampering devices because it is another impediment to the rapid service that VFRS tries to provide. A hydrant anti-tampering device may only take a few seconds to remove, but when combined with other impediments to response times it all adds up to increasingly longer response times.

Staff from both Public Works and VFRS met on site to assess the efficient removal of these devices. So as not to increase the requirement for the City's fire fighters to carry additional equipment such as band cutters to remove the devices, VFRS staff attempted to break the banding using a hydrant wrench, which is standard equipment on all fire emergency vehicles.

The test determined that plastic banding is more appropriate than steel as a material for securing these devices to the hydrant, as it could be broken with one attempt.

The plastic banding could be broken in a fraction of a second versus the steel that took several attempts and 15 to 30 seconds to break. In view of these test results, VFRS and Public Works will consider further deployment of these devices secured with plastic banding as a pilot project in an

area of new housing construction to determine their effectiveness in preventing the unlawful use of City water. Although the plastic banding is easier to break, anyone that breaks the band is fully aware that they are committing an unlawful act.

The City will purchase and install up to 100 anti-tampering units for use in two pilot project areas; 80 units in the Urban Village residential area of Weston Road and Major Mackenzie Drive and 20 units in the Rural Residential area at Keele Street and Kirby Road in north Maple. This quantity is considered sufficient to gauge their deterrent value and the costs associated with the pilot project will be borne by the City. Full deployment in new development areas will depend on the results of the pilot project. If successful, the long-term goal is for the developers to pay for, and install, these devices on the hydrants immediately when they are first put into service. At full occupancy or assumption, the City would authorize the removal of these devices.

In addition to dealing with the water loss issue, anti-tampering devices may also reduce the risk of damage to the hydrants by unauthorized users, and may help prevent water quality being impacted.

Relationship to Vaughan Vision 2007

This report is consistent with the priorities previously set by Council, and complies with Vaughan Vision A-2 "Promote Community Safety, Health & Wellness".

Conclusion

Pending a successful field test of the anti-tampering devices for fire hydrants in a pilot project area of new construction, the installation of anti-tampering devices for fire hydrants will be expanded to include all areas of new construction to assist in preventing the unlawful use of City water.

Attachments

N/A

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Respectfully submitted,

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