TO: Chair and Members
Audit, Finance and Administration Committee

WARD(S) AFFECTED: CITY WIDE

COMMITTEE DATE: March 2, 2011

SUBJECT/REPORT NO:
Proposed Waterworks By-Law Amendments (FCS11007) (City Wide)

SUBMITTED BY:
Roberto Rossini
General Manager
Finance and Corporate Services

PREPARED BY:
John Savoia (905) 546-2424 Ext. 7298

RECOMMENDATION:

(a) That the proposed amendments to the Waterworks By-law R84-026, as amended, attached as Appendix A to Report FCS11007, be approved;

(b) That the City Solicitor be authorized and directed to prepare the necessary amending By-laws to the Waterworks By-law R84-026, as amended, and to the Water and Wastewater Fees and Charges By-law which reflect the approved amendments attached as Appendix A to Report FCS11007;

(c) That, if required, staff be authorized and directed to amend the Service Agreement between the City of Hamilton and Horizon Utilities Corporation, dated May 31, 2005, and/or the Amending Agreement to this Service Agreement, dated March 22, 2010, to reflect the approved amendments attached as Appendix A to Report FCS11007 in a form satisfactory to the City Solicitor and with content satisfactory to the General Manager of Finance and Corporate Services;
EXECUTIVE SUMMARY

The City’s Waterworks By-law R84-026 (By-law) outlines the requirements to operate and regulate the waterworks service relating to the provision of water in the City including the imposition of connection fees, water rates and charges for use of said waterworks and to encourage the conservation of water. Numerous aspects of the By-law are in need of updating, particularly, with respect to issues impacting rate revenues and water conservation and enforcement of the By-law.

Staff conducted a literature review of other Waterworks By-laws to identify Best Practices to develop a range of proposed amendments (Amendments) to the By-law that are premised on a number of objectives:

Water Conservation – the Amendments seek to ensure that all properties serviced by the City’s waterworks system are metered so that customers are provided information regarding their water consumption so that they may be in a position to make informed decisions with respect to water consumption/conservation.

Fairness/Equity/Rate Revenue Assurance - the Amendments intend to ensure that all customers shall be charged for water received based on metered usage, include additional City costs for the discovering, investigating and remedying of situations involving the alteration of water meters and water meter equipment without the permission of the City so as to limit the situations where the collection of earned water fees may be compromised.

Enforcement – the Amendments contemplate that the current Municipal Act, 2001 order, powers of entry and enforcement powers will be included in the By-law and as such, will provide City staff with the most current tools available to administer and enforce the By-law, including the ability to issue orders and the creation of an offence for failure to comply with an order.

The proposed Amendments to the By-law are outlined in Appendix A to Report FCS11007 with further details available in the Analysis/Rationale for Recommendation section of this report. It should be noted that the final wording to be contained in the
amending by-laws will reflect the amendment concepts described in Appendix A to Report FCS11007 for each proposed amendment. It is anticipated that the recommended amendments set out in Appendix A to Report FCS11007 would promote the efficient utilization of a valuable resource provided by the City and enhance the commitment to achieving a sustainable water and wastewater system attained by sustainable, fair and equitable pricing. These amendments will also better enable City staff to meet their current needs until a new or consolidated By-law is passed.

Alternatives for Consideration – Not Applicable.

FINANCIAL / STAFFING / LEGAL IMPLICATIONS (for Recommendation(s) only)

Financial: Rate revenues may be enhanced by reducing the potential of foregone revenues by introducing or strengthening financial disincentives so that the collection of earned water fees may not be compromised as previously experienced.

Staffing: No anticipated impact.

Legal: The recommendations contained in this report FCS11007 will result in amendments to the City’s Waterworks By-law R84-026 and potentially, the City of Hamilton’s Water and Wastewater Fees By-law. The wording of such amendments will reflect the concepts set out in this report but will also be satisfactory to the Legal Services Division.

HISTORICAL BACKGROUND (Chronology of events)

The City’s Waterworks By-law R84-026 (By-law) outlines the requirements to operate and regulate the waterworks service relating to the provision of water in the City including the imposition of connection fees, water rates and charges for use of said waterworks and to encourage the conservation of water.

In a variety of circumstances, the By-law’s current provisions, particularly with respect to issues impacting rate revenues and water conservation, have been lacking in providing a number of suitable measures to address situations where the ability to measure/bill for actual water consumption has become compromised.

The proposed Amendments to the By-law seek to create appropriate financial mechanisms to remedy conditions for potentially significant foregone revenue, City administration costs and the inefficient utilization of water resources. The proposed Amendments will also allow the most current order, powers of entry and enforcement
powers contained in the *Municipal Act, 2001* to be incorporated into the By-law so that City staff will have the most current tools available to administer and enforce the By-law, including the ability to issue orders and the creation of an offence for failure to comply with an order.

**POLICY IMPLICATIONS**

Not Applicable.

**RELEVANT CONSULTATION**

City Manager’s Office – the Legal Services Division has reviewed and provided comments on the proposed By-law Amendments and the report itself and their comments have been incorporated.

Public Works – Environment and Sustainable Infrastructure Division has been consulted and supports the objectives and recommendations of this report.

Horizon Utilities Corporation (HUC) has been consulted and advised of potential implementation requirements that may arise from the adoption of this report’s recommendations and HUC has indicated they can support the City with these initiatives.

**ANALYSIS / RATIONALE FOR RECOMMENDATION**

(Include Performance Measurement/Benchmarking Data, if applicable)

Staff conducted a literature review of other Waterworks By-laws to identify Best Practices to develop a range of proposed amendments (Amendments) to the City’s Waterworks By-law R84-026 (By-law):

1. **Meter Equipment Alteration - Non-Residential Customers**

   The By-law requires that a suitably-valved water meter by-pass be installed where service connections are greater than 50mm in diameter or in cases, where the by-pass may be required for public health and safety reasons. The By-law currently exempts this requirement for the installation of a water meter by-pass for any structure with a residential end-use. The meter by-pass is sealed in the closed position at the time the meter is installed. The purpose of the water meter by-pass valve is to prevent disruption of the water service when maintenance or testing is in process.
The By-law permits only City personnel or its agents to break the by-pass seal. If a seal is removed and a by-pass valve is opened, without the permission of the City, the customer is currently billed for the period when the valve was opened at two (2) times the average monthly charge to the account during the preceding year. If a full year’s billing history for the account is not available, the City will estimate a monthly charge based on the average annual consumption of similar customers.

It is proposed that the current provision be amended to allow for the open by-pass billing for the period when the valve was opened at up to three (3) times the average daily consumption charge to the account during the preceding year. The current provision does not allow the City to bill at a rate less than 2 times that may be warranted due to extenuating circumstances, such as the bypass having been opened by someone other than the property owner, or an agent of the owner. Additionally, in some cases, the current 2 times provision has proven to be inadequate in terms of being able to achieve recovery of lost revenue and the City’s costs in dealing with these types of situations.

Currently, the By-law does not prescribe any action where a meter by-pass has been opened more than once, without the permission of the City. It is proposed that, in such circumstances, that the property owner may be required to meter the by-pass at their own expense.

2. Meter Equipment Alteration - Residential Customers

There are no explicit provisions in the By-law to address situations where the alteration of the meter equipment on a residential property has occurred such that non-metered water is being drawn without the prior permission of the City. It is proposed that a similar mechanism to prevent the alteration of non-residential meter equipment should also be adopted for residential properties. Therefore, where the existing water metering equipment and/or house piping has been altered to by-pass the meter without the prior permission of the City, the customer shall be billed for the period when the valve was opened up to three (3) times the historical average daily consumption to the account during the preceding year. If a full year’s billing history for the account is not available, the City will estimate a monthly charge based on the average daily consumption of similar customers.

Additionally, it is recommended that water metering equipment and/or house piping must be restored to its’ original condition, subject to a City inspection, failing which, the property’s billing is to be invoiced at two times the non-metered (flat) rate.

The property owner would be responsible for any permits and related inspections that may be required at the owner’s expense. Where the water meter has been damaged, the owner will be required to pay the replacement meter fee.
3. Non-Metered Properties - Non Residential Customers

The By-law currently stipulates that all properties, once connected to the City’s waterworks system, are to install a water meter and remote reading device, failing which, the property’s billing is to be invoiced at two times the non-metered (flat) rate. The non-metered (flat) rate was established at 1m3/day and based on estimated non-metered residential usage and, as such, this rate was not intended or appropriate for a non-metered property where industrial, commercial and/or institutional activities occur.

Therefore, it is proposed that if a non-residential customer does not install a water meter and remote reading device when required, then the property’s billings will be based on 2 times the average daily consumption of similar customers.

4. Non-Metered Properties - Residential Customers

As noted in Item 3 above, the By-law currently stipulates that all properties, once connected to the City’s waterworks system, are to install a water meter and remote reading device, failing which, the property’s billing is to be invoiced at two times the non-metered (flat) rate. The non-metered (flat) rate was established at 1m3/day and based on estimated non-metered residential usage; however, this estimated usage may be considerably lower than the actual water consumption of non-metered customers. Environment Canada conducts surveys on a regular basis that collects information about water use and pricing by Canadian municipalities. All surveys, since at least 1991, indicate that, both nationally and provincially, Canadians use more water when they are charged a flat rate. Recent surveys show that the average daily consumption rate was 74% higher for a household on a flat rate than an equivalent household with a water meter. Therefore, there may be homes utilizing more water than the non-metered rate would essentially pay for.

At present, there are approximately 175 households in Hamilton that are non-metered and are being charged the double-flat rate the By-law currently permits. It should be noted that there are a very small number of households that are, with the approval of the City, allowed to remain on a single flat rate due to having very specific house piping issues that do not allow for metering. Additionally, there are a few cases where the home currently has only City sewer services and not City water services as they are on a well, resulting in a single flat rate billing to be the only means to bill for the sewer service.

Most of the double-flat properties have been billed on this basis for several years and the City, over the past two years, has communicated to these property owners with targeted letters requesting that they have a water meter installed with limited success. Within the non-metered population, there are a number of extremely large homes that typically have water consuming amenities, e.g., multiple washrooms, swimming pools,
irrigation systems, etc., that the average household may not have and hence, there exists a greater likelihood that these larger households consume more water than the double-flat rate equivalent consumption. Furthermore, the non-metered properties are less likely to conserve water and/or to address plumbing problems that essentially waste water; again, resulting in the likelihood that these non-metered properties may be using more water than the double-flat rate would cover in terms of consumption. Therefore, it is proposed that if a residential customer does not install a water meter and remote reading device (with the exception where the City approves single flat billing for specific reasons), that the property’s billings be based on up to 3 times the average annual consumption of similar customers until such time as a meter is installed. It is proposed that a phase-in approach be adopted whereby further contact, in writing, is made with the property owner requesting a water meter be installed prior to determining whether billings on a triple flat basis are appropriate. It should be noted that the proposed amendments are not intended to remove any other remedies or rights that the City has under the By-law, including the ability to lay charges.

5. Vacant Properties with active water service – All Customers

The By-law currently stipulates that, whenever a premise having a water service becomes vacant, the owner is required within twenty-four (24) hours of vacancy to notify the City, in writing, to shut off the water at the street line, and shall pay a fee for this service. In practice, several vacant properties exist where the City is not notified of the vacancy and the water service remains active which may result in undetected water leaks and/or unauthorized water usage to occur.

As noted in the most recent internal audit of metered water billings and revenue (refer to Report CM08011), often times, vacant properties’ water/wastewater billings fall into arrears resulting in transfers to the property tax roll with associated issues to collect earned revenues. The internal audit recognized this as an inefficient use of City resources and, as such, it is proposed that where a property owner fails to notify the City, in writing, to shut off the water at the street line within 24 hours of vacancy, the City, once aware of vacancy and upon at least 24 hours of notification, may shut off the water at the street line and impose the fee for this service. The notification would indicate that the City would not be liable for any damages to any equipment, such as boilers, resulting from the City disconnecting the water service. Various City divisions (Water/Wastewater, Financial Planning & Policy, Taxation and Building Services) and possibly with the assistance of HUC, will need to develop protocols in order to identify the extent of vacant properties with active water service.

6. Vacant Properties with inactive water service – All Customers

The By-law is silent as to billing for vacant properties where the water service is shut off at the street line but the service line connection to the City main is still intact. Typically, when a demolition occurs, the existing water meter would be removed when the
property owner requests the City to shut off the water at the street line. These orphaned services commonly referred to as “service stubs” are often the source of unidentified leaks contributing to the unaccounted water loss issue that the Water/Wastewater Division is working to address. Additionally, these services have an associated capacity allocation that arguably should not be reserved without a related water/wastewater fee.

It is proposed that, where a property has the water shut off at the street line with the service line connection to the main still intact, the property shall be billed only for the “Minimum Charge” which is a fixed monthly charge based on the meter size that metered water customers are charged. The Minimum Charge would appear on the customer’s invoice as a fixed charge and would reflect the capacity allocation attributed to the service that is physically tied to the City mains that could easily be re-activated. Additionally, the Minimum Charge recognizes associated maintenance expenses, e.g., leak survey and repair that should be borne by all customers who have connection to the system. For a customer to eliminate the Minimum Charge, the property owner would need to have the service line disconnected from the City water main at their own expense.

Currently the By-law does not define the term “vacant” and it is proposed that the By-law be amended to include a definition of when a property is “vacant” so that property owners are clear as to when their obligations with respect to such properties are triggered.

7. Order, powers of entry and enforcement powers under the Municipal Act, 2001

The By-law does not contain all of the current order, power of entry and enforcement powers under the Municipal Act, 2011 which may be applicable to the By-law. Such powers would provide City staff with further tools to administer and enforce the By-law, including the ability to issue orders and the creation of an offence for failure to comply with an order. As such, it is recommended that such powers and provisions be included in the By-law.

ALTERNATIVES FOR CONSIDERATION:

(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)
Not applicable.

**CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)**


**Financial Sustainability**
- Financially Sustainable City by 2020
- Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

**Environmental Stewardship**
- Natural resources are protected and enhanced

**APPENDICES / SCHEDULES**

Appendix A to Report FCS11007: Proposed amendments to the Waterworks By-law R84-026, as amended.
Proposed Waterworks By-Law Amendments

The final wording to be contained in the amending by-laws will reflect the concepts described in this Appendix A to report FCS11007 for each proposed amendment.

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<td>All properties connected to the City’s waterworks system are to install a water meter and remote reading device, failing this without City approval, property’s billing to be invoiced at two times the non-metered (flat) rate equating to $2m^3/day.</td>
<td>Failure to install a water meter and remote reading device may result in the property’s billing to be invoiced at up to three times the non-metered (flat) rate equating to $3m^3/day, unless the City agrees that a water meter cannot be installed.</td>
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### Vacant Properties with active water service – All Customers

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**Include a definition of “vacant” in the By-law.**

### Order, powers of entry and enforcement powers under the *Municipal Act, 2001*

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<td>All of the current powers are not included in the By-law.</td>
<td>All of the current order, powers of entry and enforcement powers under the <em>Municipal Act, 2001</em>, including offence provisions for contravening an order, which are applicable to the By-law are to be included in the By-law.</td>
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