



# Municipality of North Grenville

**Report No.**  
PW-029-2017

**File No.**  
C7-PW

**Agenda Date:** November 20<sup>th</sup>, 2017 – Committee of the Whole

**Subject:** Water & Wastewater Rate & Study

**Attachments:** Appendix 1: Water & Wastewater Rate & Study  
Appendix 2: Draft By-Law  
Appendix 3: By-Law 102-15

## RECOMMENDATION

The following recommendation is provided for Committee of the Whole’s consideration:

**That Committee of the Whole recommends that Council accept the Water and Wastewater Rate & Study Report completed by Watson & Associates Economists Ltd.;**

**And Further That Committee of the Whole recommends that Council pass a by-law to enact updated water and wastewater rates**

## BACKGROUND

In 2012, the Municipality of North Grenville passed By-law 63-12 to regulate the billing and collection of charges for water and sewer usage. The rates imposed for the 2012-2017 period were based on the recommendations of the 2012 Water Financial Plan prepared by Watson & Associates Economists Ltd. (Watson) and water/sewer rates prepared by R.V. Anderson and Associates for the Corporation’s water and wastewater systems which is consistent with the requirements of the *Sustainable Water and Sewer Systems Act 2002*.

In 2016, as part of the budget approved by Council, Watson was retained by the Water & Sewer Division to provide consulting services related to a Water & Wastewater Cost of Service, Rate Review and Financial Plan Study. The purpose of this report is for Council to accept the rate study completed by Watson and to approve a repeal and replacement of By-Law 63-12.

## ANALYSIS

The water and waste water systems are 100% funded through user fees (water and wastewater rates) and do not rely on Municipal taxes. The Municipality charges a “single combined” charge for water and wastewater. This charge includes a minimum monthly base charge, differentiated by meter size, with an additional consumptive charge based on metered water consumption.

Watson and the Water & Sewer Division worked to review what the anticipated operating and capital costs may be for the water and wastewater systems through 2023. The review of this work and recommendations by Watson were provided in the Water and Wastewater Rate & Study dated November 17<sup>th</sup> 2017. (**Appendix 1**) This report has

been prepared to address the Cost of Service Study and Rate Review Study components. The Financial Plan Study will be undertaken subsequent to this phase of the assignment.

As part of the study, a water and wastewater capital forecast for 2018 to 2023 was developed to identify the growth and non-growth related needs. The capital forecast was developed to measure program/service level adjustments, lifecycle requirements and growth-related needs in the Water and Sewer Division. Additionally, a capital funding plan was developed to determine the potential funding sources available to address the capital needs forecast. An operating budget forecast was also developed through the study to consider the need for adjustments to the Municipality's base budget reflecting program/service level changes, operating fund impacts associated with infrastructure and financing for capital needs.

Once the capital and operating forecasts were developed, Watson provided recommendations on rates for a self-sustainable water and wastewater system. The 2013 Asset Management Plan was used as background to determine anticipated costs. An update to the asset management plan is anticipated to be completed in 2018. The rates recommended by Watson beyond 2020 may need to be amended based on the updated asset management plan and completed condition assessments.

The current Water Use By-law 63-12 was also reviewed. The recommendation is to repeal and replace By-Law 63-12 to update to current practices.

The following identifies the amendments to be included in a new By-Law: (**Appendix 2**)

**Rate/Charge Amendment** – By-Law 63-12 had a previous base rate increase of 6% per year from 2012 to 2016 and an average service rate increase of 4.5% per cubic meter after 5 cubic meters used per month between 2012 and 2016. The amendment in rates is to increase both the base rate and service rate to 5.5% each year from 2018 to 2020 as recommended by Watson. The decrease in fees demonstrates the Municipality's ability to become sustainable through proper management of its assets.

A proposed inspection charge was included in Schedule A of the By-Law and would be included to By-Law 102-15 Consolidated Fees & Charges. (**Appendix 3**) The additional charge is for re-inspection after 2<sup>nd</sup> inspection of same works identified under By-Law 63-12 for \$75. By-Law 102-15 does not currently include fees for re-inspection after the 2<sup>nd</sup> inspection for the same works. The proposed fee would assist in the recovery of service costs for the Water and Sewer Division as well as to assist the developers and contractors to be more prepared for the inspections they request.

The amendments are identified in Schedule A and Schedule B of the By-Law.

**Tenant Account Amendment** – By-Law 63-12 permitted a tenant of a property to have a water and wastewater account with the Municipality. The Municipality required a \$150 deposit with every tenant account. The Municipality has had occurrences with a tenant leaving a premise with unpaid invoices. It has been difficult for the Municipality to collect remaining funds other than the deposit if a tenant leaves.

In discussion with other municipalities about how to prevent this from occurring, a proposed amendment is to have accounts left in the owner's name. This would allow the Municipality to collect unpaid funds from the owner of the property. Owners can still allow a bill to be sent directly to a tenant if a request is made to the Municipality by completing an Agreement to Bill Tenant Application, which will replace the current

Tenant Application. A \$150 deposit will still be required to help alleviate the owner with costs should a tenant leave with an unpaid account.

All existing tenant accounts will remain until there is a change in owner, tenant or mailing address, at which point a new owner account will be required to complete the Agreement to Bill Tenant Application. This will also entitle the owners of a premise to be able to inquire into the status of an account and ensure the Municipality has the ability to receive the required funds for services provided. The amendments are identified in Section I of the By-Law.

**Collection of Default Payments Amendment** – Currently, the Municipality disconnects a water service to a premise if there are default payments remaining on an account. The proposed amendment is to have default payments charged against the property and collected in the same manner as taxes. This will allow for owners to pay invoices before having water disconnected to the property and reduce the safety risk of field staff potentially dealing with confrontational clients. The amended process does allow for discretion and have the service disconnected if deemed necessary. The proposed amendments are identified in Section K of the By-Law.

### **ALTERNATIVES**

1. The Municipality may amend the rates to a lower rate than as recommended over the three year plan. This option is not recommended as the Municipality would not be maintaining water and wastewater assets in a sustainable manner.
2. The Municipality may amend the rates at a higher rate than as recommended over the three year plan. This option is not recommended as the Municipality would increase the burden on rate payers.
3. The Municipality may leave the rates as they currently are. This option is not recommended as the Municipality would not be maintaining water and wastewater assets in a sustainable manner.

### **FINANCIAL/STAFFING IMPLICATIONS**

This item has been identified in the current budget:            Yes     No     N/A

This item is within the budgeted amount:                        Yes     No     N/A

The financial implications of this recommendation, as outlined in the Analysis section, will improve the sustainability of the water and wastewater system.

Staffing implications, as they relate to implementing Council's decision on this matter, are limited to the existing staff complement and applicable administrative policies as approved by Council.

**LINK TO COMMUNITY STRATEGIC PLAN**

Section 5.6 - Environment and Sustainability encourages the Municipality to focus on sustainability. Through amending and water and wastewater rate and amending by-law 63-12 the Municipality is developing sustainable water and waste water systems.

**Prepared by:**

**Reviewed and submitted by:**

Original signed \_\_\_\_\_

**Mike Finley**  
**Superintendent of Environmental Services**

\_\_\_\_\_  
**Karen Dunlop**  
**Director of Public Works**

**Reviewed by:**

**Recommendation submitted for Committee of the Whole consideration by:**

\_\_\_\_\_  
**Nicole Zywicki**  
**Director of Finance/Treasurer**

\_\_\_\_\_  
**Brian J. Carré**  
**CAO**

## Municipality of North Grenville

### Water and Wastewater Rate and Study

November 17, 2017



Plaza Three  
101-2000 Argentia Rd.  
Mississauga, Ontario  
Canada L5N 1V9

Phone: (905) 272-3600

Fax: (905) 272-3602

e-mail: [info@watson-econ.ca](mailto:info@watson-econ.ca)

[www.watson-econ.ca](http://www.watson-econ.ca)

 Planning for growth

# Contents

	Page
1. Introduction.....	1-1
1.1 Background.....	1-1
1.2 Study Process.....	1-2
1.3 Regulatory Changes in Ontario.....	1-3
1.4 Sustainable Water and Sewage Systems Act.....	1-4
1.5 Safe Drinking Water Act.....	1-4
1.6 Financial Plans Regulation .....	1-5
1.7 Water Opportunities Act.....	1-7
1.8 Water and Wastewater Rate Calculation Methodology.....	1-8
2. Forecast Growth and Service Demands.....	2-1
2.1 Current Service Demands.....	2-1
2.2 Forecast Service Demands.....	2-1
3. Capital Infrastructure Needs.....	3-1
3.1 Overview of Lifecycle Costing.....	3-1
3.1.1 Definition .....	3-1
3.1.2 Financing Costs .....	3-1
3.1.3 Costing Methods .....	3-4
3.2 Asset Inventory .....	3-5
3.3 Capital Forecast.....	3-5
4. Capital Cost Financing Options .....	4-1
4.1 Summary of Capital Cost Financing Alternatives.....	4-1
4.2 Development Charges Act, 1997 .....	4-2
4.3 Municipal Act .....	4-3
4.4 Grant Funding Availability .....	4-3
4.5 Existing Reserves/Reserve Funds.....	4-3
4.6 Debenture Financing.....	4-4
4.7 Capital Cost Financing Summary .....	4-5
5. Operating Expenditure Forecast.....	5-1
5.1 Operating Expenditures .....	5-1
5.2 Operating Revenues.....	5-1
6. Forecast Water and Wastewater Rates.....	6-1
6.1 Introduction .....	6-1
6.2 Water Rates.....	6-1
6.3 Wastewater Rates .....	6-1
6.4 Water and Wastewater Rates Annual Impacts .....	6-1
6.5 Summary .....	6-4
6.6 Recommendations.....	6-5
Appendix A – Detailed Water Rate Calculations .....	A-1
Appendix B – Detailed Wastewater Rate Calculations .....	B-1

---

# 1. Introduction

## 1.1 Background

The Municipality of North Grenville is located in the County of Leeds and Grenville with a population of approximately 16,500. North Grenville's water and wastewater systems are operated under a single tier system wherein the Municipality of North Grenville operates and maintains the water treatment/distribution systems and the wastewater treatment/collection systems.

The Municipality of North Grenville maintains and operates 34 kilometers of water distribution mains, four well and pump station, one booster pumps station and five water reservoirs within the municipal boundaries. There are over 250 public hydrants providing fire protection and approximately 150 valves of various sizes for controlling water flow. Within the network, there are 1,972 service connections supplying water to residents and businesses within and outside of Kemptville Services Area 1.

The Municipality of North Grenville operates and maintains the sanitary sewer collection system comprised of 34 kilometers of main pipe, five forecemains, five pumping stations, and 379 manholes. The sanitary collection system is divided into four drainage basins which deliver raw sewage to the treatment plant operated by the municipality of North Grenville.

In 2012 the Municipality of North Grenville passed By-law 63-12 to regulate the billing and collection of charges for water and sewer usage. The rates imposed for the 2012-2017 period were based on the recommendations of the 2012 Water Financial Plan prepared by Watson & Associates Economists Ltd. (Watson) and water/sewer rates prepared by R.V. Anderson and Associates for the Corporations water and wastewater systems that is consistent with the Requirements of The *Sustainable Water and Sewer Systems Act 2002*.

The water and wastewater systems are 100% funded through user fees (water/wastewater rates) and do not rely on municipal taxes. The Municipality of North Grenville currently charges a "single combined" charge for water and wastewater. This charge includes a minimum monthly base charge, differentiated by meter size, with an additional consumptive charge based on metered water consumption. Moreover, for multi-unit residential and non-residential customers, the base charge imposed is the greater of the metre size equivalent rate or the number of units multiplied by the  $\frac{3}{4}$ " rate. The water/wastewater rates presently in effect are as follows:

**Table 1-1  
North Grenville Water and Wastewater Rates**

North Grenville	
2017 - Total Billing Rates	
Base Charge	
1/2"	\$ 63.51
5/8"	\$ 63.51
3/4"	\$ 63.51
1"	\$ 158.78
1 1/4"	\$ 238.16
1 1/2"	\$ 317.55
2"	\$ 508.08
3"	\$ 1,016.16
4"	\$ 1,587.75
6"	\$ 3,175.50
8"	\$ 5,080.80
Volume Charge	
Increasing Block Rate	
\$ -	Block 1 per m <sup>3</sup> (0-5 m <sup>3</sup> )
\$ 3.310	Block 2 per m <sup>3</sup> (> 5m <sup>3</sup> )

## 1.2 Study Process

Watson was retained by the Municipality of North Grenville to provide consulting services related to a Water and Wastewater Cost of Service, Rate Review and Financial Plan Study. This report has been prepared to address the Cost of Service Study and Rate Review Study. The objectives of this study and the steps involved in carrying out this assignment are summarized below:

### Cost of Service Study

- Update the capital needs assessment and forecast (2017 – 2023) including growth related and existing system needs; and
- Operating cost assessment and forecast (2017 – 2023)

### Water and Wastewater Rate Study

- Update water and wastewater service demand assumptions based on analysis of historical consumption and recent trends;



- Estimate future consumption levels by applying revised demand assumptions to forecast growth identified in the Municipality's 2017 Long-Term Population, Housing, and Employment Forecast;
- Consider capital cost financing options;
- Assess operating revenue requirements;
- Assess adequacy of forecast water and wastewater rates within the Municipality's By-law in addressing long-term financial plan requirements;
- Provide an impact assessment on the rate payers; and
- Develop short term water and wastewater rate forecast (2018 – 2023) prior to comprehensive rate study update subsequent to the update of the Municipality's Asset Management Plan and Development Charges (D.C.s) Background Study.

In approaching this study, the following analysis is provided herein:

- Chapter 1 – Introduction
- Chapter 2 – Forecast Growth and Service Demands
- Chapter 3 – Capital Infrastructure Needs
- Chapter 4 – Capital Cost Financing Options
- Chapter 5 – Operating Expenditure Forecast
- Chapter 6 – Forecast Water and Wastewater Rates

### **1.3 Regulatory Changes in Ontario**

Resulting from the water crisis in Walkerton, significant regulatory changes have been made in Ontario. These changes arose as a result of the Walkerton Commission and the 93 recommendations made by the Walkerton Inquiry Part II report. Areas of recommendation included:

- watershed management and source protection;
- quality management;
- preventative maintenance;
- research and development;
- new performance standards;
- sustainable asset management; and
- lifecycle costing.

The following sections describe significant applicable regulatory areas.

## 1.4 Sustainable Water and Sewage Systems Act

The Sustainable Water and Sewage Systems Act was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the “full cost” of providing their water and the wastewater services. In total, there were 40 areas within the Act to which the Minister may make Regulations, however regulations were never issued. On December 31, 2012, the Sustainable Water and Sewage Systems Act was repealed.

## 1.5 Safe Drinking Water Act

The Safe Drinking Water Act was passed in December, 2002. The Safe Drinking Water Act provides for 50 of the 93 Walkerton Part II recommendations. It focuses on the administrative and operational aspects of the provision of water. The Safe Drinking Water Act is being implemented in stages.

“The purpose of the Safe Drinking Water Act is to protect human health through the control and regulation of drinking-water systems and drinking-water testing. Building on existing policy and practice in Ontario's treatment and distribution of drinking water, the Safe Drinking Water Act requires that all municipal drinking water systems obtain an approval from the Director of the Ministry of the Environment in order to operate. Operators are required to be trained and certified to provincial standards. The act also provides legally binding standards for testing of drinking water and requires that testing be done in licensed and accredited laboratories.”<sup>1</sup>

The following is a brief summary of the key elements included in the Safe Drinking Water Act:

- Mandatory licensing and accreditation of testing laboratories;
- New standards for treatment, distribution quality and testing;
- Mandatory operator training and certification;
- Mandatory licensing of municipal water providers;
- Stronger enforcement and compliance provisions; and
- “Standard of care” requirements for municipalities.

---

<sup>1</sup> The Ministry of Environment

[http://www.ene.gov.on.ca/environment/en/legislation/safe\\_drinking\\_water\\_act/index.html](http://www.ene.gov.on.ca/environment/en/legislation/safe_drinking_water_act/index.html)

This legislation impacts the costs of operating a water system with the need for higher skilled operators including increased training costs, increased reporting protocols and requirements, continuing enhancements to quality standards and the costs to licence each water system.

## 1.6 Financial Plans Regulation

On August 16, 2007, the Ministry of Environment introduced Ontario Regulation 453/07 which requires the preparation of financial plans for water systems (and municipalities are encouraged to prepare plans for wastewater systems). The Ministry of Environment has also provided a Financial Plan Guideline to assist municipalities with preparing the plans. A brief summary of the key elements of the regulation is provided below:

- The financial plan will represent one of the key elements to obtain a Drinking Water License.
- The plan is to be completed, approved by Council Resolution and submitted to the Ministry of Municipal Affairs and Housing as part of the application for receiving approval of a water license.
- The financial plans shall be for a period of at least six years but longer planning horizons are encouraged.
- As the regulation is under the Safe Drinking Water Act, the preparation of the plan is mandatory for water services and encouraged for wastewater services.
- The plan is considered a living document (i.e. can be updated if there are significant changes to budgets) but will need to be undertaken at a minimum every five years.
- The plans generally require the forecasting of capital, operating and reserve fund positions, and providing detailed capital inventories. In addition, Public Sector Accounting Board full accrual information on the system must be provided for each year of the forecast (i.e. total non-financial assets, tangible capital asset acquisitions, tangible capital asset construction, betterments, write-downs, disposals, total liabilities, net debt, etc.).
- The financial plans must be made available to the public (at no charge) upon request and be available on the municipality's web site. The availability of this information must also be advertised.

In general, the financial principles of this regulation follow the intent of the Sustainable Water and Sewage Systems Act, 2002 to move municipalities towards financial sustainability for water services. However, many of the prescriptive requirements have

been removed (e.g. preparation of two separate documents for provincial approval, auditor opinions, engineer certifications, etc.).

A guideline (“Towards Financially Sustainable Drinking-Water and Wastewater Systems”) has been developed to assist municipalities in understanding the Province’s direction and provides a detailed discussion on possible approaches to sustainability. The Province’s Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4: Lifecycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial Plans are “living” documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.

Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

## 1.7 Water Opportunities Act

The Water Opportunities Act received Royal Assent on November 29, 2010. The Act provides for the following elements:

- Foster innovative water, wastewater and stormwater technologies, services and practices in the private and public sectors;
- Prepare water conservation plans to achieve water conservation targets established by the regulations; and
- Prepare sustainability plans for municipal water services, municipal wastewater services and municipal stormwater services.

With regard to the sustainability plans:

- The Bill extends from the water financial plan and requires a more detailed review of the water financial plan and requires a full plan for wastewater and stormwater services;
- Regulations (when issued) will provide performance targets for each service – these targets may vary based on the jurisdiction of the regulated entity or the class of entity.

The Financial Plan shall include:

- An asset management plan for the physical infrastructure;
- Financial Plan;
- For water, a water conservation plan;
- Assessment of risks that may interfere with the future delivery of the municipal service, including, if required by the regulations, the risks posed by climate change and a plan to deal with those risks;
- Strategies for maintaining and improving the municipal service, including strategies to ensure the municipal service can satisfy future demand, consider technologies, services and practices that promote the efficient use of water and reduce negative impacts on Ontario's water resources, and increase co-operation with other municipal service providers.

Performance indicators will be established by service:

- May relate to the financing, operation or maintenance of a municipal service or to any other matter in respect of which information may be required to be included in a plan;
- May be different for different municipal service providers or for municipal services in different areas of the Province.

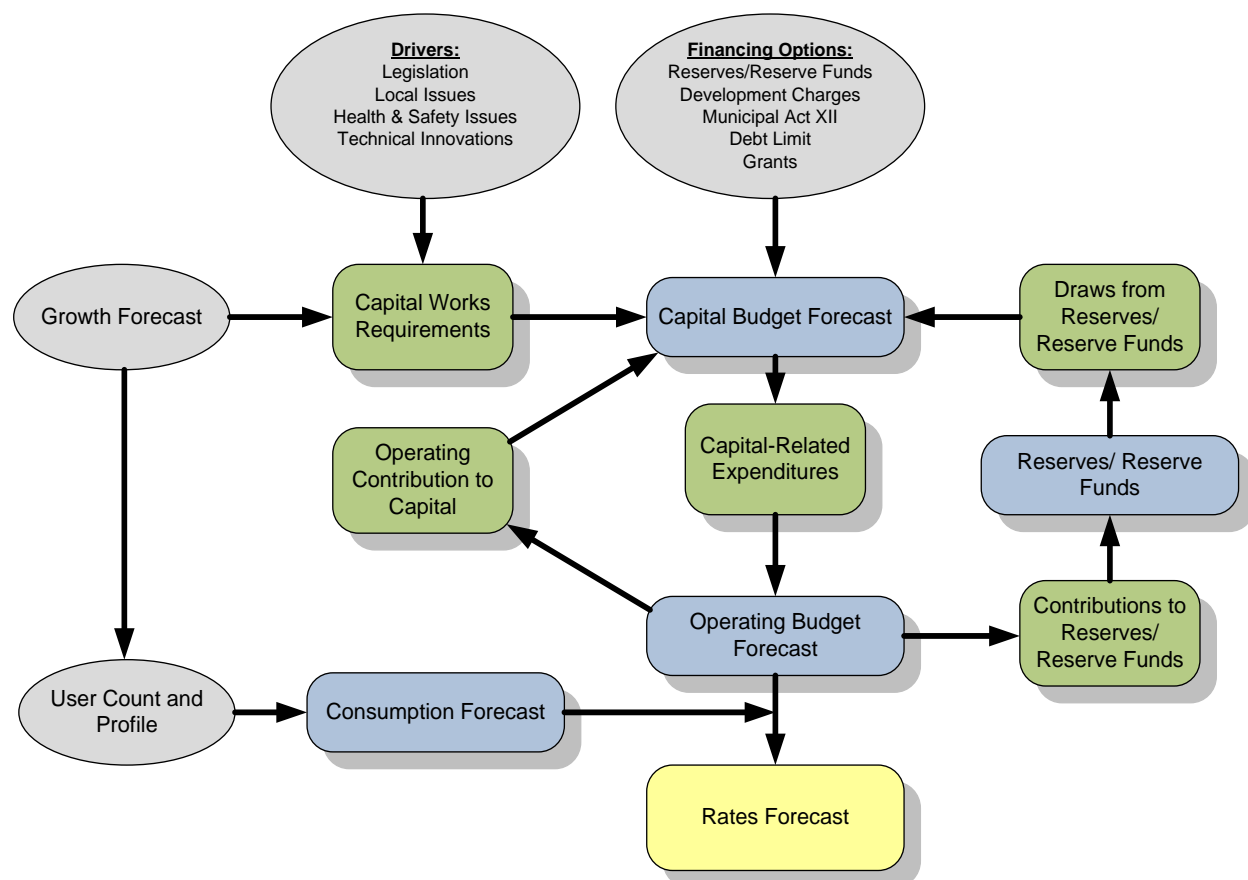
Regulations will prescribe:

- Timing;
- Contents of the plans;
- Identifying what portions of the plan will require certification;
- Public consultation process; and
- Limitations, updates, refinements, etc.

## **1.8 Water and Wastewater Rate Calculation Methodology**

Figure 1-1 illustrates the general methodology used in determining the full cost recovery water and wastewater rate forecast.

**Figure 1-1  
Water and Wastewater Rate Calculation Methodology**



The methodology employed generally consists of 5 major elements:

### 1. Customer Demands and Consumption Forecast

As noted in Section 1.1, the Municipality employs a rate structure consisting of a monthly base charge and a consumptive rate. The base charge is imposed based on water meter size with higher charges imposed on larger meters, generally reflective of higher capital infrastructure demands. The consumptive rate is imposed at a constant rate based on consumption greater than five cubic metres per month.

This first step in the analysis is important as it produces the current base revenue by source and assumptions for forecasting purposes. The base charge revenues are forecast with customer growth. The customer profile forecast is modeled based on the alternative growth scenario with the Municipality's 2017 Long-Term Population, Housing, and Employment Forecast, applying generally witnessed metered size assumptions by use. Moreover, the customer forecast is modelled

for the water and wastewater systems independently to identify differences in service demands.

The water consumption forecast is prepared by applying average annual consumption estimates to future development. The forecast may adjust the base consumption levels for anticipated water conservation based on historic trends and industry witnessed practices. Consumption estimates are based on average consumption levels by customer type drawn from municipal billing records over multiple years. The non-residential consumption estimates are generally adjusted to net out large consuming water customers that may skew anticipated consumption levels of future growth. Consistent with the customer forecast, the water consumption forecast used to determine the wastewater consumptive rates is adjusted to reflect differences in service demands.

## 2. Capital Needs Forecast

The capital needs forecast is developed to measure program/service level adjustments, lifecycle requirements and growth related needs. The Municipality's developed a long-term Water and Wastewater capital forecast reflective of growth and non-growth related needs. Capital expenditures are forecast with inflationary adjustments based on actual inflation over the previous 10 years.

## 3. Capital Funding Plan

The capital funding plan considers the potential funding sources available to address the capital needs forecast. The sources of capital funding include rate-based support, reserves/reserve funds, provincial/federal grants, and debt for program/service level improvements. Growth related sources of funding include provincial/federal grants, D.C.s, interim funding, and debt. The use of rate-based funding is measured against the revenue projections and affordability impacts. The reserve/reserve fund sources are measured against the sustainability of these funds, relative to lifecycle demands, revenue projections and affordability impacts. Debt financing is considered for significant capital expenditures, where funding is required beyond long-term lifecycle needs or to facilitate rate transition policies. Debt financing is measured in against the Municipality's debt policies and annual repayment limits to ensure a practical and sustainable funding mix.



---

#### 4. Operating Budget Forecast

The operating budget forecast considers adjustments to the Municipality's base budget reflecting program/service level changes, operating fund impacts associated with infrastructure and financing for capital needs. The operating expenditures are forecast with inflationary CPI adjustments, anticipated increases (Hydro), and growth in service demand, based on fixed and variable cost characteristics. The operating budget forecast ties the capital funding plan and reserve/reserve fund continuity forecast to the rate-based revenue projections. This ensures sufficient funding for both the ongoing annual operation and maintenance of water and, wastewater services, as well as the capital cost requirements to ensure service sustainability. Operating revenues are projected to identify the base charge and consumptive rate components net of anticipated operating revenues, such as inspection, penalty and other miscellaneous revenues.

#### 5. Rate Forecast and Structure

The rate forecast and structure component of the analysis considers various rate structures to recover the forecast rate-based revenue from the projected customer demands. The full costs of service are measured against the customer growth and consumption demands to determine full cost recovery rates. Providing context to the rate forecast, the results are quantified to measure the impacts on a typical residential customer type and in relation to other municipalities.

## 2. Forecast Growth and Service Demands

### 2.1 Current Service Demands

In preparing the demands forecast for water and wastewater services, the Municipality provided the bi-monthly consumption and billing data by customer type (residential vs. non-residential, metre size, number of units). Table 2-1 provides a summary of the water and wastewater customers as of year-end 2016.

**Table 2-1**  
**Municipality of North Grenville**  
**2016 Residential and Non-Residential Service Water and Wastewater Customers**

Residential			Non-Residential		
Metered	Water	Wastewater	Metered	Water	Wastewater
<u>Customers</u>			<u>Customers</u>		
Single	1,680	1,666	Single	159	151
Multi Unit	68	68	Multi Unit	21	21
Blended	26	25	MET7	18	18
Total	1,774	1,759	Total	198	190

Compared with projections in the 2011 Rate Study and Financial Plan, the 2016 water and wastewater connections were lower residential connections and greater for non-residential. Residential water and wastewater customers were projected to total 2,146 and 2,138 respectively by 2016, with year-end actuals totalling 1,774 and 1,759 for water and wastewater respectively. For non-residential connections water and wastewater customers were projected to total 174 and 162 respectively by 2016, with year-end actuals totalling 198 and 190 for water and wastewater respectively.

### 2.2 Forecast Service Demands

Reviewing the 2011 Rate Study water consumption forecasts (i.e. service demands), the previous study projected that average residential consumption in would be approximately 183 m<sup>3</sup>/customer/year and non-residential service was based on 1,185 m<sup>3</sup>/customer/year. This resulted in an assumed overall consumption in 2016 of 586,000 m<sup>3</sup> for water. 2016 actual water consumption levels were 20% lower than forecast at 472,000 m<sup>3</sup> for water and 463,000 m<sup>3</sup> for wastewater. This implies average annual consumption levels per customer of 148 m<sup>3</sup> and 95 m<sup>3</sup>, for residential single and multi-unit customers respectively, and 637 m<sup>3</sup> annually for non-residential customers.

These 2016 annual consumption levels by customer type were applied to the Municipality's growth projections for the serviced areas to forecast future service

demands. The growth forecast estimates are taken from the alternative growth scenario within the Municipality's 2017 Long-Term Population, Household, and Employment Forecast, completed by Watson. The alternative scenario is the Municipality's preferred growth scenario to be incorporated into future plans. Anticipated within this growth scenario is an average annual increase of 80 residential dwelling units and 48 non-residential employees by 2031.

Based on this forecast, in total, water and wastewater system customers are anticipated to increase by 604 residential and 14 non-residential customers respectively. This results in an increase from 1,972 customers currently to 2,590 for the water system and from 1,949 currently to 2,567 for the wastewater system. Table 2-3 provides the detailed growth forecast for the period.

The Municipality intends to maintain its practice of charging a consumptive rate for the monthly water consumption in excess of five cubic metres. As such, the 2016 water consumption summarized above was further disaggregated to identify the annual billable consumption by customer type (i.e. monthly consumption in excess of five cubic metres per month). Shown in Table 2-2 is the 2016 annual water consumption by customer type and consumption block (i.e. 0-5 cubic metres per month and greater than 5 cubic metres per month).

**Table 2-2**  
**Municipality of North Grenville**  
**2016 Water Consumption per Customer**

	Water			Wastewater		
	Block 1 0-5 m <sup>3</sup> /month	Block 2 >5 m <sup>3</sup> /month	Total	Block 1 0-5 m <sup>3</sup> /month	Block 2 >5 m <sup>3</sup> /month	Total
<b>Residential</b>						
Single	56	92	148	56	92	148
Multi-Unit	59	36	95	59	36	95
<b>Non-Residential</b>						
Single	51	586	637	51	586	637

Applying these estimates to new customers, results in an estimated increase in total water consumption from approximately 472,000 m<sup>3</sup> currently to 560,000 m<sup>3</sup> by 2023. Total wastewater flows are anticipated to increase from approximately 463,000 m<sup>3</sup> currently to 553,000 m<sup>3</sup> by 2023. Based on average annual water consumption levels seen elsewhere in the province, it is assumed that average consumption per customer will not decrease further but remain constant over the forecast period. Table 2-4 provides the detailed water consumption forecast for water and wastewater customers for the 2017-2023 period.

**Table 2-3**  
**Municipality of North Grenville**  
**2017-2023 Water and Wastewater Customer Forecast**

<b>Water Customer Forecast</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Residential</b>							
Existing	1,774	1,774	1,774	1,774	1,774	1,774	1,774
New - Single	54	108	162	216	270	342	414
New - Multi-Unit	30	60	90	120	150	170	190
<b>Subtotal</b>	<b>1,858</b>	<b>1,942</b>	<b>2,026</b>	<b>2,110</b>	<b>2,194</b>	<b>2,286</b>	<b>2,378</b>
<b>Non-Residential</b>							
Existing	198	198	198	198	198	198	198
New - Single	2	4	6	8	10	12	14
New - Multi-Unit	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>200</b>	<b>202</b>	<b>204</b>	<b>206</b>	<b>208</b>	<b>210</b>	<b>212</b>
<b>Total</b>	<b>2,058</b>	<b>2,144</b>	<b>2,230</b>	<b>2,316</b>	<b>2,402</b>	<b>2,496</b>	<b>2,590</b>

<b>Wastewater Customer Forecast</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Residential</b>							
Existing	1,759	1,759	1,759	1,759	1,759	1,759	1,759
New - Single	54	108	162	216	270	342	414
New - Multi-Unit	30	60	90	120	150	170	190
<b>Subtotal</b>	<b>1,843</b>	<b>1,927</b>	<b>2,011</b>	<b>2,095</b>	<b>2,179</b>	<b>2,271</b>	<b>2,363</b>
<b>Non-Residential</b>							
Existing	190	190	190	190	190	190	190
New - Single	2	4	6	8	10	12	14
New - Multi-Unit	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>192</b>	<b>194</b>	<b>196</b>	<b>198</b>	<b>200</b>	<b>202</b>	<b>204</b>
<b>Total</b>	<b>2,035</b>	<b>2,121</b>	<b>2,207</b>	<b>2,293</b>	<b>2,379</b>	<b>2,473</b>	<b>2,567</b>

**Table 2-4**  
**Municipality of North Grenville**  
**2017-2023 Water Consumption by Water and Wastewater Customers Forecast**

<b>Water Volume Forecast (m<sup>3</sup>)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Block 1</b>							
Existing	138,318	138,318	138,318	138,318	138,318	138,318	138,318
New - Residential	4,784	9,568	14,352	19,136	23,920	29,123	34,325
New - Non-Residential	105	211	316	421	527	632	737
Subtotal	143,207	148,097	152,986	157,876	162,765	168,072	173,380
<b>Block 2</b>							
Existing	333,789	333,789	333,789	333,789	333,789	333,789	333,789
New - Residential	6,040	12,079	18,119	24,158	30,198	37,522	44,846
New - Non-Residential	1,206	2,411	3,617	4,823	6,029	7,234	8,440
Subtotal	341,034	348,279	355,525	362,770	370,015	378,545	387,075
<b>Total</b>	<b>484,242</b>	<b>496,376</b>	<b>508,511</b>	<b>520,645</b>	<b>532,780</b>	<b>546,617</b>	<b>560,454</b>

<b>Wastewater Flows Forecast (m<sup>3</sup>)</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Block 1</b>							
Existing	136,792	136,792	136,792	136,792	136,792	136,792	136,792
New - Residential	4,784	9,568	14,352	19,136	23,920	29,123	34,325
New - Non-Residential	105	211	316	421	527	632	737
Subtotal	141,682	146,571	151,460	156,350	161,239	166,547	171,854
<b>Block 2</b>							
Existing	326,084	327,501	327,501	327,501	327,501	327,501	327,501
New - Residential	6,040	12,079	18,119	24,158	30,198	37,522	44,846
New - Non-Residential	1,206	2,411	3,617	4,823	6,029	7,234	8,440
Subtotal	333,329	341,992	349,237	356,482	363,727	372,257	380,787
<b>Total</b>	<b>475,011</b>	<b>488,562</b>	<b>500,697</b>	<b>512,832</b>	<b>524,966</b>	<b>538,803</b>	<b>552,641</b>

## 3. Capital Infrastructure Needs

### 3.1 Overview of Lifecycle Costing

#### 3.1.1 Definition

For many years, lifecycle costing has been used in the field of maintenance engineering and to evaluate the advantages of using alternative materials in construction or production design. The method has gained wider acceptance and use in the areas of industrial decision-making and the management of physical assets.

By definition, lifecycle costs are all the costs which are incurred during the lifecycle of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The stages which the asset goes through in its lifecycle are specification, design, manufacture (or build), installation, commissioning, operation, maintenance and disposal. Figure 3-1 depicts these stages in a schematic form.

#### 3.1.2 Financing Costs

This section will focus on financing mechanisms in place to fund the costs incurred throughout the asset's life.

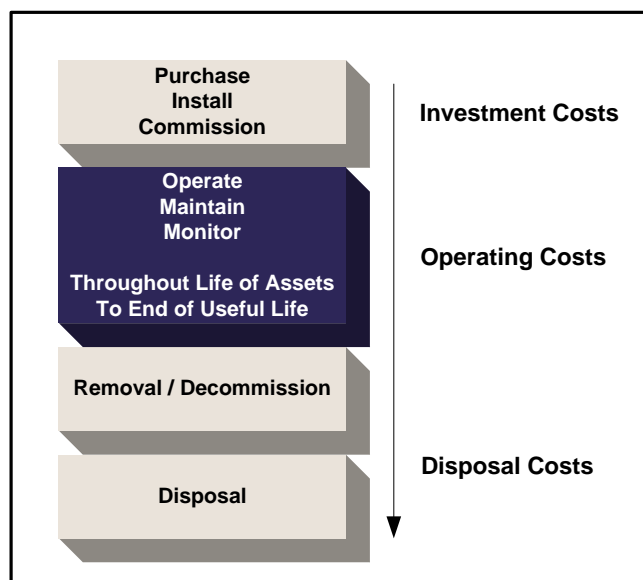
In a municipal context, services are provided to benefit tax/rate payers. Acquisition of assets is normally timed in relation to direct needs within the community. At times, economies of scale or technical efficiencies will lead to oversizing an asset to accommodate future growth within the municipality. Over the past few decades, new financing techniques such as connection charges or D.C.s have been employed based on the underlying principle of having tax/rate payers who benefit directly from the service paying for that service. Operating costs which reflect the cost of the service for that year are charged directly to all existing tax/rate payers who have received the benefit. Operating costs are normally charged through the tax base or user rates.

Capital expenditures are recouped through several methods, the most common being operating budget contributions, connection charges, D.C.s, reserves, developer contributions and debentures.

New construction related to growth could produce connection charges, D.C.s and developer contributions (e.g. works internal to a subdivision which are the responsibility of the developer to construct) to fund a significant portion of projects, where new assets

are being acquired to allow growth within the municipality to continue. As well, debentures could be used to fund such works, with the debt charge carrying costs recouped from taxpayers in the future.

**Figure 3-1  
Lifecycle Costing**



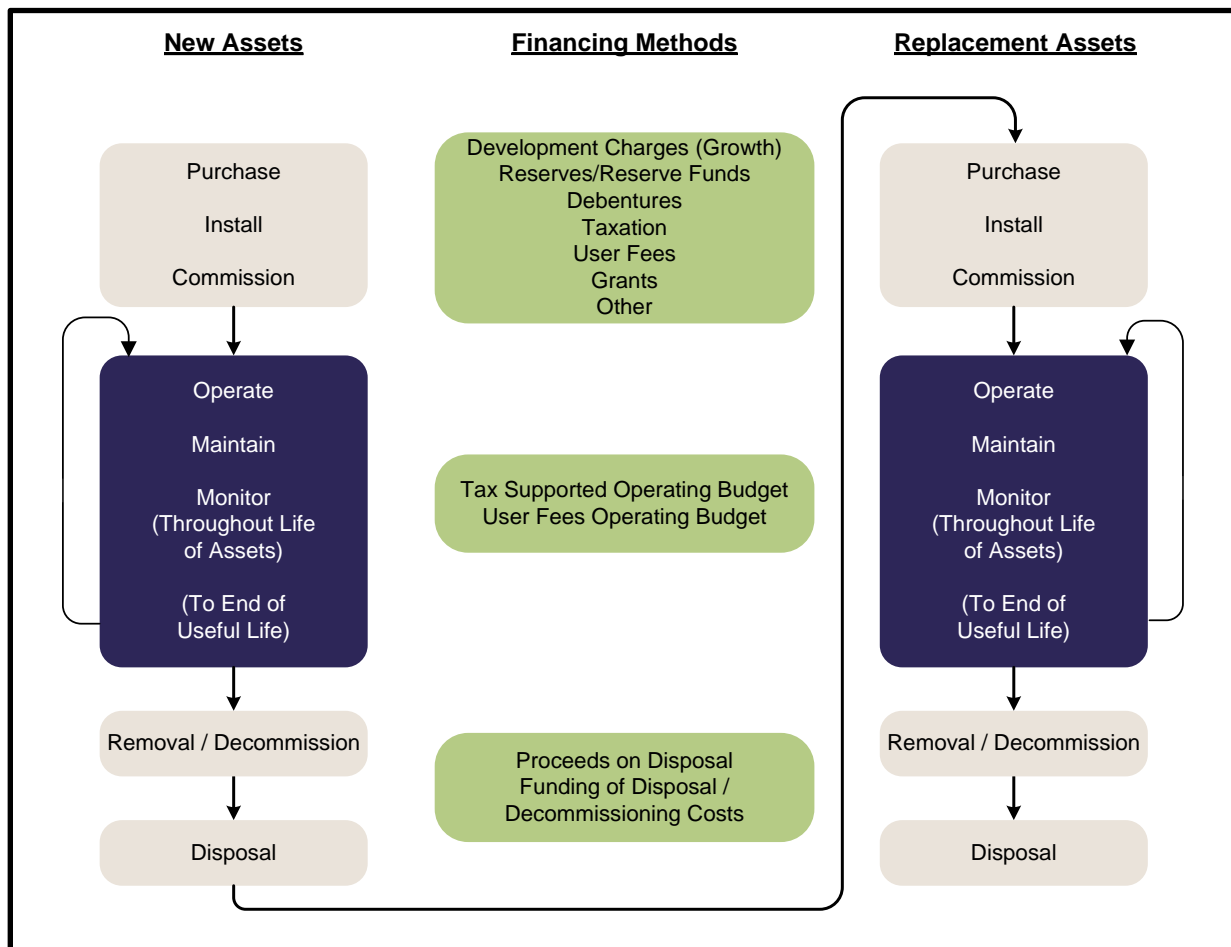
However, capital construction to replace existing infrastructure is largely not growth related and will therefore not yield D.C.s or developer contributions to assist in financing these works. Hence, a municipality will be dependent upon debentures, reserves and contributions from the operating budget to fund these works.

Figure 3-2 depicts the costs of an asset from its initial conception through to replacement and then continues to follow the associated costs through to the next replacement.

As referred to earlier, growth related financing methods such as connection charges, D.C.s and developer contributions could be utilized to finance the growth related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of this asset. Other financing methods may be used as well to finance the non-growth related component of this project; reserves which have been collected from past tax/rate payers, operating budget contributions which are collected from existing tax/rate payers, connection charges collected from new development and debenturing which will be carried by future tax/rate payers. Ongoing costs for monitoring, operating and maintaining the asset will be charged annually to the existing tax/rate payer.

When the asset requires replacement, the sources of financing will be limited to connection charges, reserves, debentures and contributions from the operating budget. At this point, the question is raised; "If the cost of replacement is to be assessed against the tax/rate payer who benefits from the replacement of the asset, should the past tax/rate payer pay for this cost or should future rate payers assume this cost?" If the position is taken that the past user has used up the asset, hence he should pay for the cost of replacement, then a charge should be assessed annually, through the life of the asset to have funds available to replace it when the time comes. If the position is taken that the future tax/rate payer should assume this cost, then debenturing and, possibly, a contribution from the operating budget should be used to fund this work.

**Figure 3-2  
Financing Lifecycle Costs**



Charging for the cost of using up of an asset is the fundamental concept behind amortization methods utilized by the private sector. This concept allows for expending the asset as it is used up in the production process. The tracking of these costs forms part of the product's selling price and hence end users are charged for the asset's

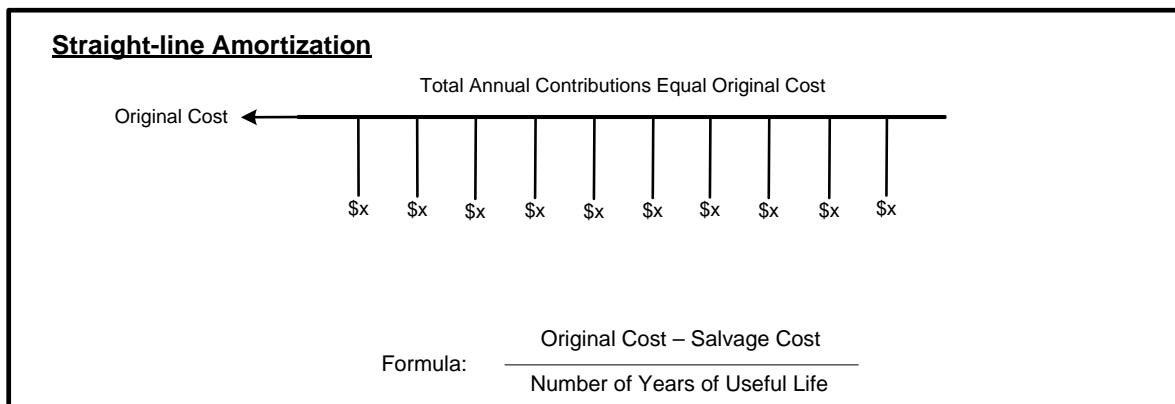


amortization. The same concept can be applied in a municipal setting to charge existing users for the asset's use and set those funds aside in a reserve to finance the cost of replacing the asset in the future.

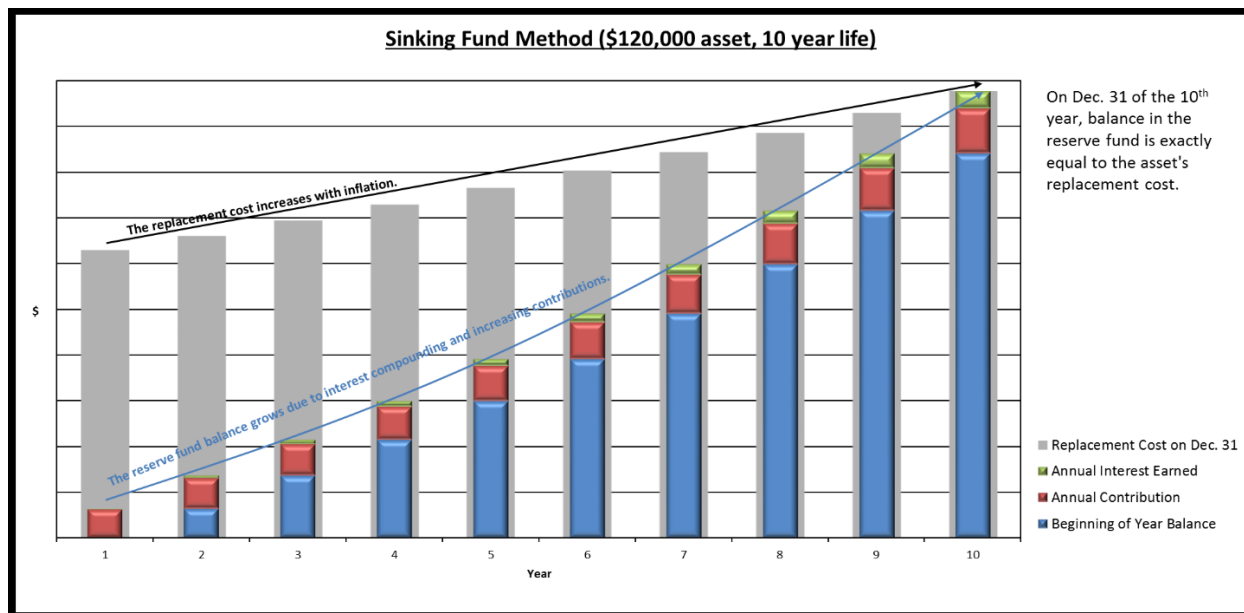
### 3.1.3 Costing Methods

There are two fundamental methods of calculating the cost of the usage of an asset and for the provision of the revenue required when the time comes to retire and replace it. The first method is the Amortization Method. This method recognizes the reduction in the value of the asset through wear and tear, and aging. There are two commonly used forms of amortization: the straight-line method and the reducing balance method.

The straight line method is calculated by taking the original cost of the asset, subtracting its estimated salvage value (estimated value of the asset at the time it is disposed of) and dividing this by the estimated number of years of useful life. The reducing balance method is calculated by utilizing a fixed percentage rate and this rate is applied annually to the undepreciated balance of the asset value.



The second method of lifecycle costing is the sinking fund method. This method first estimates the future value of the asset at the time of replacement. This is done by inflating the original cost of the asset at an assumed annual inflation rate. A calculation is then performed to determine annual contributions (equal or otherwise) which, when invested, will grow with interest to equal the future replacement cost.



The Municipality's 2013 Asset Management Plan contains an assessment of the average annual revenue required to sustain the water and sanitary sewer systems over their full lifecycles. This average annual funding level has been utilized in this rate study.

### 3.2 Asset Inventory

Detailed water and wastewater capital asset inventory information was obtained from the Municipality's asset inventory database. The information from the inventory was used to supplement the Municipality's capital plan for water and sewer main replacement needs.

The sustainable funding levels identified in the 2013 Asset Management Plan have also been included. The sustainable funding level (in 2012\$ values) was determined to be \$283,000 for the water system and \$841,000 for the wastewater system. These calculations determine the level of capital investment to be included in the full cost assessment and rate forecast. This rate study forecasts an increase in annual funding to reach the target inflated lifecycle contribution amounts plus reserve fund contributions by 2023.

### 3.3 Capital Forecast

2017-2023 capital forecasts have been developed for the water and wastewater systems to address capital needs across all areas for the systems. The forecasts include projects from the Municipality's 2017 Capital budget, 2014 D.C. Background

Study, specific projects identified by staff and updated capital cost estimates, and capital program provisions based on the Municipality's asset inventory. The costs of projects with a benefit to both the water and wastewater systems (i.e. water and wastewater administration projects) have been allocated to the respective systems based on their share of operating and lifecycle costs. The capital forecasts are summarized in Tables 3-1 and 3-2 for water and wastewater services respectively. These capital needs are forecast in constant uninflated dollars (i.e. 2017\$).

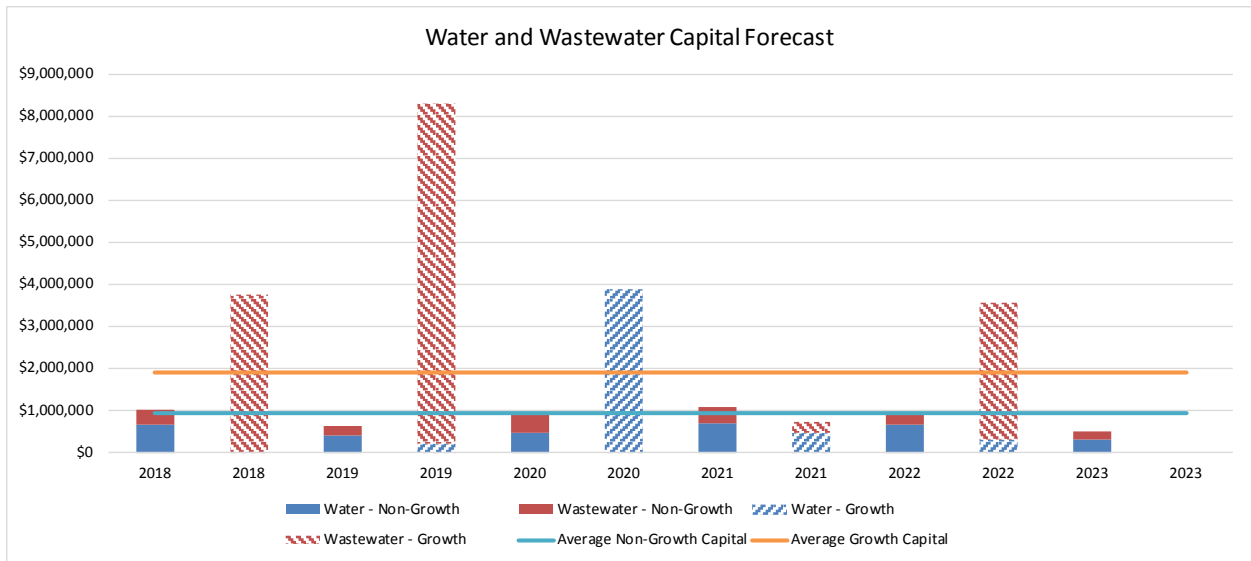
The water capital plan totals \$8.7 million, approximately 56% of which would be funded from D.C.s. The largest driver of the growth related capital needs is \$3.9 million for a new water source and storage in the Northwest Quadrant. In addition, a provision for the replacement of watermains totalling \$1.3 million has been added as the capital plan did not address watermain replacements.

For wastewater services, the capital plan totals \$19.2 million over the 2017-2023 forecast period. Included in this total are \$15.7 million of growth related projects, \$8.1 million of which are for the equalization of the existing wastewater facility in 2019. Other significant drivers of the growth related capital needs is Ph1 of the Northwest Quadrant Pump Station in 2018 (\$3.89 million) and the implementation of the phosphorous offsetting program in 2022 (\$3.2 million). Included within the \$3.6 million of non-growth related needs is \$1.1 million for the replacement of existing sewer mains over the 2018-2023 period.

For rate determination purposes, the capital needs forecast has been inflated at 2.5% annually. This is reflective of the annual capital cost inflation witnessed in the Statscan Construction Price Index over the past 10 years.

Figure 3-3 illustrates the capital needs forecast for non-growth and growth related capital needs over the 2018-2023 period. Moreover, the graph further illustrates the average annual non-growth and growth related spending relative to the average annual amount. This analysis indicates that while non-growth related capital spending is somewhat evenly distributed over the forecast period for water and wastewater needs combined, growth related spending is significantly front-ended. This requirement for additional growth related capital spending is more pronounced for the wastewater system than for water. Growth related capital needs occurring in the front-end of the forecast period typically indicates the requirement for external debenture financing, or service in lieu or front-end financing agreements. This will be discussed further in Chapter 4.

**Figure 3-3  
Municipality of North Grenville  
Capital Needs Forecast**



**Table 3-1  
Municipality of North Grenville Water Service  
Capital Budget Forecast – Uninflated\$**

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Expenditures</b>								
<b>Water &amp; Wastewater Admin</b>								
Rate Review and Financial Plan (4400-8000) Every 5 years	19,515	20,048	-	-	-	20,048	-	-
Cap Artesian Flow Kernahan (4410-8000)	38,553	-	-	-	-	-	-	-
Portable Generator - East Quad (4410-8000)	23,132	-	-	-	-	-	-	-
Bypass Design Bridge Street (4500-8000)	4,626	-	-	-	-	-	-	-
Repair Tertiary Sand Filter (4500-8000)	37,011	-	-	-	-	-	-	-
Replace 2009 Truck - 4x4 (4400-8222) 2017 Sierra	12,337	-	-	-	-	-	-	-
WS- 2011 Chev 4x4	-	10,795	-	-	-	10,795	-	-
WS - 2010 Chev Colorado	-	10,795	-	-	10,795	-	-	-
WS - 2015 Cargo Van	-	10,795	-	-	-	-	10,795	-
WS - 2012 Sierra	-	10,795	-	-	10,795	-	-	-
WS - Trench box trailer	-	4,935	4,935	-	-	-	-	-
WS - 2013 Cub Mower	-	1,542	-	-	-	1,542	-	-
<b>Water</b>								
Circumferential Watermain (4410-8269)	200,000	-	-	-	-	-	-	-
Full AMP replacement c/w reading system upgrade (4410-8012)	100,000	200,000	100,000	100,000	-	-	-	-
Water Modelling Update (4410-8013)	40,000	40,000	-	-	-	40,000	-	-
Install VFDs on eQuinelle Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Install VFDs on Alfred Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Install VFDs on Kernahan Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Flood and Temperature Alarms (I/O upgrade) at 3 pump stations (4410-8000)	20,000	-	-	-	-	-	-	-
Replace Chlorine Tanks Alfred/Kernahan ( 4410-8000)	10,000	-	-	-	-	-	-	-
New Chlorine Pump - Vanburen (4410-8000)	15,000	-	-	-	-	-	-	-
eQuinelle Mini-PLC (4410-8000)	6,000	-	-	-	-	-	-	-
Fire Pump Alfred	-	273,000	273,000	-	-	-	-	-
Generator Replacement Alfred	-	306,000	-	-	153,000	153,000	-	-
New Chlorine Pumps - Each Station	-	15,000	-	-	-	-	-	15,000
Generator Controller Replacement Vanburen	-	10,000	-	-	10,000	-	-	-
Building Upgrades	-	100,000	-	50,000	-	-	-	50,000
Well piping and deep pump replacement	-	40,000	-	-	40,000	-	-	-
Analyzers and Monitoring System	-	101,000	16,000	17,000	17,000	17,000	17,000	17,000
Portable Generator Connections to Pump Stations	-	24,000	-	24,000	-	-	-	-
Watermain Replacement	-	-	-	-	-	-	-	-
Alfred Reservoir Condition Inspection	-	25,000	25,000	-	-	-	-	-
VanBuren PS Transfer Switch	-	30,000	30,000	-	-	-	-	-
Prescott Bridge Watermain Crossing	-	200,000	-	-	-	-	200,000	-
Watermain Replacement Provision	-	1,328,819	221,470	221,470	221,470	221,470	221,470	221,470
<b>Growth Related:</b>								
Rosewater Well and Reservoir Station & Hydrogeological Study	-	100,000	-	-	-	-	100,000	-
New Water Source and Storage - NW Quadrant	-	3,882,353	-	-	3,882,353	-	-	-
New Water Source and Storage #3 (incl. EA)	-	-	-	-	-	-	-	-
Water Distribution Works	-	445,778	-	208,122	-	237,656	-	-
Van Buren Upgrade	-	485,294	-	-	-	485,294	-	-
Concession Loop (includes River Crossing)	-	-	-	-	-	-	-	-
CR43 Piping Upsizing	-	442,157	-	-	-	-	442,157	-
Pump Station Linkages (Alfred and Kernahan)	-	-	-	-	-	-	-	-
Water Master Plan Update	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>616,174</b>	<b>8,118,106</b>	<b>670,405</b>	<b>620,592</b>	<b>4,345,413</b>	<b>1,186,805</b>	<b>991,422</b>	<b>303,470</b>

**Table 3-2  
Municipality of North Grenville Wastewater Service  
Capital Budget Forecast – Uninflated\$**

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Expenditures</b>								
<u>Water &amp; Wastewater Admin</u>								
Rate Review and Financial Plan (4400-8000) Every 5 years	43,757	44,952	-	-	-	44,952	-	-
Cap Artesian Flow Kernahan (4410-8000)	86,447	-	-	-	-	-	-	-
Portable Generator - East Quad (4410-8000)	51,868	-	-	-	-	-	-	-
Bypass Design Bridge Street (4500-8000)	10,374	-	-	-	-	-	-	-
Repair Tertiary Sand Filter (4500-8000)	82,989	-	-	-	-	-	-	-
Replace 2009 Truck - 4x4 (4400-8222) 2017 Sierra	27,663	-	-	-	-	-	-	-
WS- 2011 Chev 4x4	-	24,205	-	-	-	24,205	-	-
WS - 2010 Chev Colorado	-	24,205	-	-	24,205	-	-	-
WS - 2015 Cargo Van	-	24,205	-	-	-	-	24,205	-
WS - 2012 Sierra	-	24,205	-	-	24,205	-	-	-
WS - Trench box trailer	-	11,065	11,065	-	-	-	-	-
WS - 2013 Cub Mower	-	3,458	-	-	-	3,458	-	-
<u>Wastewater</u>								
PLC 200 I/O (4500-8000)	25,000	-	-	-	-	-	-	-
Gas Detection - Colonnade / WWTP (4500-8000)	60,000	-	-	-	-	-	-	-
HVAC / Lightening protection at Bridge Street (4500-8272)	30,000	-	-	-	-	-	-	-
Bridge Street roof replacement (4500-8272)	30,000	-	-	-	-	-	-	-
Upgrade 3rd pump at Bridge Street Station (4500-8272)	100,000	-	-	-	-	-	-	-
Secondary Clarifier Short Collector and Motor (4500-8000)	30,000	-	-	-	-	-	-	-
UV System New Installation (4500-8283)	300,000	-	-	-	-	-	-	-
RAW/RAS Mag Meter replacement (4500-8000)	20,000	-	-	-	-	-	-	-
Pre Aeration Replacement (4500-8000)	20,000	-	-	-	-	-	-	-
Digester Cleanout and Inspection	-	100,000	-	-	100,000	-	-	-
Primary Tank Rehabilitation	-	40,000	40,000	-	-	-	-	-
Secondary Tank Rehabilitation	-	-	-	-	-	-	-	-
Channel Monster Rehabilitation (Every 4 years)	-	60,000	-	-	60,000	-	-	-
Decommissioning Well at WPCP	-	10,000	-	-	-	10,000	-	-
SCADA Computer Upgrades	-	40,000	-	20,000	10,000	10,000	-	-
WPCP Roof Replacement	-	80,000	-	-	80,000	-	-	-
Portable Pump (Bridge Street Failure)	-	90,000	-	-	-	90,000	-	-
Process Air Piping Seal Replacement	-	50,000	-	-	-	-	50,000	-
Portable Generator Connections to Pump Stations	-	16,000	16,000	-	-	-	-	-
Bridge Street PLC Replacement	-	40,000	-	-	-	-	40,000	-
Bridge Street Remote Start Replacement	-	20,000	-	20,000	-	-	-	-
WPCP VFD Surge Protection	-	20,000	-	-	20,000	-	-	-
Alum Tank Replacement	-	100,000	100,000	-	-	-	-	-
Sewermain Replacement Provision	-	1,089,430	181,572	181,572	181,572	181,572	181,572	181,572
<b>Growth Related:</b>								
Septage Receiving Facility	-	-	-	-	-	-	-	-
Pump Station - North West Quadrant Ph 1	68,502	3,767,400	3,767,400	-	-	-	-	-
Pump Station - North West Quadrant Ph 1A	-	-	-	-	-	-	-	-
<u>Force Main Twinning</u>								
CR 43 (includes bridge crossing) & East Quadrant Pump	-	-	-	-	-	-	-	-
Anniversary Way from Bridge Street Station	-	-	-	-	-	-	-	-
East Quad Pipes	-	-	-	-	-	-	-	-
West Quad Pipes	-	241,245	-	-	-	241,245	-	-
CR 44 (CR43 to Firehall)	760,330	-	-	-	-	-	-	-
Wastewater Treatments ESR Amendment	-	-	-	-	-	-	-	-
Implementation of a Phosphorus Offsetting Program	-	3,235,294	-	-	-	-	3,235,294	-
Equalization of Existing Wastewater Facility	-	8,088,235	-	8,088,235	-	-	-	-
I&I Improvements	300,000	-	-	-	-	-	-	-
Wastewater Master Plan Update	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>2,046,930</b>	<b>17,243,901</b>	<b>4,116,037</b>	<b>8,309,807</b>	<b>499,982</b>	<b>605,432</b>	<b>3,531,071</b>	<b>181,572</b>

## 4. Capital Cost Financing Options

### 4.1 Summary of Capital Cost Financing Alternatives

Historically, the powers that municipalities have had to raise alternative revenues to taxation to fund capital services have been restrictive. Over the past number of years, legislative reforms have been introduced. Some of these have expanded municipal powers (e.g. Bill 130 providing for natural person powers for fees and charges bylaws); while others appear to restrict them (Bill 73 in 2015 providing amendments to the Development Charges Act (D.C.A.)).

The most recent Municipal Act came into force on January 1, 2003, with significant amendments in 2006 through the Municipal Statute Law Amendment Act. Part XII of the Act and Ontario Regulation 584/06, govern a municipality's ability to impose fees and charges. This Act provides municipalities with broadly defined powers and provides the ability to impose fees for both operating and capital purposes. Under s.484 of the Municipal Act, 2001, the Local Improvement Act was repealed with the in force date of the Municipal Act (January 1, 2003). The municipal powers granted under the Local Improvement Act now fall under the jurisdiction of the Municipal Act.

The methods of capital cost recovery available to municipalities are provided as follows:

<b>Recovery Methods</b>	<b>Section Reference</b>
• Development Charges Act, 1997	4.2
• Municipal Act	4.3
○ Fees and Charges	
○ Local Improvements	
• Grant Funding	4.4
• Reserves/Reserve Funds	4.5
• Debenture Financing	4.6

## 4.2 Development Charges Act, 1997

The D.C.A. received royal assent on December 8, 1997, replacing the previous act, which had been in-force since November 23, 1989.

The Province's stated intentions were to "create new construction jobs and make home ownership more affordable" by reducing the charges and to "make municipal Council decisions more accountable and more cost effective." The basis for this Act is to allow municipalities to recover the growth related capital cost of infrastructure necessary to accommodate new growth within the municipality. The D.C.A. provides for limitations and ceilings on services that can be included in the charges.

The Municipality currently imposes D.C.s for the supply and treatment of water and the collection and treatment of wastewater within the urban serviced areas. The Municipality passed By-law 72-14 effective September 8, 2014, being a by-law for the purposes of establishing and collecting a D.C. in accordance with the provisions of the D.C.A. The D.C.s under by-law 72-14 have been indexed annually.

Under Section 27 of the D.C.A. a municipality may enter into an agreement with a person who is required to pay a D.C. providing for all or any part of a D.C. to be paid before or after it would otherwise be payable. The Municipality has entered into or will be entering into service-in-lieu D.C. credit agreements with developers. In these agreements, the developer will be required to undertake the construction of certain D.C. eligible water and wastewater works. The developer then receives credits against future D.C.s equal to value of the works constructed on behalf of the Municipality.

Based on the capital cost estimates provided in Tables 3-1, an estimated \$4.3 million of the water services capital program will be constructed through service-in-lieu agreements between 2019 and 2021. A further \$4.0 million of the wastewater services capital program would also be constructed by developers as per the terms of service-in-lieu agreements. To account for the D.C. credit obligations of the Municipality, the anticipated D.C. revenues have been adjusted to account for D.C. credits that will be issued as development occurs. For the purpose of this rate study, the timing of anticipated development that would be eligible for D.C. credits has been estimated. These estimates are fiscally conservative and would result in all potential water services D.C. revenue being credited to developers over the 2018-2023 forecast period. To the extent that D.C.s are collected that would not be credited or paid to the developer of the service-in-lieu works, the D.C. reserve fund position could be improved.



---

### 4.3 Municipal Act

The Municipal Act, 2001, came into force January 1, 2003. Part XII Fees and Charges, gives municipalities the statutory authority to recover the costs of services, including capital costs, through by-law. Municipalities have used these types of charges to recover infrastructure costs associated with the extension of municipal services to private service users, to recover capital improvement costs from existing developments, and to recover growth related costs of service extension. These by-laws are typically used where D.C.s would not be applicable (e.g. recovery from existing developments) or where existing and growth related cost recovery would be simplified under the administration of one by-law.

The Municipality does not recover capital costs through fees imposed under the Municipal Act.

### 4.4 Grant Funding Availability

In August 2012, the Province of Ontario initiated the Municipal Infrastructure Investment Initiative. In supporting the efforts of communities to restore and revitalize their public infrastructure, this initiative provides one-time provincial funding to improve asset management planning in small municipalities and local service boards. In addition, funding will be made available for municipal infrastructure projects under this initiative. Any municipality or local service board seeking capital funding in the future must demonstrate how its proposed project fits within a detailed asset management plan. To assist in defining the components of an asset management plan, the Province produced a document entitled, "Building Together: Guide for Municipal Asset Management Plans." This guide documents the components, information and analysis that are required to be included in a municipality's asset management plan under this initiative.

Beyond the receipt of anticipated grant funding of \$582,000 in 2017, the Municipality does not anticipate receiving any other grant funding towards growth or non-growth projects over the 2017 to 2023 forecast period.

### 4.5 Existing Reserves/Reserve Funds

The Municipality has established reserves and reserve funds for water and wastewater capital costs. The established water and wastewater reserves are utilized for non-growth related capital purposes and to supplement operating costs (i.e. annual debt servicing costs). Furthermore, the Municipality also maintains separate D.C. reserve funds for growth related water and wastewater capital needs.

The following table summarizes the water and wastewater reserves/reserve funds utilized in this analysis and the respective 2017 opening balances. Water D.C. reserve funds are currently in a deficit position reflective of D.C. capital needs having occurred in advance of growth and the resultant interim funding requirement.

**Table 4-1**  
**Municipality of North Grenville**  
**Water and Wastewater Reserves/Reserve Fund Balances**

Reserve/Reserve Fund	Dec 31, 2016 Balance
Water Capital Reserves	\$906,949
Wastewater Capital Reserves	\$1,484,153
Water D.C. Reserve Fund	\$(2,575,008)
Wastewater D.C. Reserve Fund	\$2,407,125

## 4.6 Debenture Financing

Although it is not a direct method of minimizing the overall cost to the ratepayer, debentures are used by municipalities to assist in cash flowing large capital expenditures.

The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the Municipal Act. Ontario Regulations 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges). Furthermore, the Municipality's current borrowing policy as set out in the 2015 Long Term Financial Plan is to limit future debt repayment to 12.5% of own source revenues.

The Municipality has outstanding external debt for water and wastewater services. In total, the outstanding principal balance as of December 31, 2016 was \$3.9 million. The associated debt payments in addition to other non-rate based debt payments represent 8% of own source revenues.<sup>1</sup>

<sup>1</sup> Municipality of North Grenville 2016 FIR, Schedule 81

The water capital funding plan proposes debt financing for the forecast period totalling \$1.8 million (\$1.2 million growth related and \$0.6 million non-growth related). Moreover, the capital funding plan for growth related needs also includes \$3.1 million in interim financing from other non-rate based sources (reflective of negative D.C. reserve fund balances). The wastewater capital funding plan proposes debt financing of \$16.8 million for growth related capital. Similar to the water capital funding plan, interim funding of \$3.3 million from capital wastewater reserves and \$0.8 million from other non-rate based sources by the end of the forecast period is anticipated.

Future debt requirements have been forecast over a 20-year term at 3.5 % interest<sup>1</sup>. The forecast increase in new debentures taken on by the Municipality within the capital plan totals \$12.7 million (\$1.2 million non-growth and \$7.4 million growth related). The impact on the Municipality's debt repayment limit has been assessed by forecasting tax and rate based own-source revenues and annual debt repayment levels<sup>2</sup>. In this context, the metric would increase from 8% to a peak of 11.5% in 2023. While this increase is forecast to be within the Municipality's self imposed debt repayment limit of 12.5%, taking on this level of debt financing for the water and wastewater systems would limit the Municipality to borrow for non-rate based capital needs. As such, it is anticipated that the actual timing of anticipated growth related capital needs would be deferred or there would be a requirement for the Municipality to enter into further service-in-lieu or front-end financing agreements to limit the requirements for debt financing, mitigating the impact on the Municipality's debt repayment limit.

#### **4.7 Capital Cost Financing Summary**

Table 4-2 summarizes the recommended capital funding sources supporting the capital needs forecast.

---

<sup>1</sup> November 6, 2017 Infrastructure Ontario 20-year lending rate of 3.26%

<sup>2</sup> 2016 tax based own source revenues/capita maintained. 2016 tax based debt repayment levels maintained.

**Table 4-2**  
**Municipality of North Grenville**  
**2017-2023 Water and Wastewater Capital Funding Summary (\$, millions)**

	Capital Reserves	D.C. Reserve Fund	Service-in-Lieu Agreements	Non-Growth Related Debt	Growth Related Debt	Grant Funding
<b>Water</b>	2.94		4.66	1.19	0.63	
<b>Wastewater</b>	6.48	2.47	4.13		6.75	0.58
<b>Total</b>	9.42	2.47	8.79	1.19	7.38	0.58

Tables 4-3 and 4-4 provide for the full capital expenditure and funding program by year for water and wastewater services respectively. These capital funding plans are provided in inflated dollars.

**Table 4-3**  
**Municipality of North Grenville**  
**2017-2023 Water Capital Funding Program**

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Financing</b>								
Provincial/Federal Grants	-	-	-	-	-	-	-	-
Development Charges Reserve Fund (Water)	-	-	-	-	-	-	-	-
Development Charges Reserve Fund (Administration)	-	-	-	-	-	-	-	-
Development Charges Service in Lieu Agreements	-	4,661,856	-	218,659	4,180,869	262,328	-	-
Non-Growth Related Debenture Requirements	-	1,187,275	46,268	154,870	148,041	421,064	407,811	9,221
Growth Related Debenture Requirements	-	631,108	-	-	-	267,837	363,271	-
Growth Related Interim Funding (Water Reserves)	-	-	-	-	-	-	-	-
Water Reserve	616,174	2,322,115	640,897	278,481	350,624	358,782	350,621	342,711
<b>Total Capital Financing</b>	<b>616,174</b>	<b>8,802,354</b>	<b>687,165</b>	<b>652,010</b>	<b>4,679,534</b>	<b>1,310,010</b>	<b>1,121,703</b>	<b>351,932</b>

**Table 4-4**  
**Municipality of North Grenville**  
**2017-2023 Wastewater Capital Funding Program**

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Financing</b>								
Provincial/Federal Grants	582,187	-	-	-	-	-	-	-
Development Charges Reserve Fund (Wastewater)	379,053	2,089,654	-	2,089,654	-	-	-	-
Development Charges Reserve Fund (Administration)	-	-	-	-	-	-	-	-
Development Charges Service in Lieu Agreements	-	4,127,874	3,861,585	-	-	266,289	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	6,751,546	-	4,689,675	-	-	2,061,870	-
Growth Related Interim Funding (Wastewater Reserves)	-	3,316,941	-	1,718,373	-	-	1,598,568	-
Wastewater Reserve	1,085,689	2,075,774	357,353	232,789	538,426	401,994	334,644	210,568
<b>Total Capital Financing</b>	<b>2,046,930</b>	<b>18,361,789</b>	<b>4,218,938</b>	<b>8,730,491</b>	<b>538,426</b>	<b>668,284</b>	<b>3,995,083</b>	<b>210,568</b>

---

## 5. Operating Expenditure Forecast

### 5.1 Operating Expenditures

Forecast operating budget figures for water and wastewater services are based on the Municipality's 2017 operating budgets. The expenditures for each component of the operating budget have been reviewed with staff to establish cost adjustments. Hydro costs have been forecast to increase at 5% annually. Inflationary increases for all other components of the operating budget have been set at 2% annually, consistent with annual CPI increases over the past 10-year period.

Capital-related annual expenditures in the forecast include annual debt repayments and contributions to reserves and reserve funds to support the forecast needs. While operating aspects identified above generally increase with inflation over the period, the capital-related aspects tend to increase more specifically with the increase in capital funding requirements.

As a result of the inflationary and capital-related expenditure increases, the water and wastewater operating expenditures are anticipated to increase over the forecast period. Gross operating expenditures for water services are anticipated to increase from \$1.1 million in 2017 to \$1.6 million by 2023. Similarly, for wastewater services annual gross expenditures are forecast to increase from \$2.1 million to \$3.4 million by 2023.

### 5.2 Operating Revenues

In addition to water and wastewater user fee, the Municipality has operating revenue sources such as inspection fees, penalties and interest, meter sales, fire protection charges, and transfers from reserves for some of the annual operating costs.

A significant source of revenue is secured from the monthly base charge rate for water and wastewater services. Water and wastewater base charge revenues have been forecast based on the underlying system growth assumptions while increasing monthly base charges at the current annual increase of 5.5% for a period of three years. This ensures that the revenue the Municipality receives from base charges is sufficient to fund the fixed costs of providing the service and provides for contributions to capital reserves for future system needs. The benefit of this approach is increased revenue stability and lessens the potential impact of changing demand patterns.

Forecast water and wastewater base charges for the 2017-2023 period are shown in Tables 5-1 and 5-2 respectively.

**Table 5-1**  
**Municipality of North Grenville**  
**Water Service**  
**Monthly Base Charge Forecast**

Water	2017	2018	2019	2020	2021	2022	2023
<b>Monthly Base Charge</b>							
1/2", 5/8", 3/4"	25.49	26.89	28.37	29.93	29.93	29.93	29.93
1"	63.73	67.24	70.93	74.84	74.84	74.84	74.84
1 1/4"	95.59	100.85	106.40	112.25	112.25	112.25	112.25
1 1/2"	127.46	134.47	141.86	149.67	149.67	149.67	149.67
2"	203.93	215.15	226.98	239.47	239.47	239.47	239.47
3"	407.87	430.30	453.96	478.93	478.93	478.93	478.93
4"	637.29	672.34	709.32	748.33	748.33	748.33	748.33
6"	1,274.58	1,344.68	1,418.64	1,496.66	1,496.66	1,496.66	1,496.66
8"	2,039.33	2,151.49	2,269.82	2,394.66	2,394.66	2,394.66	2,394.66

**Table 5-2**  
**Municipality of North Grenville**  
**Wastewater Service**  
**Monthly Base Charge Forecast**

Wastewater	2017	2018	2019	2020	2021	2022	2023
<b>Monthly Base Charge</b>							
1/2", 5/8", 3/4"	38.02	40.11	42.32	44.64	44.64	44.64	44.64
1"	95.05	100.28	105.79	111.61	111.61	111.61	111.61
1 1/4"	142.57	150.41	158.68	167.41	167.41	167.41	167.41
1 1/2"	190.09	200.55	211.58	223.21	223.21	223.21	223.21
2"	304.15	320.88	338.52	357.14	357.14	357.14	357.14
3"	608.29	641.75	677.05	714.28	714.28	714.28	714.28
4"	950.46	1,002.74	1,057.89	1,116.07	1,116.07	1,116.07	1,116.07
6"	1,900.92	2,005.47	2,115.77	2,232.14	2,232.14	2,232.14	2,232.14
8"	3,041.47	3,208.75	3,385.24	3,571.42	3,571.42	3,571.42	3,571.42

The annual operating revenues for water services are forecast to increase from \$0.9 million in 2017 to \$1.2 million by 2023. Transfers from reserves are not currently required to support the rates with the exception of transfers from D.C. reserve funds for existing growth related debt repayments. For wastewater services, annual operating revenues are forecast to increase from \$1.3 million in 2017 to \$2.2 by 2023. As with the water system, transfers from reserves are not forecast to be required except to fund growth related debt costs.

The consumptive rate recovery component of the water revenue is anticipated to increase from \$262,000 in 2017 to \$349,000 by 2023. The wastewater consumptive billing recovery is anticipated to increase from \$847,000 in 2017 to \$1.1 million in 2023.

For the purposes of calculating sustainable rates for the water and wastewater systems independently, the base and consumptive rates have been allocated to the water and

wastewater systems based on their share of the 2017 operating budget expenditures and anticipated capital needs of the systems.

Tables 5-3 to 5-4 provide the water and wastewater operating budget forecasts. The forecast operating budgets are provided in inflated dollars.

.

**Table 5-3  
Municipality of North Grenville – Water Service  
Operating Budget Forecast – Inflated\$**

Description	Budget 2017	Forecast						
		2018	2019	2020	2021	2022	2023	
<b>Expenditures</b>								
<b>Operating Costs</b>								
<b>W/S ADMINISTRATION</b>								
1-5-4400-1010 W/S ADMIN - Wages	286,854	292,591	298,443	304,412	310,500	316,710	323,044	
1-5-4400-1011 W/S ADMIN - Standby Pay	3,235	3,300	3,366	3,433	3,502	3,572	3,643	
1-5-4400-1015 W/S ADMIN - Overtime	20,731	21,146	21,569	22,000	22,440	22,889	23,347	
1-5-4400-1110 W/S ADMIN - GWL	32,899	33,557	34,229	34,913	35,611	36,324	37,050	
1-5-4400-1111 W/S ADMIN - CPP & EI	15,474	15,784	16,100	16,422	16,750	17,085	17,427	
1-5-4400-1115 W/S ADMIN - Omers	28,730	29,304	29,890	30,488	31,098	31,720	32,354	
1-5-4400-1200 W/S ADMIN - EHT	6,087	6,208	6,332	6,459	6,588	6,720	6,854	
1-5-4400-1210 W/S ADMIN - WSIB	3,621	3,693	3,767	3,842	3,919	3,998	4,078	
1-5-4400-1610 W/S ADMIN - Contract Staff	-	-	-	-	-	-	-	
1-5-4400-1710 W/S ADMIN - Consultants	10,034	10,235	10,440	10,649	10,862	11,079	11,300	
1-5-4400-1770 W/S ADMIN - Legal Fees	1,638	1,670	1,704	1,738	1,773	1,808	1,844	
1-5-4400-3001 W/S ADMIN - Office Supplies	2,388	2,436	2,485	2,534	2,585	2,637	2,690	
1-5-4400-3002 W/S ADMIN - Postage & Courier	2,456	2,506	2,556	2,607	2,659	2,712	2,766	
1-5-4400-3005 W/S ADMIN - Mileage	120	123	125	128	130	133	136	
1-5-4400-3006 W/S ADMIN - Memberships/Dues	442	450	459	469	478	487	497	
1-5-4400-3009 W/S ADMIN - Education/Training	11,239	11,463	11,693	11,927	12,165	12,408	12,657	
1-5-4400-3010 W/S ADMIN - Uniforms and allowances	2,328	2,375	2,422	2,470	2,520	2,570	2,622	
1-5-4400-3011 W/S ADMIN - Communications	11,158	11,382	11,609	11,841	12,078	12,320	12,566	
1-5-4400-3012 W/S ADMIN - Cell	2,415	2,464	2,513	2,563	2,615	2,667	2,720	
1-5-4400-3015 W/S - Materials & Supplies	313	319	326	332	339	346	353	
1-5-4400-3022 W/S ADMIN - Advertising	819	835	852	869	886	904	922	
1-5-4400-3031 W/S Admin - Hydro Locates	201	205	209	213	217	222	226	
1-5-4400-3033 WWTP - water/sewer	2,408	2,456	2,506	2,556	2,607	2,659	2,712	
1-5-4400-3034 W/S ADMIN - PROPERTY TAXES	22,968	23,427	23,896	24,374	24,861	25,358	25,865	
1-5-4400-3035 W/S ADMIN - Model Maintenance	1,003	1,024	1,044	1,065	1,086	1,108	1,130	
1-5-4400-3038 W/S SHARED - Vehicle Maintenance	1,879	1,917	1,955	1,994	2,034	2,075	2,116	
1-5-4400-3055 W/S SHARED - Fuel	5,017	5,118	5,220	5,324	5,431	5,539	5,650	
1-5-4400-3130 W/S SHARED - Annual TSSA Inspection	1,606	1,638	1,670	1,704	1,738	1,773	1,808	
1-5-4400-3131 W/S SHARE - Annual Auto Tsrfr Switch Insp	2,408	2,456	2,506	2,556	2,607	2,659	2,712	
1-5-4400-4001 W/S ADMIN - Services	-	-	-	-	-	-	-	
1-5-4400-4005 W/S ADMIN - Insurance	15,240	15,545	15,856	16,173	16,497	16,827	17,163	
1-5-4400-4011 W/S ADMIN- Service Contracts	2,007	2,047	2,088	2,130	2,172	2,216	2,260	
1-5-4400-4015 W/S ADMIN - Insurance Deductibles	2,007	2,047	2,088	2,130	2,172	2,216	2,260	
1-5-4400-4022 W/S ADMIN - Licensed SCADA Services	2,810	2,866	2,923	2,982	3,041	3,102	3,164	
1-5-4400-4030 W/S ADMIN - Licenses & Certification	1,204	1,228	1,253	1,278	1,303	1,329	1,356	
<b>WATER</b>								
1-5-4410-3015 WATER - Materials/Supplies	57,000	58,140	59,303	60,489	61,699	62,933	64,191	
1-5-4410-3017 WATER - Computer/Software	7,000	7,140	7,283	7,428	7,577	7,729	7,883	
1-5-4410-3031 WATER - Hydro	116,000	121,800	127,890	134,285	140,999	148,049	155,451	
1-5-4410-3040 WATER - Safety Supplies	-	-	-	-	-	-	-	
1-5-4410-3070 WATER - Lab Supplies	-	-	-	-	-	-	-	
1-5-4410-3072 WATER - Consumables	-	-	-	-	-	-	-	
1-5-4410-3101 WATER - Alfred Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487	
1-5-4410-3102 WATER - Kernahan Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487	
1-5-4410-3103 WATER - VanBuren Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487	
1-5-4410-3104 WATER - Equinelle Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487	
1-5-4410-3105 WATER - Rosewater Pump Mtc	5,100	5,202	5,306	5,412	5,520	5,631	5,743	
1-5-4410-3130 WATER - Annual Leak Detection	5,000	5,100	5,202	5,306	5,412	5,520	5,631	
1-5-4410-4009 WATER - Vehicle/Equip Rental	255	260	265	271	276	282	287	
1-5-4410-4031 WATER - Generator Mtc & Fuel	-	-	-	-	-	-	-	
1-5-4410-4032 WATER - Meter Maintenance	3,570	3,641	3,714	3,789	3,864	3,942	4,020	
1-5-4410-4033 WATER - Water Testing	18,000	18,360	18,727	19,102	19,484	19,873	20,271	
1-5-4410-4034 WATER - Hydrant/Valve Repair/curb stop	20,000	20,400	20,808	21,224	21,649	22,082	22,523	
1-5-4410-4035 WATER - Pump Plant Repairs	-	-	-	-	-	-	-	
1-5-4410-4036 WATER - Water Chlorine	14,000	14,280	14,566	14,857	15,154	15,457	15,766	
1-5-4410-4039 WATER - Line Repairs	45,900	46,818	47,754	48,709	49,684	50,677	51,691	
1-5-4410-5010 WATER - Meter Purchases	40,000	40,800	41,616	42,448	43,297	44,163	45,046	
Sub Total Operating	876,365	897,373	918,974	941,190	964,043	987,554	1,011,746	
<b>Capital-Related</b>								
Existing Debt (Principal) - Growth Related	33,528	35,033	36,605	38,249	39,966	41,760	43,635	
Existing Debt (Interest) - Growth Related	15,705	14,200	12,627	10,984	9,267	7,473	5,598	
New Growth Related Debt (Principal)	-	-	-	-	-	9,802	23,441	
New Growth Related Debt (Interest)	-	-	-	-	-	9,043	20,965	
Existing Debt (Principal) - Non-Growth Related	23,217	24,164	25,019	25,905	26,822	27,771	28,754	
Existing Debt (Interest) - Non-Growth Related	42,726	42,104	41,248	40,363	39,446	38,496	37,513	
New Non-Growth Related Debt (Principal)	-	-	1,693	7,421	12,618	28,487	44,426	
New Non-Growth Related Debt (Interest)	-	-	1,562	6,732	11,470	25,228	37,983	
Transfer to Capital	-	-	-	-	-	-	-	
Transfer to Capital Reserve	135,665	205,388	278,481	350,624	358,782	350,621	342,711	
Sub Total Capital Related	250,841	320,888	397,237	480,276	498,370	538,681	585,025	
Total Expenditures	1,127,206	1,218,261	1,316,211	1,421,467	1,462,413	1,526,234	1,596,771	
<b>Revenues</b>								
Base Charge	724,297	793,262	867,624	947,765	980,187	1,015,482	1,050,778	
Other Revenue	92,149	93,992	95,900	97,800	99,800	101,800	103,800	
Contributions from Development Charges Reserve Fund	49,233	49,233	49,233	49,233	49,233	68,078	93,638	
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	
Total Operating Revenue	865,678	936,487	1,012,756	1,094,797	1,129,219	1,185,360	1,248,216	
Water Billing Recovery - Subtotal	261,528	281,773	303,455	326,669	333,193	340,874	348,555	
Total Revenue	1,127,206	1,218,261	1,316,211	1,421,467	1,462,413	1,526,234	1,596,771	

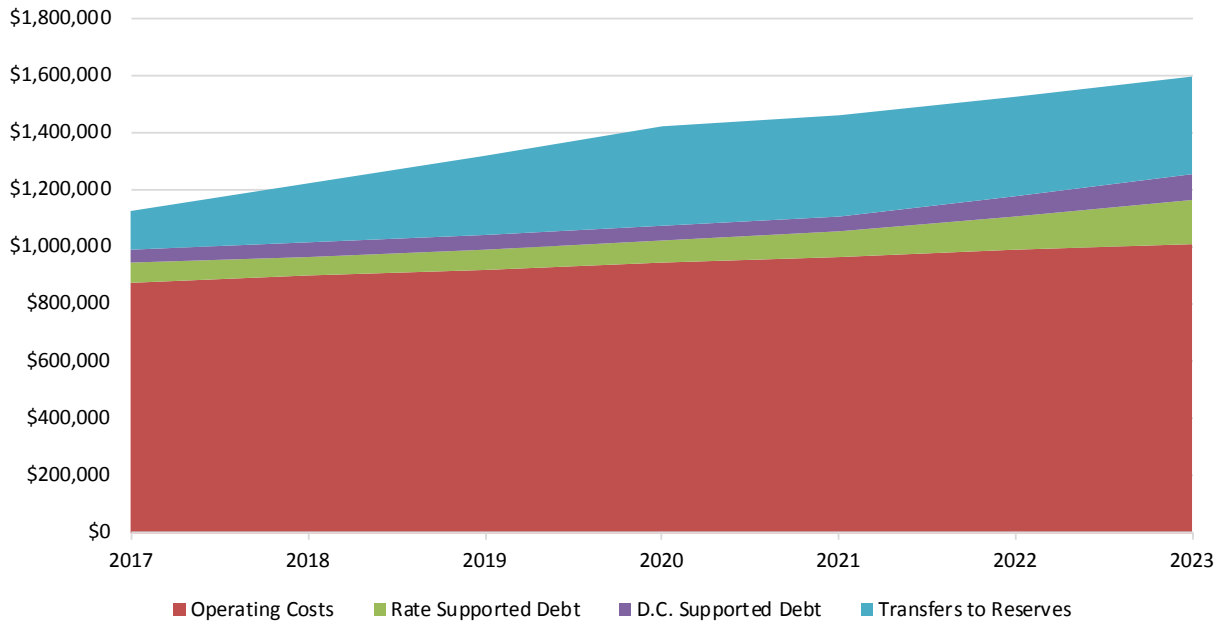


**Table 5-4  
Municipality of North Grenville – Wastewater Service  
Operating Budget Forecast – Inflated\$**

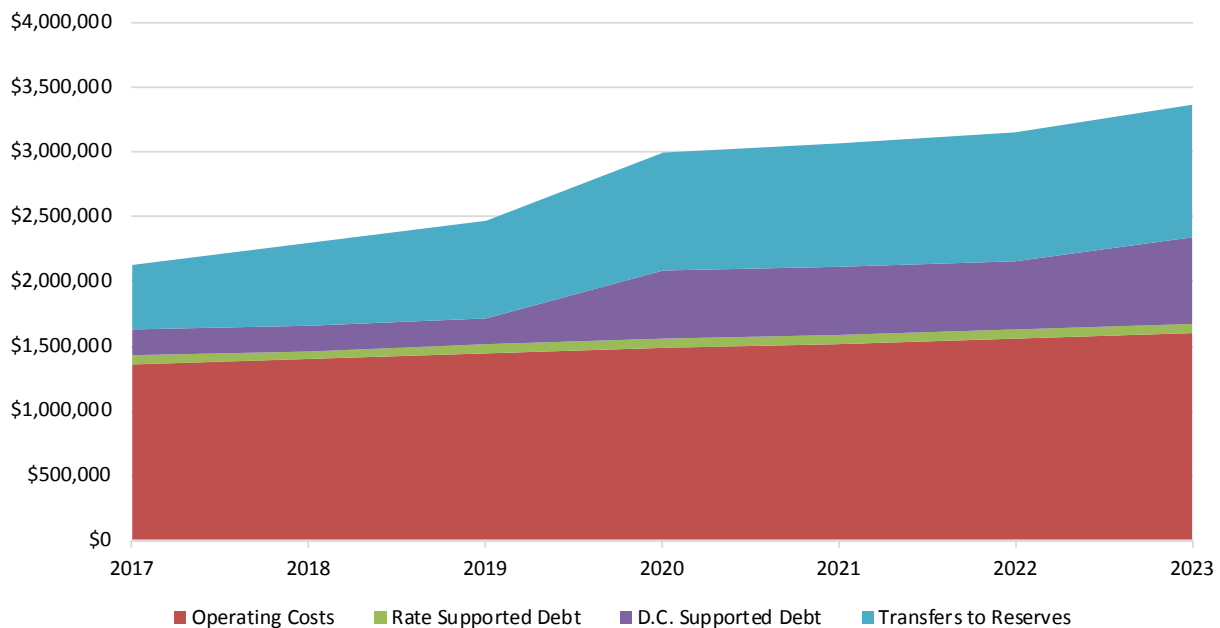
Description	Budget 2017	Forecast					
		2018	2019	2020	2021	2022	2023
<b>Expenditures</b>							
<b>Operating Costs</b>							
<b>W/S ADMINISTRATION</b>							
1-5-4400-1010 W/S ADMIN - Wages	427,817	436,373	445,101	454,003	463,083	472,345	481,791
1-5-4400-1011 W/S ADMIN - Standby Pay	4,825	4,921	5,020	5,120	5,223	5,327	5,434
1-5-4400-1015 W/S ADMIN - Overtime	30,919	31,537	32,168	32,811	33,467	34,137	34,820
1-5-4400-1110 W/S ADMIN - GWL	49,067	50,048	51,049	52,070	53,111	54,173	55,257
1-5-4400-1111 W/S ADMIN - CPP & EI	23,079	23,540	24,011	24,491	24,981	25,481	25,990
1-5-4400-1115 W/S ADMIN - Omers	42,847	43,704	44,579	45,470	46,379	47,307	48,253
1-5-4400-1200 W/S ADMIN - EHT	9,077	9,259	9,444	9,633	9,826	10,022	10,223
1-5-4400-1210 W/S ADMIN - WSIB	5,400	5,508	5,618	5,731	5,845	5,962	6,081
1-5-4400-1610 W/S ADMIN - Contract Staff	-	-	-	-	-	-	-
1-5-4400-1710 W/S ADMIN - Consultants	14,966	15,265	15,570	15,882	16,199	16,523	16,854
1-5-4400-1770 W/S ADMIN - Legal Fees	2,442	2,491	2,541	2,592	2,644	2,697	2,751
1-5-4400-3001 W/S ADMIN - Office Supplies	3,562	3,633	3,706	3,780	3,855	3,933	4,011
1-5-4400-3002 W/S ADMIN - Postage & Courier	3,664	3,737	3,812	3,888	3,966	4,045	4,126
1-5-4400-3005 W/S ADMIN - Mileage	180	183	187	191	194	198	202
1-5-4400-3006 W/S ADMIN - Memberships/Dues	658	672	685	699	713	727	742
1-5-4400-3009 W/S ADMIN - Education/Training	16,761	17,097	17,439	17,787	18,143	18,506	18,876
1-5-4400-3010 W/S ADMIN - Uniforms and allowances	3,472	3,541	3,612	3,685	3,758	3,833	3,910
1-5-4400-3011 W/S ADMIN - Communications	16,642	16,974	17,314	17,660	18,013	18,374	18,741
1-5-4400-3012 W/S ADMIN - Cell	3,603	3,675	3,748	3,823	3,899	3,977	4,057
1-5-4400-3015 W/S - Materials & Supplies	467	476	486	496	505	516	526
1-5-4400-3022 W/S ADMIN - Advertising	1,221	1,246	1,271	1,296	1,322	1,348	1,375
1-5-4400-3031 W/S Admin - Hydro Locates	299	305	311	318	324	330	337
1-5-4400-3033 WWTP - water/sewer	3,592	3,664	3,737	3,812	3,888	3,966	4,045
1-5-4400-3034 W/S ADMIN - PROPERTY TAXES	34,254	34,939	35,638	36,351	37,078	37,819	38,576
1-5-4400-3035 W/S ADMIN - Model Maintenance	1,497	1,526	1,557	1,588	1,620	1,652	1,685
1-5-4400-3038 W/S SHARED - Vehicle Maintenance	2,803	2,859	2,916	2,974	3,034	3,094	3,156
1-5-4400-3055 W/S SHARED - Fuel	7,483	7,632	7,785	7,941	8,100	8,262	8,427
1-5-4400-3130 W/S SHARED - Annual TSSA Inspection	2,394	2,442	2,491	2,541	2,592	2,644	2,697
1-5-4400-3131 W/S SHARED - Annual Auto Tsfr Switch Insp	3,592	3,664	3,737	3,812	3,888	3,966	4,045
1-5-4400-4001 W/S ADMIN - Services	-	-	-	-	-	-	-
1-5-4400-4005 W/S ADMIN - Insurance	22,730	23,184	23,648	24,121	24,603	25,095	25,597
1-5-4400-4011 W/S ADMIN- Service Contracts	2,993	3,053	3,114	3,176	3,240	3,305	3,371
1-5-4400-4015 W/S ADMIN - Insurance Deductibles	2,993	3,053	3,114	3,176	3,240	3,305	3,371
1-5-4400-4022 W/S ADMIN - Licensed SCADA Services	4,190	4,274	4,360	4,447	4,536	4,626	4,719
1-5-4400-4030 W/S ADMIN - Licenses & Certification	1,796	1,832	1,868	1,906	1,944	1,983	2,022
<b>SEWER</b>							
1-5-4500-3015 SEWER - Materials & Supplies	95,000	96,900	98,838	100,815	102,831	104,888	106,985
1-5-4500-3030 SEWER - Heating Fuel	22,440	22,889	23,347	23,814	24,290	24,776	25,271
1-5-4500-3031 SEWER - Hydro	247,500	259,875	272,869	286,512	300,838	315,880	331,674
1-5-4500-3040 SEWER - Safety Supplies	2,000	2,040	2,081	2,122	2,165	2,208	2,252
1-5-4500-3070 SEWER - Lab Supplies	9,000	9,180	9,364	9,551	9,742	9,937	10,135
1-5-4500-3071 SEWER - UV Bulbs	-	-	15,000	15,300	15,606	15,918	16,236
1-5-4500-3072 SEWER - Consumables	1,020	1,040	1,061	1,082	1,104	1,126	1,149
1-5-4500-3074 SEWER - Aluminum Sulphate	31,824	32,460	33,110	33,772	34,447	35,136	35,839
1-5-4500-3101 SEWER - Bridge Pump Mtc	11,220	11,444	11,673	11,907	12,145	12,388	12,636
1-5-4500-3102 SEWER - Colonade Pump Mtc	11,118	11,340	11,567	11,799	12,034	12,275	12,521
1-5-4500-3103 SEWER - Kempton Pump Mtc	6,120	6,242	6,367	6,495	6,624	6,757	6,892
1-5-4500-3104 SEWER - Equinelle Pump Mtc	11,118	11,340	11,567	11,799	12,034	12,275	12,521
1-5-4500-3130 SEWER - Annual Hydro Substn Inspection	8,000	8,160	8,323	8,490	8,659	8,833	9,009
1-5-4500-4020 SEWER - Electrician/Milwright Services	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4023 SEWER - Meter Calibrations	1,591	1,623	1,655	1,688	1,722	1,757	1,792
1-5-4500-4024 SEWER - Boiler Maintenance	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4026 SEWER - Biosolids	70,000	71,400	72,828	74,285	75,770	77,286	78,831
1-5-4500-4029 SEWER - Lab Tests	21,221	21,645	22,078	22,520	22,970	23,430	23,898
1-5-4500-4031 SEWER - Generator Maintenance	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4039 SEWER - CCTV/Flushing	30,000	30,600	31,212	31,836	32,473	33,122	33,785
Sub Total Operating	1,361,056	1,395,702	1,446,412	1,483,526	1,521,792	1,561,253	1,601,955
<b>Capital-Related</b>							
Existing Debt (Principal) - Growth Related	79,522	83,426	87,521	91,817	96,324	101,053	106,013
Existing Debt (Interest) - Growth Related	115,768	111,865	107,769	103,473	98,966	94,238	89,277
New Growth Related Debt (Principal)	-	-	-	171,636	177,643	183,861	265,758
New Growth Related Debt (Interest)	-	-	-	158,335	152,327	146,110	209,288
Existing Debt (Principal) - Non-Growth Related	36,181	37,458	38,675	39,932	41,230	42,570	43,954
Existing Debt (Interest) - Non-Growth Related	32,208	31,321	30,104	28,847	27,549	26,209	24,825
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Capital Reserve	494,908	631,593	756,884	918,966	951,188	990,337	1,028,246
Sub Total Capital Related	758,588	895,663	1,020,953	1,513,006	1,545,228	1,584,377	1,767,361
<b>Total Expenditures</b>	<b>2,119,643</b>	<b>2,291,364</b>	<b>2,467,365</b>	<b>2,996,532</b>	<b>3,067,021</b>	<b>3,145,630</b>	<b>3,369,316</b>
<b>Revenues</b>							
Base Charge	1,053,760	1,155,159	1,264,525	1,382,426	1,430,778	1,483,416	1,536,054
Other Revenue	22,891	23,349	23,800	24,300	24,800	25,300	25,800
Contributions from Development Charges Reserve Fund	195,290	195,290	190,500	525,261	525,261	525,261	670,336
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-
Total Operating Revenue	1,271,942	1,373,799	1,478,825	1,931,987	1,980,839	2,033,977	2,232,190
Wastewater Billing Recovery - Subtotal	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
<b>Total Revenue</b>	<b>2,119,643</b>	<b>2,291,364</b>	<b>2,467,365</b>	<b>2,996,532</b>	<b>3,067,021</b>	<b>3,145,630</b>	<b>3,369,316</b>

Figures 5-1 and 5-2 illustrate the annual net operating budget increase for water and wastewater service respectively over the forecast period by component, illustrating the increase in annual revenues for increased capital funding purposes.

**Figure 5-1**  
**Municipality of North Grenville**  
**2017-2023 Water Annual Net Operating Forecast by Major Component**



**Figure 5-2**  
**Municipality of North Grenville**  
**2017-2023 Wastewater Annual Net Operating Forecast by Major Component**



---

## 6. Forecast Water and Wastewater Rates

### 6.1 Introduction

To summarize the analysis undertaken thus far, Chapter 3 reviewed capital-related issues for all customers within the water and wastewater systems and responds to the lifecycle needs of the Municipality. Chapter 4 provided a review of capital financing options of which transfers from capital reserves, D.C. revenues, and debt funding will be the predominant basis for financing future capital needs. Chapter 5 established the operating forecast of expenditures for water and wastewater systems. The following calculations will be based on the expenditures provided in Chapter 5 and the customers and volumes forecast provided in Chapter 2.

### 6.2 Water Rates

The net recoverable expenditures from Table 5-1 (the product of total annual expenditures less operating revenues, base charge revenues contributions from D.C. reserve fund) are divided by the forecast water consumption (in excess of five cubic metres per customer per month) to calculate the consumptive rates.

The resultant consumptive rate forecast for water services is summarized in Table 6-1. The detailed financial forecast and rate calculations for water services are provided in Appendix A to this report.

### 6.3 Wastewater Rates

The rate forecast for wastewater services is summarized in Table 6-2. Similar to water services forecast consumptive rates are arrived at by dividing the net recoverable expenditures by the wastewater flows (in excess of five cubic metres per customer per month) forecast to occur.

The detailed financial forecast and rate calculations for wastewater services are provided in Appendix B to this report.

### 6.4 Water and Wastewater Rates Annual Impacts

Table 6-3 summarizes the annual impacts to a typical residential water and wastewater customer. The table assumes average annual water consumption of 148 m<sup>3</sup> and a water meter of 5/8" or 3/4". A typical residential customer with these demand patterns

would have a total water and wastewater bill of \$1,065 in 2017 (i.e. \$376 for water and \$689 for wastewater).

As per the water and wastewater financial plan and staff direction, the base charge (i.e. monthly charge by meter size) would increase by 5.5% in 2018 through 2020 and remain constant thereafter. The consumptive rate (i.e. \$/m<sup>3</sup> consumed greater than five cubic metres per month) would also increase by 5.5% in 2018 through 2020 and then remain constant. This would result in a combined 5.5% increase over the first three years of the forecast (2018-2020) or an annual increase in the water and wastewater bill for a typical residential customer of between \$59 and \$65 per year (i.e. \$5 per month).

**Table 6-1  
Water Rate Forecast – Inflated\$**

Description	2017	2018	2019	2020	2021	2022	2023
Total Water Billing Recovery	261,528	281,773	303,455	326,669	333,193	340,874	348,555
Total Volume (m <sup>3</sup> )	484,242	496,376	508,511	520,645	532,780	546,617	560,454
<b>Increasing Block Structure</b>							
<i>Volume Forecast By Block (m3)</i>							
Block 1	143,207	148,097	152,986	157,876	162,765	168,072	173,380
Block 2	341,034	348,279	355,525	362,770	370,015	378,545	387,075
Check Total Volume	484,242	496,376	508,511	520,645	532,780	546,617	560,454
<b>Increasing Block Rates (\$/m<sup>3</sup>)</b>							
Block 1	-	-	-	-	-	-	-
Block 2	0.77	0.81	0.85	0.90	0.90	0.90	0.90
<b>Annual Percentage Change</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
Check Revenue							
Block 1	-	-	-	-	-	-	-
Block 2	261,528	281,773	303,455	326,669	333,193	340,874	348,555
Check Total Revenue	261,528	281,773	303,455	326,669	333,193	340,874	348,555

**Table 6-2  
Wastewater Rate Forecast – Inflated\$**

Description	2017	2018	2019	2020	2021	2022	2023
Total Wastewater Billing Recovery	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
Total Volume (m <sup>3</sup> )	475,011	488,562	500,697	512,832	524,966	538,803	552,641
<b>Increasing Block Structure</b>							
<i>Volume Forecast By Block (m3)</i>							
Block 1	141,682	146,571	151,460	156,350	161,239	166,547	171,854
Block 2	333,329	341,992	349,237	356,482	363,727	372,257	380,787
Check Total Volume	475,011	488,562	500,697	512,832	524,966	538,803	552,641
<b>Increasing Block Rates (\$/m<sup>3</sup>)</b>							
Block 1	-	-	-	-	-	-	-
Block 2	2.54	2.68	2.83	2.99	2.99	2.99	2.99
<b>Annual Percentage Change</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
Check Revenue							
Block 1	-	-	-	-	-	-	-
Block 2	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
Check Total Revenue	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125

**Table 6-3**  
**Total Annual Water and Wastewater Bill Impacts for a Typical Residential Customer**

**Annual Customer Water Bill - Based on 148 m<sup>3</sup> of usage and 5/8", " or 3/4" meter**

Description	2017	2018	2019	2020	2021	2022	2023
Monthly Base Rate	\$25.49	\$26.89	\$28.37	\$29.93	\$29.93	\$29.93	\$29.93
Block 1 Rate (first 5 m <sup>3</sup> )	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Block 2 Rate	\$0.77	\$0.81	\$0.85	\$0.90	\$0.90	\$0.90	\$0.90
<b>Annual Base Rate Bill</b>	<b>\$306</b>	<b>\$323</b>	<b>\$340</b>	<b>\$359</b>	<b>\$359</b>	<b>\$359</b>	<b>\$359</b>
Block 1 Volume	56	56	56	56	56	56	56
Block 2 Volume	92	92	92	92	92	92	92
Volume	148	148	148	148	148	148	148
<b>Annual Volume Bill</b>	<b>\$70</b>	<b>\$74</b>	<b>\$78</b>	<b>\$82</b>	<b>\$82</b>	<b>\$82</b>	<b>\$82</b>
<b>Total Annual Bill</b>	<b>\$376</b>	<b>\$397</b>	<b>\$419</b>	<b>\$442</b>	<b>\$442</b>	<b>\$442</b>	<b>\$442</b>
<b>% Increase - Base Rate</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>% Increase - Volume Rate</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>% Increase - Total Annual Bill</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>\$ Increase - Total Annual Bill</b>		\$20.69	\$21.83	\$23.03	\$0.00	\$0.00	\$0.00

**Annual Customer Wastewater Bill - Based on 148 m<sup>3</sup> of usage and 5/8" or 3/4" meter**

Description	2017	2018	2019	2020	2021	2022	2023
Monthly Base Rate	\$38.02	\$40.11	\$42.32	\$44.64	\$44.64	\$44.64	\$44.64
Block 1 Rate (first 5 m <sup>3</sup> )	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Block 2 Rate	\$2.54	\$2.68	\$2.83	\$2.99	\$2.99	\$2.99	\$2.99
<b>Annual Base Rate Bill</b>	<b>\$456</b>	<b>\$481</b>	<b>\$508</b>	<b>\$536</b>	<b>\$536</b>	<b>\$536</b>	<b>\$536</b>
Block 1 Volume	56	56	56	56	56	56	56
Block 2 Volume	92	92	92	92	92	92	92
Volume	148	148	148	148	148	148	148
<b>Annual Volume Bill</b>	<b>233</b>	<b>246</b>	<b>259</b>	<b>274</b>	<b>274</b>	<b>274</b>	<b>274</b>
<b>Total Annual Bill</b>	<b>689</b>	<b>727</b>	<b>767</b>	<b>809</b>	<b>809</b>	<b>809</b>	<b>809</b>
<b>% Increase - Base Rate</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>% Increase - Volume Rate</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>% Increase - Total Annual Bill</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>\$ Increase - Total Annual Bill</b>		\$37.90	\$39.99	\$42.19	\$0.00	\$0.00	\$0.00

**Annual Customer Water & Wastewater Bill - Based on 148 m<sup>3</sup> of usage and 5/8" or 3/4" meter**

Description	2017	2018	2019	2020	2021	2022	2023
Monthly Base Rate	\$63.51	\$67.00	\$70.69	\$74.58	\$74.58	\$74.58	\$74.58
Block 1 Rate (first 5 m <sup>3</sup> )	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Block 2 Rate	\$3.31	\$3.49	\$3.68	\$3.89	\$3.89	\$3.89	\$3.89
<b>Annual Base Rate Bill</b>	<b>\$762</b>	<b>\$804</b>	<b>\$848</b>	<b>\$895</b>	<b>\$895</b>	<b>\$895</b>	<b>\$895</b>
Block 1 Volume	56	56	56	56	56	56	56
Block 2 Volume	92	92	92	92	92	92	92
Volume	148	148	148	148	148	148	148
<b>Annual Volume Bill</b>	<b>303</b>	<b>320</b>	<b>337</b>	<b>356</b>	<b>356</b>	<b>356</b>	<b>356</b>
<b>Total Annual Bill</b>	<b>1,065</b>	<b>1,124</b>	<b>1,186</b>	<b>1,251</b>	<b>1,251</b>	<b>1,251</b>	<b>1,251</b>
% Increase - Base Rate		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
% Increase - Volume Rate		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
% Increase - Total Annual Bill		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>\$ Increase - Total Annual Bill</b>		<b>\$58.59</b>	<b>\$61.82</b>	<b>\$65.22</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

## 6.5 Summary

The recommended rate forecast and financial plan has been designed to have regard for the Municipality's self-imposed debt repayment limit of 12.5% of own-source revenues. While the Municipality could achieve a sustainable funding position over the long-term with more moderate rate increases than what has been recommended, this would require a greater reliance on debt as a source of financing. Increasing the amount of debt beyond current recommendations (11.5% of own source revenues in 2023) would result in the Municipality either exceeding the self-imposed debt repayment limit or further limiting the ability of the Municipality to fund non-rate based needs through the issuance of debt.

Capital reserves for water and wastewater systems have been utilized as a funding source to mitigate the growth-related debt payments and have been maintained below the current balance of 2.4 million with a projected year end 2023 balance of \$0.8 million.

Due to the recommended rate increases to mitigate the requirement for debt financing, annual capital spending beyond 2023 at levels below forecast averages could result in the accumulation of reserve funds in excess of what is required.

## 6.6 Recommendations

The following recommendations are put forth for Council's consideration:

1. That Council approve the 2018 to 2020 water and wastewater rates as shown in Chapter 6 herein;
2. That Council maintain the Reserve Funds for water and wastewater services as discussed in Section 4.5; and
3. That the Water and Wastewater Rate Study be updated after the completion of the Municipality's updated Asset Management Plan and D.C. Background Study; and
4. That direction be provided to Municipality Staff to submit the required Water Financial Plan to the Province under O.Reg 453/07 on the basis of the updated plan, prior to June 18, 2020.

# Appendix A – Detailed Water Rate Calculations



# Appendix A – Detailed Water Rate Calculations

The following appendix contains the tables outlining the detailed wastewater rate calculations as follows:

- Page A-3 Water Capital Budget
- Page A-4 Water Debenture Schedules and Water Reserves/Reserve Funds Schedules
- Page A-5 Water Operating Budget Forecast
- Page A-6 Water Rate Forecast

**Table 1**  
**North Grenville**  
**Water Service**  
**Capital Budget Forecast**  
Inflated \$

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Expenditures</b>	-	-	-	-	-	-	-	-
<b>Water &amp; Wastewater Admin</b>	-	-	-	-	-	-	-	-
Rate Review and Financial Plan (4400-8000) Every 5 years	19,515	22,129	-	-	-	22,129	-	-
Cap Artesian Flow Kernahan (4410-8000)	38,553	-	-	-	-	-	-	-
Portable Generator - East Quad (4410-8000)	23,132	-	-	-	-	-	-	-
Bypass Design Bridge Street (4500-8000)	4,626	-	-	-	-	-	-	-
Repair Tertiary Sand Filter (4500-8000)	37,011	-	-	-	-	-	-	-
Replace 2009 Truck - 4x4 (4400-8222) 2017 Sierra	12,337	-	-	-	-	-	-	-
WS- 2011 Chev 4x4	-	11,916	-	-	-	11,916	-	-
WS - 2010 Chev Colorado	-	11,625	-	-	11,625	-	-	-
WS - 2015 Cargo Van	-	12,213	-	-	-	-	12,213	-
WS - 2012 Sierra	-	11,625	-	-	11,625	-	-	-
WS - Trench box trailer	-	5,058	5,058	-	-	-	-	-
WS - 2013 Cub Mower	-	1,702	-	-	-	1,702	-	-
<b>Water</b>	-	-	-	-	-	-	-	-
Circumferential Watermain (4410-8269)	200,000	-	-	-	-	-	-	-
Full AMP replacement c/w reading system upgrade (4410-8012)	100,000	207,563	102,500	105,063	-	-	-	-
Water Modelling Update (4410-8013)	40,000	44,153	-	-	-	44,153	-	-
Install VFD's on eQuinelle Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Install VFD's on Alfred Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Install VFD's on Kernahan Service Pumps (4410-8000)	30,000	-	-	-	-	-	-	-
Flood and Temperature Alarms (I/O upgrade) at 3 pump stations	20,000	-	-	-	-	-	-	-
Replace Chlorine Tanks Alfred/Kernahan ( 4410-8000)	10,000	-	-	-	-	-	-	-
New Chlorine Pump - Vanburen (4410-8000)	15,000	-	-	-	-	-	-	-
eQuinelle Mini-PLC (4410-8000)	6,000	-	-	-	-	-	-	-
Fire Pump Alfred	-	279,825	279,825	-	-	-	-	-
Generator Replacement Alfred	-	333,648	-	-	164,764	168,883	-	-
New Chlorine Pumps - Each Station	-	17,395	-	-	-	-	-	17,395
Generator Controller Replacement Vanburen	-	10,769	-	-	10,769	-	-	-
Building Upgrades	-	110,516	-	52,531	-	-	-	57,985
Well piping and deep pump replacement	-	43,076	-	-	43,076	-	-	-
Analyzers and Monitoring System	-	110,281	16,400	17,861	18,307	18,765	19,234	19,715
Portable Generator Connections to Pump Stations	-	25,215	-	25,215	-	-	-	-
Watermain Replacement	-	-	-	-	-	-	-	-
Alfred Reservoir Condition Inspection	-	25,625	25,625	-	-	-	-	-
VanBuren PS Transfer Switch	-	30,750	30,750	-	-	-	-	-
Prescott Bridge Watermain Crossing	-	226,282	-	-	-	-	226,282	-
Watermain Replacement Provision	-	1,450,059	227,007	232,682	238,499	244,461	250,573	256,837
<b>Growth Related:</b>	-	-	-	-	-	-	-	-
Rosewater Well and Reservoir Station & Hydrogeological Study	-	113,141	-	-	-	-	113,141	-
New Water Source and Storage - NW Quadrant	-	4,180,869	-	-	4,180,869	-	-	-
New Water Source and Storage #3 (incl. EA)	-	-	-	-	-	-	-	-
Water Distribution Works	-	480,986	-	218,659	-	262,328	-	-
Van Buren Upgrade	-	535,674	-	-	-	535,674	-	-
Concession Loop (includes River Crossing)	-	-	-	-	-	-	-	-
CR43 Piping Upsizing	-	500,260	-	-	-	-	500,260	-
Pump Station Linkages (Alfred and Kernahan)	-	-	-	-	-	-	-	-
Water Master Plan Update	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>616,174</b>	<b>8,802,354</b>	<b>687,165</b>	<b>652,010</b>	<b>4,679,534</b>	<b>1,310,010</b>	<b>1,121,703</b>	<b>351,932</b>
<b>Capital Financing</b>	-	-	-	-	-	-	-	-
Provincial/Federal Grants	-	-	-	-	-	-	-	-
Development Charges Reserve Fund (Water)	-	-	-	-	-	-	-	-
Development Charges Reserve Fund (Administration)	-	-	-	-	-	-	-	-
Development Charges Service in Lieu Agreements	-	4,661,856	-	218,659	4,180,869	262,328	-	-
Non-Growth Related Debenture Requirements	-	1,187,275	46,268	154,870	148,041	421,064	407,811	9,221
Growth Related Debenture Requirements	-	631,108	-	-	-	267,837	363,271	-
Growth Related Interim Funding (Water Reserves)	-	-	-	-	-	-	-	-
Water Reserve	616,174	2,322,115	640,897	278,481	350,624	358,782	350,621	342,711
<b>Total Capital Financing</b>	<b>616,174</b>	<b>8,802,354</b>	<b>687,165</b>	<b>652,010</b>	<b>4,679,534</b>	<b>1,310,010</b>	<b>1,121,703</b>	<b>351,932</b>

**Table 2**  
**North Grenville**  
**Water Service**  
**Schedule of Non-Growth Related Debenture Repayments**  
Inflated \$

Debenture Year	2017	Principal (Inflated)	Forecast					
			2018	2019	2020	2021	2022	2023
2018		46,268		3,255	3,255	3,255	3,255	3,255
2019		154,870			10,897	10,416	10,416	10,416
2020		148,041				10,416	10,416	10,416
2021		421,064					29,627	29,627
2022		407,811						28,694
2023		9,221						
<b>Total Annual Debt Charges</b>	-	<b>1,187,275</b>	-	3,255	14,152	24,088	53,715	82,409

**Table 3**  
**North Grenville**  
**Water Service**  
**Schedule of Growth Related Debenture Repayments**  
Inflated \$

Debenture Year	2017	Principal (Inflated)	Forecast					
			2018	2019	2020	2021	2022	2023
2018		-		-	-	-	-	-
2019		-		-	-	-	-	-
2020		-		-	-	-	-	-
2021		267,837					18,845	18,845
2022		363,271						25,560
2023		-						
<b>Total Annual Debt Charges</b>	-	<b>631,108</b>	-	-	-	-	18,845	44,405

**Table 4**  
**North Grenville**  
**Water Service**  
**Water Reserves/ Reserve Funds Continuity**  
Inflated \$

Description	2017		2018	2019	2020	2021	2022	2023
Opening Balance	906,949		435,510	-	-	-	-	-
Transfer from Operating	135,665		205,388	278,481	350,624	358,782	350,621	342,711
Transfer to Capital	616,174		640,897	278,481	350,624	358,782	350,621	342,711
Transfer to Growth-Related Capital								
Transfer to Operating	-		-	-	-	-	-	-
Closing Balance	426,440		-	-	-	-	-	0
Interest	9,069		-	-	-	-	-	0

**Table 5**  
**North Grenville**  
**Water Service**  
**Water Development Charges Reserve Fund Continuity**  
Inflated \$

Description	2017		2018	2019	2020	2021	2022	2023
Opening Balance	(2,575,008)		(2,600,758)	(2,676,491)	(2,752,981)	(2,830,235)	(2,908,263)	(3,006,104)
Development Charge Proceeds	-		-	-	-	-	-	-
Transfer to Capital	-		-	-	-	-	-	-
Transfer to Operating	49,233		49,233	49,233	49,233	49,233	68,078	93,638
Closing Balance	(2,575,008)		(2,649,991)	(2,725,723)	(2,802,213)	(2,879,468)	(2,976,341)	(3,099,742)
Interest	(25,750)		(26,500)	(27,257)	(28,022)	(28,795)	(29,763)	(30,997)
Required from Development Charges	-		-	-	-	267,837	363,271	-

**Table 6**  
**North Grenville**  
**Water Services**  
**Operating Budget Forecast**  
Inflated \$

Description	Budget 2017	Forecast					
		2018	2019	2020	2021	2022	2023
<b>Expenditures</b>							
<b>Operating Costs</b>							
<b>W/S ADMINISTRATION</b>							
1-5-4400-1010 W/S ADMIN - Wages	286,854	292,591	298,443	304,412	310,500	316,710	323,044
1-5-4400-1011 W/S ADMIN - Standby Pay	3,235	3,300	3,366	3,433	3,502	3,572	3,643
1-5-4400-1015 W/S ADMIN - Overtime	20,731	21,146	21,569	22,000	22,440	22,889	23,347
1-5-4400-1110 W/S ADMIN - GWL	32,899	33,557	34,229	34,913	35,611	36,324	37,050
1-5-4400-1111 W/S ADMIN - CPP & EI	15,474	15,784	16,100	16,422	16,750	17,085	17,427
1-5-4400-1115 W/S ADMIN - Omers	28,730	29,304	29,890	30,488	31,098	31,720	32,354
1-5-4400-1200 W/S ADMIN - EHT	6,087	6,208	6,332	6,459	6,588	6,720	6,854
1-5-4400-1210 W/S ADMIN - WSIB	3,621	3,693	3,767	3,842	3,919	3,998	4,078
1-5-4400-1610 W/S ADMIN - Contract Staff	-	-	-	-	-	-	-
1-5-4400-1710 W/S ADMIN - Consultants	10,034	10,235	10,440	10,649	10,862	11,079	11,300
1-5-4400-1770 W/S ADMIN - Legal Fees	1,638	1,670	1,704	1,738	1,773	1,808	1,844
1-5-4400-3001 W/S ADMIN - Office Supplies	2,388	2,436	2,485	2,534	2,585	2,637	2,690
1-5-4400-3002 W/S ADMIN - Postage & Courier	2,456	2,506	2,556	2,607	2,659	2,712	2,766
1-5-4400-3005 W/S ADMIN - Mileage	120	123	125	128	130	133	136
1-5-4400-3006 W/S ADMIN - Memberships/Dues	442	450	459	469	478	487	497
1-5-4400-3009 W/S ADMIN - Education/Training	11,239	11,463	11,693	11,927	12,165	12,408	12,657
1-5-4400-3010 W/S ADMIN - Uniforms and allowances	2,328	2,375	2,422	2,470	2,520	2,570	2,622
1-5-4400-3011 W/S ADMIN - Communications	11,158	11,382	11,609	11,841	12,078	12,320	12,566
1-5-4400-3012 W/S ADMIN - Cell	2,415	2,464	2,513	2,563	2,615	2,667	2,720
1-5-4400-3015 W/S - Materials & Supplies	313	319	326	332	339	346	353
1-5-4400-3022 W/S ADMIN - Advertising	819	835	852	869	886	904	922
1-5-4400-3031 W/S Admin - Hydro Locates	201	205	209	213	217	222	226
1-5-4400-3033 WWTP - water/sewer	2,408	2,456	2,506	2,556	2,607	2,659	2,712
1-5-4400-3034 W/S ADMIN - PROPERTY TAXES	22,968	23,427	23,896	24,374	24,861	25,358	25,865
1-5-4400-3035 W/S ADMIN - Model Maintenance	1,003	1,024	1,044	1,065	1,086	1,108	1,130
1-5-4400-3038 W/S SHARED - Vehicle Maintenance	1,879	1,917	1,955	1,994	2,034	2,075	2,116
1-5-4400-3055 W/S SHARED - Fuel	5,017	5,118	5,220	5,324	5,431	5,539	5,650
1-5-4400-3130 W/S SHARED - Annual TSSA Inspection	1,606	1,638	1,670	1,704	1,738	1,773	1,808
1-5-4400-3131 W/S SHARED - Annual Auto Tsfir Switch Insp	2,408	2,456	2,506	2,556	2,607	2,659	2,712
1-5-4400-4001 W/S ADMIN - Services	-	-	-	-	-	-	-
1-5-4400-4005 W/S ADMIN - Insurance	15,240	15,545	15,856	16,173	16,497	16,827	17,163
1-5-4400-4011 W/S ADMIN - Service Contracts	2,007	2,047	2,088	2,130	2,172	2,216	2,260
1-5-4400-4015 W/S ADMIN - Insurance Deductibles	2,007	2,047	2,088	2,130	2,172	2,216	2,260
1-5-4400-4022 W/S ADMIN - Licensed SCADA Services	2,810	2,866	2,923	2,982	3,041	3,102	3,164
1-5-4400-4030 W/S ADMIN - Licenses & Certification	1,204	1,228	1,253	1,278	1,303	1,329	1,356
<b>WATER</b>							
1-5-4410-3015 WATER - Materials/Supplies	57,000	58,140	59,303	60,489	61,699	62,933	64,191
1-5-4410-3017 WATER - Computer/Software	7,000	7,140	7,283	7,428	7,577	7,729	7,883
1-5-4410-3031 WATER - Hydro	116,000	121,800	127,890	134,285	140,999	148,049	155,451
1-5-4410-3040 WATER - Safety Supplies	-	-	-	-	-	-	-
1-5-4410-3070 WATER - Lab Supplies	-	-	-	-	-	-	-
1-5-4410-3072 WATER - Consumables	-	-	-	-	-	-	-
1-5-4410-3101 WATER - Alfred Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4410-3102 WATER - Kernahan Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4410-3103 WATER - VanBuren Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4410-3104 WATER - Equinelle Pump Mtc	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4410-3105 WATER - Rosewater Pump Mtc	5,100	5,202	5,306	5,412	5,520	5,631	5,743
1-5-4410-3130 WATER - Annual Leak Detection	5,000	5,100	5,202	5,306	5,412	5,520	5,631
1-5-4410-4009 WATER - Vehicle/Equip Rental	255	260	265	271	276	282	287
1-5-4410-4031 WATER - Generator Mtc & Fuel	-	-	-	-	-	-	-
1-5-4410-4032 WATER - Meter Maintenance	3,570	3,641	3,714	3,789	3,864	3,942	4,020
1-5-4410-4033 WATER - Water Testing	18,000	18,360	18,727	19,102	19,484	19,873	20,271
1-5-4410-4034 WATER - Hydrant/Valve Repair/curb stop	20,000	20,400	20,808	21,224	21,649	22,082	22,523
1-5-4410-4035 WATER - Pump Plant Repairs	-	-	-	-	-	-	-
1-5-4410-4036 WATER - Water Chlorine	14,000	14,280	14,566	14,857	15,154	15,457	15,766
1-5-4410-4039 WATER - Line Repairs	45,900	46,818	47,754	48,709	49,684	50,677	51,691
1-5-4410-5010 WATER - Meter Purchases	40,000	40,800	41,616	42,448	43,297	44,163	45,046
Sub Total Operating	876,365	897,373	918,974	941,190	964,043	987,554	1,011,746
<b>Capital-Related</b>							
Existing Debt (Principal) - Growth Related	33,528	35,033	36,605	38,249	39,966	41,760	43,635
Existing Debt (Interest) - Growth Related	15,705	14,200	12,627	10,984	9,267	7,473	5,598
New Growth Related Debt (Principal)	-	-	-	-	-	9,802	23,441
New Growth Related Debt (Interest)	-	-	-	-	-	9,043	20,965
Existing Debt (Principal) - Non-Growth Related	23,217	24,164	25,019	25,905	26,822	27,771	28,754
Existing Debt (Interest) - Non-Growth Related	42,726	42,104	41,248	40,363	39,446	38,496	37,513
New Non-Growth Related Debt (Principal)	-	-	1,693	7,421	12,618	28,487	44,426
New Non-Growth Related Debt (Interest)	-	-	1,562	6,732	11,470	25,228	37,983
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Capital Reserve	135,665	205,388	278,481	350,624	358,782	350,621	342,711
Sub Total Capital Related	250,841	320,888	397,237	480,276	498,370	538,681	585,025
<b>Total Expenditures</b>	<b>1,127,206</b>	<b>1,218,261</b>	<b>1,316,211</b>	<b>1,421,467</b>	<b>1,462,413</b>	<b>1,526,234</b>	<b>1,596,771</b>
<b>Revenues</b>							
Base Charge	724,297	793,262	867,624	947,765	980,187	1,015,482	1,050,778
Other Revenue	92,149	93,992	95,900	97,800	99,800	101,800	103,800
Contributions from Development Charges Reserve Fund	49,233	49,233	49,233	49,233	49,233	68,078	93,638
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>865,678</b>	<b>936,487</b>	<b>1,012,756</b>	<b>1,094,797</b>	<b>1,129,219</b>	<b>1,185,360</b>	<b>1,248,216</b>
Water Billing Recovery - Subtotal	261,528	281,773	303,455	326,669	333,193	340,874	348,555
<b>Total Revenue</b>	<b>1,127,206</b>	<b>1,218,261</b>	<b>1,316,211</b>	<b>1,421,467</b>	<b>1,462,413</b>	<b>1,526,234</b>	<b>1,596,771</b>

**Table 7**  
**North Grenville**  
**Water Services**  
**Water Rate Forecast**  
Inflated \$

Description	2017	2018	2019	2020	2021	2022	2023
Total Water Billing Recovery	261,528	281,773	303,455	326,669	333,193	340,874	348,555
Total Volume (m <sup>3</sup> )	484,242	496,376	508,511	520,645	532,780	546,617	560,454
<b>Increasing Block Structure</b>							
<i>Volume Forecast By Block (m3)</i>							
Block 1	143,207	148,097	152,986	157,876	162,765	168,072	173,380
Block 2	341,034	348,279	355,525	362,770	370,015	378,545	387,075
Check Total Volume	484,242	496,376	508,511	520,645	532,780	546,617	560,454
<b>Increasing Block Rates (\$/m<sup>3</sup>)</b>							
Block 1	-	-	-	-	-	-	-
Block 2	0.77	0.81	0.85	0.90	0.90	0.90	0.90
<b>Annual Percentage Change</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
<b>Check Revenue</b>							
Block 1	-	-	-	-	-	-	-
Block 2	261,528	281,773	303,455	326,669	333,193	340,874	348,555
Check Total Revenue	261,528	281,773	303,455	326,669	333,193	340,874	348,555

# Appendix B – Detailed Wastewater Rate Calculations

## Appendix B – Detailed Wastewater Rate Calculations

The following appendix contains the tables outlining the detailed wastewater rate calculations as follows:

- Page B-3 Wastewater Capital Budget
- Page B-4 Wastewater Debenture Schedules and Wastewater Reserves/Reserve Funds Schedules
- Page B-5 Wastewater Operating Budget Forecast
- Page B-6 Wastewater Rate Forecast

**Table 1**  
**North Grenville**  
**Wastewater Service**  
**Capital Budget Forecast**  
Inflated \$

Description	Budget 2017	Total	Forecast					
			2018	2019	2020	2021	2022	2023
<b>Capital Expenditures</b>								
<b>Water &amp; Wastewater Admin</b>								
Rate Review and Financial Plan (4400-8000) Every 5 years	43,757	49,619	-	-	-	49,619	-	-
Cap Artesian Flow Kernahan (4410-8000)	86,447	-	-	-	-	-	-	-
Portable Generator - East Quad (4410-8000)	51,868	-	-	-	-	-	-	-
Bypass Design Bridge Street (4500-8000)	10,374	-	-	-	-	-	-	-
Repair Tertiary Sand Filter (4500-8000)	82,989	-	-	-	-	-	-	-
Replace 2009 Truck - 4x4 (4400-8222) 2017 Sierra	27,663	-	-	-	-	-	-	-
WS - 2011 Chev 4x4	-	26,718	-	-	-	26,718	-	-
WS - 2010 Chev Colorado	-	26,066	-	-	26,066	-	-	-
WS - 2015 Cargo Van	-	27,386	-	-	-	-	27,386	-
WS - 2012 Sierra	-	26,066	-	-	26,066	-	-	-
WS - Trench box trailer	-	11,342	11,342	-	-	-	-	-
WS - 2013 Cub Mower	-	3,817	-	-	-	3,817	-	-
<b>Wastewater</b>								
PLC 200 I/O (4500-8000)	25,000	-	-	-	-	-	-	-
Gas Detection - Colonnade / WWTP (4500-8000)	60,000	-	-	-	-	-	-	-
HVAC / Lightening protection at Bridge Street (4500-8272)	30,000	-	-	-	-	-	-	-
Bridge Street roof replacement (4500-8272)	30,000	-	-	-	-	-	-	-
Upgrade 3rd pump at Bridge Street Station (4500-8272)	100,000	-	-	-	-	-	-	-
Secondary Clarifier Short Collector and Motor (4500-8000)	30,000	-	-	-	-	-	-	-
UV System New Installation (4500-8283)	300,000	-	-	-	-	-	-	-
RAW/RAS Mag Meter replacement (4500-8000)	20,000	-	-	-	-	-	-	-
Pre Aeration Replacement (4500-8000)	20,000	-	-	-	-	-	-	-
Digester Cleanout and Inspection	-	107,689	-	-	107,689	-	-	-
Primary Tank Rehabilitation	-	41,000	41,000	-	-	-	-	-
Secondary Tank Rehabilitation	-	-	-	-	-	-	-	-
Channel Monster Rehabilitation (Every 4 years)	-	64,613	-	-	64,613	-	-	-
Decommissioning Well at WPCP	-	11,038	-	-	-	11,038	-	-
SCADA Computer Upgrades	-	42,820	-	21,013	10,769	11,038	-	-
WPCP Roof Replacement	-	86,151	-	-	86,151	-	-	-
Portable Pump (Bridge Street Failure)	-	99,343	-	-	-	99,343	-	-
Process Air Piping Seal Replacement	-	56,570	-	-	-	-	56,570	-
Portable Generator Connections to Pump Stations	-	16,400	16,400	-	-	-	-	-
Bridge Street PLC Replacement	-	45,256	-	-	-	-	45,256	-
Bridge Street Remote Start Replacment	-	21,013	-	21,013	-	-	-	-
WPCP VFD Surge Protection	-	21,538	-	-	21,538	-	-	-
Alum Tank Replacement	-	102,500	102,500	-	-	-	-	-
Sewermain Replacement Provision	-	1,188,828	186,111	190,764	195,533	200,421	205,432	210,568
<b>Growth Related:</b>								
Septage Receiving Facility	-	-	-	-	-	-	-	-
Pump Station - North West Quadrant Ph 1	68,502	3,861,585	3,861,585	-	-	-	-	-
Pump Station - North West Quadrant Ph 1A	-	-	-	-	-	-	-	-
Force Main Twinning	-	-	-	-	-	-	-	-
CR 43 (includes bridge crossing) & East Quadrant Pump Station	-	-	-	-	-	-	-	-
Anniversary Way from Bridge Street Station	-	-	-	-	-	-	-	-
Equinelle (from Pumping Station to WWTP)	-	-	-	-	-	-	-	-
East Quad Pipes	-	-	-	-	-	-	-	-
West Quad Pipes	-	266,289	-	-	-	266,289	-	-
CR 44 (CR43 to Firehall)	760,330	-	-	-	-	-	-	-
Waste Water Treatment Plant and Disposal	-	-	-	-	-	-	-	-
Wastewater Treatments ESR Amendment	-	-	-	-	-	-	-	-
Implementation of a Phosphorus Offsetting Program	-	3,660,438	-	-	-	-	3,660,438	-
Equalization of Existing Wastewater Facility	-	8,497,702	-	8,497,702	-	-	-	-
I&I Improvements	300,000	-	-	-	-	-	-	-
Wastewater Master Plan Update	-	-	-	-	-	-	-	-
NW Quadrant - 2nd Force Main	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>2,046,930</b>	<b>18,361,789</b>	<b>4,218,938</b>	<b>8,730,491</b>	<b>538,426</b>	<b>668,284</b>	<b>3,995,083</b>	<b>210,568</b>
<b>Capital Financing</b>								
Provincial/Federal Grants	582,187	-	-	-	-	-	-	-
Development Charges Reserve Fund (Wastewater)	379,053	2,089,654	-	2,089,654	-	-	-	-
Development Charges Reserve Fund (Administration)	-	-	-	-	-	-	-	-
Development Charges Service in Lieu Agreements	-	4,127,874	3,861,585	-	-	266,289	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	6,751,546	-	4,689,675	-	-	2,061,870	-
Growth Related Interim Funding (Wastewater Reserves)	-	3,316,941	-	1,718,373	-	-	1,598,568	-
Wastewater Reserve	1,085,689	2,075,774	357,353	232,789	538,426	401,994	334,644	210,568
<b>Total Capital Financing</b>	<b>2,046,930</b>	<b>18,361,789</b>	<b>4,218,938</b>	<b>8,730,491</b>	<b>538,426</b>	<b>668,284</b>	<b>3,995,083</b>	<b>210,568</b>



**Table 2**  
**North Grenville**  
**Wastewater Service**  
**Schedule of Non-Growth Related Debenture Repayments**  
Inflated \$

Debenture Year	2017	Principal (Inflated)	Forecast					
			2018	2019	2020	2021	2022	2023
2018		-		-	-	-	-	-
2019		-		-	-	-	-	-
2020		-		-	-	-	-	-
2021		-		-	-	-	-	-
2022		-		-	-	-	-	-
2023		-		-	-	-	-	-
<b>Total Annual Debt Charges</b>	-	-	-	-	-	-	-	-

**Table 3**  
**North Grenville**  
**Wastewater Service**  
**Schedule of Growth Related Debenture Repayments**  
Inflated \$

Debenture Year	2017	Principal (Inflated)	Forecast					
			2018	2019	2020	2021	2022	2023
2018		-		-	-	-	-	-
2019		4,689,675		-	329,971	329,971	329,971	329,971
2020		-		-	-	-	-	-
2021		-		-	-	-	-	-
2022		2,061,870		-	-	-	-	145,075
2023		-		-	-	-	-	-
<b>Total Annual Debt Charges</b>	-	<b>6,751,546</b>	-	-	329,971	329,971	329,971	475,046

**Table 4**  
**North Grenville**  
**Wastewater Service**  
**Wastewater Reserves/ Reserve Funds Continuity**  
Inflated \$

Description	2017	2018	2019	2020	2021	2022	2023
Opening Balance	1,484,153	908,213	1,194,278	-	384,346	942,875	-
Transfer from Operating	494,908	631,593	756,884	918,966	951,188	990,337	1,028,246
Transfer to Capital	1,085,689	357,353	232,789	538,426	401,994	334,644	210,568
Transfer to Growth-Related Capital			1,718,373			1,598,568	
Transfer to Operating	-	-	-	-	-	-	-
Closing Balance	893,371	1,182,453	-	380,540	933,540	-	817,678
Interest	14,842	11,825	-	3,805	9,335	-	8,177

**Table 5**  
**North Grenville**  
**Wastewater Service**  
**Wastewater Development Charges Reserve Fund Continuity**  
Inflated \$

Description	2017	2018	2019	2020	2021	2022	2023
Opening Balance	2,407,125	2,431,196	2,267,704	-	(517,624)	(905,354)	(810,385)
Development Charge Proceeds	488,686	9,346	12,451	12,762	146,495	628,253	645,794
Transfer to Capital	379,053		2,089,654				
Transfer to Operating	195,290	195,290	190,500	525,261	525,261	525,261	670,336
Closing Balance	2,407,125	2,245,251	-	(512,499)	(896,390)	(802,361)	(834,928)
Interest	24,071	22,453	-	(5,125)	(8,964)	(8,024)	(8,349)
Required from Development Charges	379,053	-	8,497,702	-	-	3,660,438	-

**Table 6**  
**North Grenville**  
**Wastewater Services**  
**Operating Budget Forecast**  
Inflated \$

Description	Budget 2017	Forecast					
		2018	2019	2020	2021	2022	2023
<b>Expenditures</b>							
<b>Operating Costs</b>							
<b>W/S ADMINISTRATION</b>							
1-5-4400-1010 W/S ADMIN - Wages	427,817	436,373	445,101	454,003	463,083	472,345	481,791
1-5-4400-1011 W/S ADMIN - Standby Pay	4,825	4,921	5,020	5,120	5,223	5,327	5,434
1-5-4400-1015 W/S ADMIN - Overtime	30,919	31,537	32,168	32,811	33,467	34,137	34,820
1-5-4400-1110 W/S ADMIN - GWL	49,067	50,048	51,049	52,070	53,111	54,173	55,257
1-5-4400-1111 W/S ADMIN - CPP & EI	23,079	23,540	24,011	24,491	24,981	25,481	25,990
1-5-4400-1115 W/S ADMIN - Omers	42,847	43,704	44,579	45,470	46,379	47,307	48,253
1-5-4400-1200 W/S ADMIN - EHT	9,077	9,259	9,444	9,633	9,826	10,022	10,223
1-5-4400-1210 W/S ADMIN - WSIB	5,400	5,508	5,618	5,731	5,845	5,962	6,081
1-5-4400-1610 W/S ADMIN - Contract Staff	-	-	-	-	-	-	-
1-5-4400-1710 W/S ADMIN - Consultants	14,966	15,265	15,570	15,882	16,199	16,523	16,854
1-5-4400-1770 W/S ADMIN - Legal Fees	2,442	2,491	2,541	2,592	2,644	2,697	2,751
1-5-4400-3001 W/S ADMIN - Office Supplies	3,562	3,633	3,706	3,780	3,855	3,933	4,011
1-5-4400-3002 W/S ADMIN - Postage & Courier	3,664	3,737	3,812	3,888	3,966	4,045	4,126
1-5-4400-3005 W/S ADMIN - Mileage	180	183	187	191	194	198	202
1-5-4400-3006 W/S ADMIN - Memberships/Dues	658	672	685	699	713	727	742
1-5-4400-3009 W/S ADMIN - Education/Training	16,761	17,097	17,439	17,787	18,143	18,506	18,876
1-5-4400-3010 W/S ADMIN - Uniforms and allowances	3,472	3,541	3,612	3,685	3,758	3,833	3,910
1-5-4400-3011 W/S ADMIN - Communications	16,642	16,974	17,314	17,660	18,013	18,374	18,741
1-5-4400-3012 W/S ADMIN - Cell	3,603	3,675	3,748	3,823	3,899	3,977	4,057
1-5-4400-3015 W/S - Materials & Supplies	467	476	486	496	505	516	526
1-5-4400-3022 W/S ADMIN - Advertising	1,221	1,246	1,271	1,296	1,322	1,348	1,375
1-5-4400-3031 W/S Admin - Hydro Locates	299	305	311	318	324	330	337
1-5-4400-3033 WWTP - water/sewer	3,592	3,664	3,737	3,812	3,888	3,966	4,045
1-5-4400-3034 W/S ADMIN - PROPERTY TAXES	34,254	34,939	35,638	36,351	37,078	37,819	38,576
1-5-4400-3035 W/S ADMIN - Model Maintenance	1,497	1,526	1,557	1,588	1,620	1,652	1,685
1-5-4400-3038 W/S SHARED - Vehicle Maintenance	2,803	2,859	2,916	2,974	3,034	3,094	3,156
1-5-4400-3055 W/S SHARED - Fuel	7,483	7,632	7,785	7,941	8,100	8,262	8,427
1-5-4400-3130 W/S SHARED - Annual TSSA Inspection	2,394	2,442	2,491	2,541	2,592	2,644	2,697
1-5-4400-3131 W/S SHARE - Annual Auto Tsfr Switch Insp	3,592	3,664	3,737	3,812	3,888	3,966	4,045
1-5-4400-4001 W/S ADMIN - Services	-	-	-	-	-	-	-
1-5-4400-4005 W/S ADMIN - Insurance	22,730	23,184	23,648	24,121	24,603	25,095	25,597
1-5-4400-4011 W/S ADMIN - Service Contracts	2,993	3,053	3,114	3,176	3,240	3,305	3,371
1-5-4400-4015 W/S ADMIN - Insurance Deductibles	2,993	3,053	3,114	3,176	3,240	3,305	3,371
1-5-4400-4022 W/S ADMIN - Licensed SCADA Services	4,190	4,274	4,360	4,447	4,536	4,626	4,719
1-5-4400-4030 W/S ADMIN - Licenses & Certification	1,796	1,832	1,868	1,906	1,944	1,983	2,022
<b>SEWER</b>							
1-5-4500-3015 SEWER - Materials & Supplies	95,000	96,900	98,838	100,815	102,831	104,888	106,985
1-5-4500-3030 SEWER - Heating Fuel	22,440	22,889	23,347	23,814	24,290	24,776	25,271
1-5-4500-3031 SEWER - Hydro	247,500	259,875	272,869	286,512	300,838	315,880	331,674
1-5-4500-3040 SEWER - Safety Supplies	2,000	2,040	2,081	2,122	2,165	2,208	2,252
1-5-4500-3070 SEWER - Lab Supplies	9,000	9,180	9,364	9,551	9,742	9,937	10,135
1-5-4500-3071 SEWER - UV Bulbs	-	-	15,000	15,300	15,606	15,918	16,236
1-5-4500-3072 SEWER - Consumables	1,020	1,040	1,061	1,082	1,104	1,126	1,149
1-5-4500-3074 SEWER - Aluminum Sulphate	31,824	32,460	33,110	33,772	34,447	35,136	35,839
1-5-4500-3101 SEWER - Bridge Pump Mtc	11,220	11,444	11,673	11,907	12,145	12,388	12,636
1-5-4500-3102 SEWER - Colonade Pump Mtc	11,118	11,340	11,567	11,799	12,034	12,275	12,521
1-5-4500-3103 SEWER - Kempton Pump Mtc	6,120	6,242	6,367	6,495	6,624	6,757	6,892
1-5-4500-3104 SEWER - Equinelle Pump Mtc	11,118	11,340	11,567	11,799	12,034	12,275	12,521
1-5-4500-3130 SEWER - Annual Hydro Substn Inspection	8,000	8,160	8,323	8,490	8,659	8,833	9,009
1-5-4500-4020 SEWER - Electrician/Millwright Services	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4023 SEWER - Meter Calibrations	1,591	1,623	1,655	1,688	1,722	1,757	1,792
1-5-4500-4024 SEWER - Boiler Maintenance	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4026 SEWER - Biosolids	70,000	71,400	72,828	74,285	75,770	77,286	78,831
1-5-4500-4029 SEWER - Lab Tests	21,221	21,645	22,078	22,520	22,970	23,430	23,898
1-5-4500-4031 SEWER - Generator Maintenance	10,200	10,404	10,612	10,824	11,041	11,262	11,487
1-5-4500-4039 SEWER - CCTV/Flushing	30,000	30,600	31,212	31,836	32,473	33,122	33,785
Sub Total Operating	1,361,056	1,395,702	1,446,412	1,483,526	1,521,792	1,561,253	1,601,955
<b>Capital-Related</b>							
Existing Debt (Principal) - Growth Related	79,522	83,426	87,521	91,817	96,324	101,053	106,013
Existing Debt (Interest) - Growth Related	115,768	111,865	107,769	103,473	98,966	94,238	89,277
New Growth Related Debt (Principal)	-	-	-	171,636	177,643	183,861	265,758
New Growth Related Debt (Interest)	-	-	-	158,335	152,327	146,110	209,288
Existing Debt (Principal) - Non-Growth Related	36,181	37,458	38,675	39,932	41,230	42,570	43,954
Existing Debt (Interest) - Non-Growth Related	32,208	31,321	30,104	28,847	27,549	26,209	24,825
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Capital Reserve	494,908	631,593	756,884	918,966	951,188	990,337	1,028,246
Sub Total Capital Related	758,588	895,663	1,020,953	1,513,006	1,545,228	1,584,377	1,767,361
Total Expenditures	2,119,643	2,291,364	2,467,365	2,996,532	3,067,021	3,145,630	3,369,316
<b>Revenues</b>							
Base Charge	1,053,760	1,155,159	1,264,525	1,382,426	1,430,778	1,483,416	1,536,054
Other Revenue	22,891	23,349	23,800	24,300	24,800	25,300	25,800
Contributions from Development Charges Reserve Fund	195,290	195,290	190,500	525,261	525,261	525,261	670,336
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-
Total Operating Revenue	1,271,942	1,373,799	1,478,825	1,931,987	1,980,839	2,033,977	2,232,190
Wastewater Billing Recovery - Subtotal	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
<b>Total Revenue</b>	<b>2,119,643</b>	<b>2,291,364</b>	<b>2,467,365</b>	<b>2,996,532</b>	<b>3,067,021</b>	<b>3,145,630</b>	<b>3,369,316</b>

**Table 7**  
**North Grenville**  
**Wastewater Services**  
**Wastewater Rate Forecast**  
Inflated \$

Description	2017	2018	2019	2020	2021	2022	2023
Total Wastewater Billing Recovery	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
Total Volume (m <sup>3</sup> )	475,011	488,562	500,697	512,832	524,966	538,803	552,641
<b>Increasing Block Structure</b>							
<i>Volume Forecast By Block (m3)</i>							
Block 1	141,682	146,571	151,460	156,350	161,239	166,547	171,854
Block 2	333,329	341,992	349,237	356,482	363,727	372,257	380,787
Check Total Volume	475,011	488,562	500,697	512,832	524,966	538,803	552,641
<b>Increasing Block Rates (\$/m<sup>3</sup>)</b>							
Block 1	-	-	-	-	-	-	-
Block 2	2.54	2.68	2.83	2.99	2.99	2.99	2.99
<b>Annual Percentage Change</b>		5.5%	5.5%	5.5%	0.0%	0.0%	0.0%
Check Revenue							
Block 1	-	-	-	-	-	-	-
Block 2	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125
Check Total Revenue	847,701	917,565	988,540	1,064,545	1,086,182	1,111,653	1,137,125

**THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE**

**BY-LAW NO. 63-12**

*A By-Law to Regulate the Installation, Repair,  
Maintenance, Access and Use of the Municipality's Water Supply System,  
Water Meters, Sewer Services and Related Appurtenances;  
the Billing and Collection of Charges for Water and Sewer Usage;  
and the Penalties for Offences*

**WHEREAS** pursuant to the *Municipal Act 2001*, as amended, a municipality may pass by-laws imposing fees and charges on any class of persons for services and activities provided or done by or on behalf of it;

**AND WHEREAS** the *Ontario Water Resources Act*, the *Building Code Act* and the *Municipal Act 2001* provide for the regulation, maintenance, inspection and management of water, sewer and related municipal works;

**AND WHEREAS** the Council for the Municipality of North Grenville did approve recommendations based on Watson & Associates 2017 Rate Study for the Corporation's Water and Wastewater Systems that is consistent with the requirements of the *Sustainable Water and Sewer Systems Act 2002*;

**AND WHEREAS** the Municipality of North Grenville deems it necessary and desirable to regulate the installation, repair, maintenance and access to water meters, sewer services and related appurtenances and the penalties for offences related to same;

**NOW THEREFORE** the Council of the Corporation of the Municipality of North Grenville enacts as follows:

**A. DEFINITIONS**

In this by-law, except where a contrary intention appears,

- (a) "Authorized Function List" shall mean the list of functions and the persons authorized to carry out such functions as set out in CSA B64 Standard and Schedule "E".
- (b) "authorized tester" shall mean a person who is certified to test backflow prevention devices by an accredited organization acceptable to the Corporation as set out in the Authorized Function List.
- (c) "backflow" shall mean a reversal of the normal direction of the flow in the water piping or plumbing system.

- (d) “base rate” shall mean the minimum water/sewer service rate per independent residential unit or independent non-residential unit per month and may include a minimum amount of water to be provided by the water works.
- (e) “building” shall mean a structure supplied with potable water and/or sewer services by the Corporation.
- (f) “Building Code” shall mean the Ontario Building Code (2006), O.Reg. 350/06, as amended.
- (g) “commercial” shall mean lands, buildings or structures to be used for the sale or provision of goods and services to the general public which does not include industrial and not exclude additional residential usage.
- (h) “consumer” shall mean the owner of a property which is serviced by, connected to, and/or takes water from the Corporation’s water works. However, in the case of tenant-occupied properties, where the owner or tenant completes and submits an Application for Tenant Account and such application is approved by the Corporation, the “consumer” shall mean the tenant.
- (i) “contractor” shall mean a person, partnership, or corporation who contracts to undertake the execution of work commissioned by the Corporation to install and/or maintain water meters and other related appurtenances.
- (j) “Corporation” shall mean the Corporation of the Municipality of North Grenville.
- (k) “Council” shall mean the elected Municipal Council of the Municipality of North Grenville.
- (l) “cross-connection” shall mean any actual or potential connection between a potable water system and any source of pollution or contamination and includes any bypass, jumper connection, removable section of pipe or hose, swivel or changeover device, private hydrant connections and any other temporary or permanent connecting arrangement through which backflow may occur.
- (m) “cross-connection control” shall mean the enforcement of any ordinance or other legal statement regulating cross-connections.
- (n) “Cross-Connection Control Program” shall mean a program initiated by the Corporation to administer and regulate the selection, installation, testing and maintenance of backflow prevention devices.
- (o) “cross-connection survey” shall mean a complete review of the potable water system or systems located on a property to determine the presence of any existing

backflow prevention devices, existing and potential cross-connections, corrective measures and recommendations.

- (p) “CSA B64” shall mean the Canadian Standard Association (CSA) Standard Series B64.10 – Selection and Installation of Backflow Preventers/Maintenance and Field Testing of Backflow Preventers, as amended.
- (q) “Director” shall mean the Director of Public Works or her/his designate.
- (r) “disconnection” shall mean the physical discontinuance of the supply of water to a premises by shutting it off at the curb stop or through isolation of the lateral near the main; and “disconnect” shall have the same meaning.
- (s) "dwelling" and "dwelling unit" shall mean a building, room or rooms intended to be used for human habitation, and occupied by not more than one family and in which separate kitchen and sanitary facilities are provided for the exclusive use of such a family, with a private entrance from outside the building or from a common hallway or stairway inside the building.
- (t) "flat rate" shall mean a single charge per specified time period for the provision of water and/or sewer services.
- (u) “hazard” –
  - “minor hazard” shall mean any type of cross-connection or potential cross-connection that involves a substance that constitutes only a nuisance and results in a reduction in only the aesthetic qualities of the water and cannot create a danger to health.
  - “moderate hazard” shall mean any minor hazard connection that has a low probability of becoming a severe hazard which includes, but is not limited to, connections involving water where the aesthetic qualities of the water have been reduced and, under certain conditions, can create a danger to health.
  - “severe hazard” shall mean any type of cross-connection or potential cross-connection involving water that has additives or substances that, under any concentration, can create a danger to health.
- (v) “independent non-residential unit” shall mean a single commercial, institutional or industrial unit served by an individual water service pipe which is freestanding, or attached to a main building which is serviced by, connected to, and/or takes water from the Corporation’s water works.
- (w) “independent residential unit” shall mean a single dwelling unit served by an individual water service pipe which is freestanding, or attached to a main building serviced by, connected to, and/or takes water from the Corporation’s water works.

- (x) “industrial” shall mean lands, building or structures to be used for assembling, fabricating, manufacturing, production, processing, repairing, supplying, storing or selling of industrial goods and materials to the general public which does not include commercial and not exclude additional residential usage.
- (y) “institutional” shall mean property usage for places of worship, school, senior’s residences, hospitals, recreation centers, libraries or municipal/provincial/federal offices, etc.
- (z) “irrigation systems” shall mean pipes and sprinklers artificially supplying land with water for agriculture or landscaping.
- (aa) “isolation” –
  - “area isolation” shall mean backflow protection provided for a section of a piping system with potable and non-potable connections (that may or may not be considered cross-connections) downstream of a backflow prevention device.
  - “fixture isolation” shall mean backflow protection provided at the connection to a fixture or appliance.
  - “premises isolation” shall mean a backflow protection provided at the entrance to a building or facility.
  - “zone isolation” shall mean backflow protection provided for sections of a piping system within a building or facility with no potable connections downstream of a backflow prevention device.
- (bb) “lateral”, “private lateral”, “service lateral” or “fire flow lateral” shall mean the privately owned piping system that is connected to the water works.
- (cc) “meter” shall mean a municipal or private water meter, register and remote readout unit, supplied at the cost of the owner, which is of a type approved by the Corporation.
- (dd) “meter pit” shall mean any exterior chamber or pit approved by the Corporation for the purpose of containing a water meter and related appurtenances.
- (ee) “metered water/sewer service rate” shall mean the cost per volume measure of water described by the by-law.
- (ff) “multiple non-residential unit” shall mean a single building containing two or more independent non-residential units, which is serviced by, connected to, and/or take water from the Corporation’s water works.

- (gg) “multiple residential unit” shall mean a single building containing two or more independent residential units, which is serviced by, connected to, and/or takes water from the Corporation’s water works; except for Section D., Backflow Prevention, where for purposes of backflow prevention devices multi-residential buildings and structures shall mean five units or more with a shared single-service connection.
- (hh) “Municipality” shall mean the same as “Corporation”.
- (ii) “municipal meter” shall mean the water meter, register and remote readout unit owned by the Corporation to measure the quantity of water used by the consumer.
- (jj) “occupant” shall include any lessee, tenant, owner, the agent of a lessee, tenant or owner, or any person in possession of a premises.
- (kk) “owner” shall include any person or any firm or corporation that is the registered owner of the property under consideration or any agent thereof, a person entitled to a limited estate in land, a trustee in whom land is vested, a committee of the estate of a mentally incompetent person, an executor, an administrator and a guardian.
- (ll) “person” shall mean an “owner” and “occupant” as herein described.
- (mm) “potable water” shall mean water that is fit for human consumption.
- (nn) “premises” shall mean the property being supplied or to be supplied with water.
- (oo) “private fire hydrant” shall mean a hydrant owned by someone or some entity other than the Corporation.
- (pp) ”private meter” shall mean the water meter, register and remote readout unit installed and owned by a property owner, to measure the quantity of water used by the consumer.
- (qq) “private water service” shall mean the pipes and fixtures used for the purpose of supplying any building with water from the Corporation’s water works that is located between the street property line in front of or abutting the premises so supplied and the building on the premises.
- (rr) “private water system” shall mean a source of water other than the Corporation's water works system.
- (ss) “remote read-out unit” shall mean the device installed at a separate location from the water meter and used to provide electronic access to the register on the meter.
- (tt) "sanitary sewer works" shall mean the publically owned sanitary sewer system located on publically owned land, public right-of-ways, and easements with right of public entry and shall include but not be limited to any public works for the



collection, transmission, treatment or disposal of sewage, or any part of any such works.

- (uu) “shut-off valve” shall mean the valve on the Corporation’s water service connection owned and used by the Corporation to shut off or turn on the water supply from the Corporation’s water distribution system to any premises.
- (vv) "taking of water" shall mean the unauthorized use of the Corporation’s water works such as the taking of water from outlets other than those regulated by the Municipality and paid for by the individual(s) in question.
- (ww) “unit” shall mean either an independent residential unit or an independent non-residential unit, as applicable.
- (xx) “water/sewer service rate” shall mean the volumetric or measured period charges for the capital cost and the operating and maintenance costs of the Corporation’s water and sanitary sewer works, and shall be comprised of a base rate and a metered water/sewer service rate.
- (yy) “water service connection” shall mean the pipes and fixtures used for the purpose of supplying any premises in the Municipality with water from the Corporation’s water works that is located between the Corporation’s watermain in the street and the street property line abutting the premises so supplied.
- (zz) "water treatment system" shall mean any system designed to treat, condition, or otherwise modify the naturally occurring properties of water.
- (aaa) “water well” shall mean any hole which is dug, bored or drilled into the ground for the purpose of locating and obtaining groundwater.
- (bbb) “water works" shall mean the publically owned water system, including wells, pumps, reservoirs, and pipe distribution network, located on publically owned land, public right-of-ways, and easements with right of public entry and shall include but not be limited to any works for the collection, production, treatment, storage, supply or distribution of water or any part of any such works.

## **B. SERVICE AREA**

1. No new development shall be permitted to be serviced on private services (well and/or septic system) where piped municipal services are readily available or where they could be reasonably extended, as determined by the Director.
2. New development in the urban area, but outside of the serviced area may be permitted to proceed on the basis of private services where servicing to the property is impractical at the time. Permission for such development must be authorized by the Corporation through

a Development Agreement. As a condition of such agreement, the developer will be required to abandon at their own expense, the private services when municipal services become available to the property.

3. Properties within the urban serviced area which are currently on private services shall not be required to connect to the municipal system until such time as the well or septic system has failed or requires serious alteration or replacement, or development on the property intensifies such that the septic system would be required to be enlarged; or as otherwise directed at the sole discretion of the Corporation.

### **C. WATER WORKS CONNECTION AND REQUIRED WATER METER**

1. No person shall have water and/or sewer services connected to any premises or have a new account opened for any owner or occupant, without a Water/Sewer Connection Permit (for new or repair replacement) being first issued and all appropriate fees and charges being paid according to the Schedule "A".
2. No person shall take water for non-emergency purposes from the Corporation's water works without the express written permission of the Director.
3. No person shall connect or allow any premises to be connected to the Corporation's water supply system until a meter and related appurtenances has been installed by a contractor or other person authorized to do so by the Corporation according to the Corporation standards.
4. The Corporation shall supply at a cost to the owner, the required water meter(s), which shall remain property of the Corporation.
5. No person shall take water from or allow water to be taken from the Corporation's water works unless a meter(s) has been installed by a contractor or other person authorized by the Corporation to install such meter(s).
6. Any consumer shall, at his sole cost and expense, supply, install and maintain a lockable valve before the meter to permit water shut-off as required by the Corporation or persons authorized by the Corporation. All shut-off valves must be left clear and accessible at all times so that the water in the water service pipe may be turned off or on as may be found necessary by the Corporation.
7. The Corporation will not supply, install, inspect or read private water meters, nor will the Corporation bill consumption on private meters. Water supply pipes to private meters must be connected to the owner's plumbing after the Corporation's meter.
8. A meter shall be placed on each service lateral that is connected to the Corporation's water works to the satisfaction of the Director and the plumbing shall be so arranged that all water used on such premises shall pass through such meter and the owner of the premises shall be held liable for all water/sewer service rates or charges.

9. Corporation may charge a water meter installation inspection fee to the owner of premises.
10. Any unit for which an **Application to Bill Tenant** has been made, as a condition to the approval of the said application shall be equipped with a separate meter, backflow prevention device(s), and a lockable shut off valve.
11. For a building with a single water service lateral feeding multiple residential units or multiple non-residential units or combination of the two and where;
  - (a) the units are under separate ownership, and
  - (b) the units are without a governing operating agreement,the owners shall be allowed one meter per unit provided that the owner can demonstrate to the satisfaction of the Director, that the water services are fully separated.
12. Every meter shall be placed in such location as the persons authorized by the Corporation shall direct. If possible, the meter shall be installed in the basement of residential buildings, and shall be located immediately after the lockable shut off valve on the customer's plumbing, so as to ensure that all water supplied to the building passes through the meter. In the event that a building has no basement, the meter shall be installed in a location which is satisfactory to the Director or in a meter pit if required by the Corporation.
13. The owner of premises to which water service is supplied shall provide sufficient convenient and safe space, free of charge or rent, for the installation and maintenance of municipal meters, lockable shut off valves, pipes and related appurtenances on said premises. No person shall be permitted to install, remove, inspect, repair or tamper with any of the said equipment or related appurtenances unless authorized by the Corporation or otherwise lawfully entitled to do so.
14. The owner of the premises to be supplied with water shall provide appropriate heat in any premises in which water meters, lockable shut off valves, backflow prevention devices, pipes and related appurtenances are located in order to prevent damage due to frost or otherwise. Any costs related to damage caused to meters, pipes and related appurtenances as a result of the failure to comply with the provisions of this by-law shall be the sole responsibility of the owner of such premises.
15. The owner of the property shall install and maintain all the piping, fixtures, valves and appurtenances located on his property in proper working condition.
16. Where a meter cannot conveniently be placed inside a building, it shall be placed in a meter pit, the location and construction of which shall be approved by the Corporation, the cost of which shall be paid for by the owner.

17. No person shall change the location of a meter once installed to the standards of the Corporation, except such persons that are authorized and approved by the Corporation.
18. The owner or occupant of premises shall provide free and clear access to the meter and related appurtenances in said premises so that the meter may be frequently read and examined by persons authorized by the Corporation for that purpose.
19. The Corporation may charge a missed appointment fee to the owner of premises for **not being present for a scheduled appointment**, denying or otherwise prohibiting access to the meter and related appurtenances, which would represent the reasonable cost incurred by the Corporation and as deemed by the Director, may add this fee to the tax roll for the relevant property and collect the fee in the same manner as municipal taxes.
20. Where such access is not provided by the owner or occupant of premises within fourteen (14) days upon written notification by the Corporation, the Corporation may, at its discretion, shut off the supply of water to the premises until such time as free and clear access to the water meter and related appurtenances is provided.
21. No person shall disconnect or allow to be disconnected any premises which are serviced by, connected to and/or take water from the Corporation's water works, without the express written permission of the Corporation.
22. No person shall connect a water well or allow a water well to be or remain connected to any premises which are serviced by, connected to and/or take water from the Corporation's water works.
23. The owner of any property which is connected to a water well shall forthwith properly abandon such water well, upon receiving written notification from the Corporation, where such property is connected to and/or takes water from the Corporation's water works.
24. The Corporation may enter into agreements with others to provide for the installation of water services or meters in any manner satisfactory to the Corporation.
25. Any person authorized by the Corporation for the purpose of inquiring into the compliance with the provisions of this by-law shall have free and clear access at all reasonable times to premises and lands to which water is supplied and under no circumstances will any owner, occupant or other person refuse access or otherwise interfere with authorized persons in the performance of their duties.

**D. BACKFLOW PREVENTION/CROSS CONNECTION**

1. No person shall connect, cause to be connected, or allow to remain connected to the potable water distribution system works any piping, fixture, fitting, container or appliance, in a manner which under any circumstances may allow water, wastewater, or any other liquid, chemical or substance to enter the potable water distribution system.

2. Every owner of a new or existing residential, industrial, commercial, and institutional property identified in Schedule “D” or of any other new or existing building, structure or property that contains a risk of contamination of the potable water system shall install, at the owner's expense, a backflow prevention device(s) in accordance with the Ontario Building Code and CSA B64, as amended from time to time.
3. All irrigation systems connected to the potable water distribution system require the installation of backflow prevention device(s).
4. The approved backflow prevention device(s) may be supplied by the Corporation at cost to the owner or a CSA approved device that meets municipal standards may be purchased directly by the owner. The owner shall be responsible for installation and maintenance of the backflow prevention device(s) and all costs associated therewith.
5. The Corporation shall maintain a list of those companies or persons in possession of valid backflow prevention device tester’s license as described in the Authorized Function List (Schedule “E”). Such list is available to the public during business hours.
6. The Corporation shall be permitted access, within twenty four (24) hours of providing notice, to any premises that are connected to the municipal drinking water system for the purpose of performing inspections to verify compliance with this by-law.
7. Where in the opinion of the Director, a risk of possible contamination of the municipal drinking water system exists, the Corporation shall be permitted immediate access to any premises that are connected to the municipal drinking water system. In such instances, the Corporation may require a routine cross connection inspection of the premises to be performed by an approved tester as described in the Authorized Function List (Schedule “E”). Should an unsafe and/or undocumented cross connection be found during said inspection, the cost of the inspection shall become the responsibility of the owner.
8. When carrying out an inspection pursuant to Sections D.6. and D.7., the Corporation may:
  - (a) Require the production for inspection of documents or things relevant to the inspection;
  - (b) Inspect and remove documents or things relevant to the inspection for the purpose of making tests, copies or extracts;
  - (c) Require information from any person concerning a matter related to the inspection; and
  - (d) Make examinations or take tests, samples or photographs necessary for the purposes of the inspection.
9. Where access is not provided, a written notice by the Corporation will be issued allowing five (5) working days to provide access. If access is not provided within this time frame, the Corporation may, at its discretion, shut off the supply of water to the premises until such time as the access is provided.

10. If a condition is found to exist which is contrary to Section D.1. of this by-law, the Corporation shall immediately carry out an inspection and shall issue such order to the owner as may be required to obtain compliance with this by-law.
11. If the owner to whom the Corporation has issued an order fails to comply with that order, the Director, at his/her discretion, may:
  - (a) Give notice to the owner to correct the fault, at his/her expense, within a specified time period and, if the notice is not complied with, the Corporation may then shut off the water service or services; or
  - (b) Without prior notice, shut off the water service or services.
12. Notwithstanding Sections D.1., D.9. and D.10. of this by-law, where a risk of possible contamination of the water works distribution system exists in the opinion of the Director or an approved tester as described in the Authorized Function List (Schedule "E"), an owner shall, on notice from the Corporation, install an area isolation, zone isolation and/or fixture isolation backflow prevention device(s) as required by the Ontario Building Code and CSA B64, in addition to any backflow prevention devices installed in the owner's water system.
13. A cross-connection survey of the plumbing system of all existing industrial, commercial, institutional properties and multi-residential buildings and structures with five units or more with shared single-service connection shall be completed, at the owner's expense, by an approved tester as described in the Authorized Function List (Schedule "E").
14. The cross-connection survey shall be completed with a report and sent to the Director within thirty (30) days of the date of the request by the Director, and shall include existing backflow prevention device(s), cross-connections (existing and potential), corrective measures, and recommendations.
15. Once an approved tester as described in the Authorized Function List (Schedule "E") has conducted a survey and determined that a backflow prevention device(s) is required, the installation of a backflow prevention device(s) shall be completed within the thirty (30) days from the date of the completed survey.
16. A cross-connection survey shall be completed every five (5) years from the date of the first requested survey, subsequent any tenant or ownership change or rezoning of property, or as required by the Director.
17. The backflow prevention devices in all industrial, commercial, institutional property and multi-residential buildings and structures with five units or more with shared single-service connection shall be inspected and tested at the expense of the owner, upon installation, and thereafter annually, or more often if required by the Director, by an approved tester as described in the Authorized Function List (Schedule "E") to carry out such tests to demonstrate that the device is in good working condition.

18. All equipment used to test backflow prevention devices shall be verified or calibrated for accuracy, as described in CSA B64.
19. The owner shall submit a report on a form approved by the Director of any or all tests performed on backflow prevention device(s) within fourteen (14) days. A test tag shall be displayed on or adjacent to the backflow prevention device on which the tester shall record the address of the premises, type, manufacturer, serial number and size of the device, and the test date, the authorized tester's name, the authorized tester's license number, and the authorized tester's initials.
20. If an owner fails to have their backflow prevention device tested, the Corporation may notify the owner that the device must be tested within five (5) working days of the receipt of the notice.
21. If the owner fails to have the device tested within the time allowed, the Corporation may shut off the water service or water services until the backflow prevention device has been tested and approved as required by Section D.17. of this bylaw.
22. When the results of a test referred to in Section D.19. of this bylaw show that backflow prevention device is not in good working condition, the owner shall at his expense make repairs or replace the device within five (5) working days.
23. If an owner fails to repair or replace the device within the time allowed, the Corporation may shut off the water service until such repair or replacement has been made.
24. All backflow prevention devices shall be owned and maintained by the owner.
25. No person shall without the permission of the Corporation remove any backflow prevention device installed unless such removal is to facilitate the repair of the device or the plumbing, with the device replaced immediately after repair is carried out, or to replace the device with another device that meets or exceeds the provisions of this by-law.
26. No person shall connect, cause to be connected, or allow to remain connected any piping, fixture, fitting, container or appliance to a Municipally-owned or private hydrant in a manner which under any circumstances may allow water, wastewater, or any other liquid, chemical or substance to enter the potable water distribution system.
27. Any use of a Municipally-owned or private fire hydrant for water supply is prohibited without first acquiring permission from the Corporation, except for water used for firefighting and approved maintenance or operations by the Corporation.
28. Any person or persons authorized under Section D.27. shall:
  - (a) Open a preapproved account with the Corporation to pay all the costs associated with the water consumed as set out in Schedule "A";
  - (b) Pay to the Corporation all other costs incurred by the Corporation, resulting from their use of the hydrant, as determined by the Director; and

- (c) Use an approved Backflow prevention device on the hydrant.
29. Any new or existing industrial, commercial, institutional and residential private fire protection sprinkler system must install the appropriate backflow prevention device downstream of the building's water meter and /or on the sprinkler system feed line to isolate the system, in accordance with the Ontario Building Code and CSA B64. The backflow prevention device must be tested **annually** by an approved tester as described in the Authorized Function List (Schedule "E").
30. **Any water supplied or made available for any premise for the purposes of protection of property or persons from fire or for preventing fires or the spreading of fires shall not be used for any other purpose.**
30. All authorized testers shall obtain certification through an accredited school or college, in accordance with CSA B64 and meet the criteria as set out in the Authorized Function List (Schedule "E"). Authorized testers shall maintain current certification with the appropriate certification association.
31. Annual registration with the Corporation is required for all authorized testers.
32. Only those persons listed in the Authorized Function List (Schedule "E") shall carry out functions set out in the Authorized Function List.
33. The Director may suspend or revoke the authorized tester registration with the Municipal Backflow Prevention Program, if the authorized tester:
- (a) Fails to renew, submit or maintain the annual registration and the required annual documentation with the Corporation;
  - (b) Submits a testing and inspection report that was falsified; or
  - (c) Repeatedly submits incorrect reports or installations of backflow prevention devices.
34. The Director, at its discretion, grants the Public Works Department staff the ability to perform cross-connection survey, install, test, and repair backflow prevention devices installed on municipally owned property according to the Authorized Function List.

## **E. WATER METER REPAIRS**

1. Should a municipal meter and/or shut off valve be found to be mechanically defective, the cost of repair shall be paid by the Corporation, but if the meter and/or shut off valve are damaged or found to be defective as a result of any act or failure to act of any person other than an employee or agent of the Corporation, the owner of the premises shall pay to the Corporation the cost of making the necessary repair to such meter and/or shut off valve. Any shared assessment of cost to repair the defective municipal meter and/or shut off valve shall be determined by the Director, in its sole discretion.



2. Should any meter fail to register or cannot be read, the consumer shall be charged a base service rate, at a minimum, and an average consumption over a historical period as determined by the Director, to a maximum of one (1) year for the pertinent period.
3. Vacant premises where meter reading shows zero (0) units shall be entitled to pay a base service rate only.
4. Any leak that may develop at a meter must be reported immediately to the Corporation. The Corporation shall not be held responsible for any damages resulting from such leaks.
5. The owner shall be liable to pay for the water supplied as indicated by the meter at the rates established from time to time by the Corporation. In the event of a default of paying of any amount owing for the water supplied the Corporation may at its discretion shut off the water supply to the property and such amount shall become a charge against the property and shall be added to the tax roll for the relevant property and collected in the same manner as municipal taxes.
6. For a building with multiple residential units and/or multiple non-residential units which are not separately metered, the consumer shall be responsible for the payment of the water/sewer service rate.
7. All water passing through any water meter shall be charged to the consumer, whether used or wasted.

**F. WATER METER TESTING**

1. A municipal meter will be removed and tested by the Corporation upon a written request from the consumer or the owner and the payment of a meter testing deposit, as set out in Schedule "A" of this by-law, for completion of the test.
  - (a) Should a meter, when tested, be found to register correctly or not in excess of three per cent (3%) in favour of the Corporation, the consumer/owner's deposit shall be forfeited towards the cost of the test and any additional expense incurred in removing, testing and reinstalling the meter will be paid for in full by the consumer/owner requesting such test.
  - (b) Should a meter, when tested, be found to register in excess of 3% in favour of the Corporation, a refund will be made to the consumer/owner of an amount equal to such excess percentage of the water/sewer service rate paid for by such consumer/owner the previous four (4) months prior to the testing. In addition, the consumer/owner's meter testing deposit shall be returned in full, without interest. Notwithstanding the above, no reduction shall be made which will reduce the water/sewer service rate below the minimum water/sewer service rates fixed by Council.

2. The Corporation reserves the right to test all meters being supplied with water from the Corporation's water works.
3. Where the meter is equipped with a remote read-out unit of any type and a discrepancy occurs between the reading at the register of the meter and the reading on the read-out device, the Corporation will consider the reading at the meter to be correct, and will adjust and correct the consumer's account accordingly.
4. No reduction or refund shall be made to a consumer/owner if there has been non-compliance with the provisions of this by-law.
5. In the event that an owner refuses to have a meter placed or repaired on his property, the Corporation reserves the right to install a meter pit at the property line with all costs of said installation charged to the owner.
6. The Corporation may, in default of payment of any deposit, fee or account, shut-off the supply of water to the premises and/or such amount shall become a charge against the property and/or shall be added to the tax roll for the relevant property and collected in the same manner as municipal taxes. The Corporation shall not be liable for any damages to property or injury to persons by reason of shut-off of water supply.

#### **G. FEES AND CHARGES**

1. All permit fees and service charges for the inspection of connections to the water system and/or the sanitary sewer and storm sewer systems shall be paid as set out in Schedule "A" of this by-law for each connection and shall be payable as invoiced or at the time building permit fees are required to be paid, whichever is the sooner.
2. Service charges for the provision or discontinuance of water service shall be paid as set out in Schedule "A" of this by-law in each instance.
3. The charge for the authorized taking of water into a water carrier (tanker truck, sweeper, pumper, etc.) for non-emergency use shall be in accordance with Schedule "A" of this by-law. Permission to take water into a water carrier may be restricted during periods of water restrictions at the discretion of the Director.
4. All construction work within a public road right-of-way within the service area boundaries shall require a Water/Sewer Permit with a deposit of \$500.00. Contractors applying for a Water/Sewer Permit for work within the right of way shall provide proof of applicable insurance. Contractors shall request inspection of the connections to municipal infrastructure work by the Corporation. Upon completion of the work, the private contractor shall request inspection of the work by the Corporation. The private contractor shall have seven (7) days to make good any remedial work required by the Corporation. At the end of the seven (7) days, the deposit shall be firstly used to correct any remedial work with the balance returned to the private contractor. The Water/Sewer Permit shall be

valid for a period of sixty (60) days at which time it shall expire and the deposit may be used to carry-out any outstanding work with the balance returned to the private contractor. The period of validity of the permit may be extended at the sole discretion of the Director.

5. Pursuant to the Municipal Act, 2001, as amended, the Corporation may, in default of payment, add fees and charges imposed by the Corporation to the tax roll for the property to which the water was supplied and collect them in the same manner as municipal taxes. The amount payable to the Corporation by the owner constitutes a debt of the person and the amount is a lien and charge upon the lands in the same manner and to the same extent as municipal taxes on the land.

#### **H. WATER/SEWER SERVICE RATES**

1. A water/sewer service rate is hereby imposed upon the consumers of water from the Corporation's water works within the limits of the Municipality in accordance with the provisions of this by-law.
2. All such consumers shall pay water/sewer service rates in accordance with this by-law and Schedule "B" attached hereto.
3. The owners or occupants of unserved lands within the Municipality shall not be liable to pay water/sewer service rates.

#### **I. APPLICATION FOR WATER/SEWER SERVICE**

1. The **owner** shall be liable to pay for the water supplied as indicated by the meter at the rates established herein.
2. Should an owner or occupant wish to have the water/sewer service rate **invoice delivered** directly to a tenant or lessee, an **Application to Bill Tenant** shall be completed to the satisfaction of the Corporation in order to ensure that the tenant or lessee may be properly **sent the** invoice for all applicable water/sewer service rates or charges **All current tenant accounts will remain in effect until a change in Tenant, Occupant and/or Owner.**
3. Upon receipt by the Corporation of an **Application to Bill Tenant**, the Tenant or Lessee of such premises shall provide a deposit, in accordance with the amount set out in Schedule "C" attached hereto.
4. A deposit, in accordance with the amount set out in Schedule "C" shall be provided with all new **Application to Bill Tenant** submitted to the Corporation.
5. The Corporation shall have the discretion to waive the requirement for a deposit in its sole and unfettered discretion.

## **J. BILLING AND COLLECTION OF CHARGES**

1. The water/sewer service rates charged by the Corporation for water supplied through the water service connection and private water services shall be those set out by this by-law and attached schedules unless the same is changed from time to time either by by-law or by resolution of the Council.
2. The Council may from time to time change said water/sewer service rates without notice to any person taking a supply of water from the Corporation.
3. Payment to the Corporation of accounts for the supply of water shall be made in accordance with this by-law. Rates for water supply shall be due on the date specified in the billing invoice.
4. Billing invoices shall be rendered bi-monthly, or on any other basis at the discretion of the Corporation. If meters are for any reasons not read bi-monthly an estimated rate may be used for billing and the account will be adjusted within six (6) months of the billing after the next reading of the meter.
5. In the event there is a suspected significant anomaly in the volume of metered water, the consumer may apply for a rate review to the Director. At the Director's, sole discretion, an estimated rate may be used by the Corporation for billing and the account shall be adjusted, if applicable, upon completion of the rate review.
6. In the event of a default of payment by the consumer of the water/sewer service rate, such amount shall become a charge against the property and shall be collected in the same manner as municipal taxes. In addition, the Corporation may shut off the supply of water but the amounts owed remain a debt to the Corporation.
7. In the event of a default of payment by the owner or occupant of any amounts owing for the costs relating to the installation and maintenance of a water meter, such amount shall become a charge against the property and shall be collected in the same manner as municipal taxes.
8. No charge for water supplied, for any type of service, shall be less than the base rate fixed by the Corporation as set out in Schedule "B" and any other charges as set out in this by-law.
9. The water/sewer service rate shall be as set out in Schedule "B", unless the water charge is based on the provisions established in Section J.10.
10. All consumer accounts not metered shall be deemed transition accounts for sixty (60) days only and shall be billed in the following manner until such time meters are installed. Independent residential units and/or independent non-residential units having the use of the water/sewer system facilities shall pay the HIGHER of:

(a) a double base rate PER MONTH PER UNIT;

OR

(b) independent non-residential units that are supplied with water and/or sewer services, and the water is not metered, shall pay double the current rate per cubic metre calculated on 0.5 cubic metres per employee per working day.

11. In the event that an owner refuses to have a meter placed or repaired on his property, water rates of two times (2x) the rates as set out in Section I.10. shall apply. The Corporation reserves the right to install a meter pit at the property line with all costs of said installation charged to the owner.
12. Connection to the Corporation's water works only or sanitary sewer works only shall be permitted as follows:
  - (a) In the event that the owner of a property is connected to the Corporation's sanitary sewer works but is on private water system, a monthly water/sewer service rate at the applicable base rate shall apply per unit and such sewer rate shall be paid by the consumer.
  - (b) In the event that the owner of a property is connected to Corporation water works but is on private sanitary sewer system, a monthly water/sewer service rate that is equal to 50% of the applicable base rate plus 100% of the applicable cubic metre rate as set out in Schedule 'B' shall apply and such water/sewer service rate shall be paid by the consumer.
13. Notwithstanding anything contained herein, the Corporation shall be entitled to set the water/sewer service rate for any particular use and in respect of any particular premises based on the amount of service required or on any other relevant factor which the Corporation, in its sole discretion, deems just.

**K. OVERDUE ACCOUNTS**

1. Should a deposit or an account remain unpaid fifteen (15) days after the due date, a Final Notice may be sent by mail to the consumer, reminding the consumer of the outstanding amount.
2. Should a deposit or an account not be paid in full on or before the due date, a late payment charge of eight percent (8%) of the current charges owing on the due date shall be added to the amount owing.
3. Should a deposit or an account not be paid in full within thirty (30) days of the due date, a monthly interest charge of 1.25% (15 % per annum) shall be added to the outstanding account until such time as the account is paid in full.

6. If the owner of any premises omits, neglects or refuses to pay any invoice rendered, whether for water, service pipes, meter, service charge or any other monies to which the Corporation may be entitled in respect to such premises, such charges shall remain a lien on the property and may be collected in the like manner as taxes. The invoice shall be deemed to be served upon the owner if it is delivered or sent by mail to the premises supplied.
7. **In addition**, the Corporation may, in default of payment of any deposit or account, shut-off the supply of water to the premises. The Corporation shall not be liable for any damages to property or injury to persons by reason of shut-off of water supply. **A Notice of Disconnection may be delivered by the Corporation by personal service, registered mail, or by posting the notice on the premise in a conspicuous place to the consumer or any other interested party, advising the consumer or other interested party that unless payment is received within seven (7) days, the water service may be disconnected.**
5. **Should the Corporation be required to deliver Notice of Disconnection, a charge shall be applied to the outstanding account. The rates for the Notice of Disconnection charge are set out in Schedule "A" of this by-law.**
8. In case there are any arrears of water/sewer service rates, or any other rates or charges owing to the Corporation under this by-law, charged against any property, the water shall not be turned on for service of such premises until all such arrears are paid, but the Corporation reserves all right to collect the charges for water supplied, and all other charges owing to the Corporation.
9. Any payment received shall be applied firstly to outstanding interest and secondly, to outstanding charges under this by-law.
10. Where it has been necessary to discontinue service as a result of non-payment, a reconnection charge will be levied against the delinquent account, in addition to the applicable Notice of Disconnection charge. The reconnection charge rate shall be paid by the owner or occupant, in advance, and shall be in the amount set out in Schedule "A" of this by-law.
11. A record shall be maintained in the offices of the Corporation, which shall contain the assessment number, street number and location of premises from which the water supply has been turned off for non-payment of accounts and the sum remaining unpaid. Such records shall be maintained for inspection by any person or persons considering the purchase of any property, for the purposes of informing said person or persons of the status of the account.

## **L. ENFORCEMENT**

1. The following constitute offences under this by-law:

- (a) No person shall willfully hinder or interrupt, or cause or procure to be hindered or interrupted, the Corporation or any of its officers, contractors, agents, servants or workmen, in the exercise of any of the power conferred under this by-law;
- (b) No person shall willfully let off or discharge water so that the water runs waste or useless out of the water works;
- (c) No person being a tenant, occupant, lessee, owner, the agent of a lessee, or any person in possession of any house, building or other premises supplied with water from the water works, shall improperly waste the water or, without the consent of the Corporation, lends, sells or disposes of the water, gives it away, permits it to be taken or carried away, uses or applies it to the use or benefit of another, or to any use and benefit other than his own;
- (d) No person shall willfully open or close any valve or hydrant **without consent of the Corporation;**
- (e) No person shall willfully obstruct the free access to any hydrant, shut-off valve, valve, chamber or pipe by placing on it any building material, rubbish, parking a vehicle or causing other obstructions without lawful permission;
- (f) No person shall throw or deposit any injurious, noisome, or offensive matter into the water or waterworks, or in any way foul the water or commit any willful damage or injury to the water works, sanitary sewer works, storm sewer works, pipes or water, or encourage the same to be done;
- (g) No person shall willfully alter any meter and shut off valve placed upon any service pipe or connected therewith, within or outside any building or other place, so as to lessen or alter the amount of water registered;
- (h) No person shall lay or cause to be laid any pipe or main to connect with any pipe or main of the Corporation's water works, or in any way obtain or use the water without the consent of the Corporation;
- (i) No person shall install or operate a water source heat pump, which is connected to the Corporation's water works;
- (j) No person shall participate in the unauthorized operation of a fire hydrant or "taking of water" from the Corporation's water works;
- (k) No person shall connect any pipe or work at the connection of any pipe or other appurtenance associated with the Corporation's water works, sanitary sewer or storm sewer systems without a Water/Sewer Permit;

- (1) No person shall backfill any trench or close in or bury any works for which a Water/Sewer Permit has been issued without an inspection being first conducted by the Corporation; and their approval for such works has been granted.
2. Any person violating any of the provisions of this by-law is guilty of an offence and, on conviction, shall be liable to a penalty pursuant to the *Provincial Offences Act*, as amended.
  - (a) Set fines may be established for certain offences contained in this by-law. Such set fines shall be established pursuant to the *Provincial Offences Act* and shall become effective upon the approval of the same by the Chief Justice of the Provincial Offences Court.
3. In addition to other sanctions and remedies provided in this by-law, the Corporation may turn off or restrict the supply of water to any consumer where such consumer has violated any of the provisions of this by-law, and may refuse to restore normal service until the violation complained of has been terminated or remedied. The Corporation will not be liable for any damage to property or injury to person by reason of shut-off of water supply.

#### **M. SCHEDULES**

The following Schedules are attached hereto and form part of this by-law:

- Schedule "A" - Fees and Charges
- Schedule "B" - Water/Sewer Service Rates
- Schedule "C" - Additional Charges
- Schedule "D" - Backflow Prevention Device Installation Dates
- Schedule "E" - Authorized Function List
- Schedule "F" - Set Fine Schedule

#### **N. SHORT TITLE**

This by-law shall be cited as "The Municipality of North Grenville Water Use and Rate By-Law".

#### **O. GENERAL PROVISIONS**

1. The Corporation is exempt from the provisions of this by-law except where and when it is deemed appropriate by the Corporation not to be.
2. By-Law 62-08, as amended, and By-Law 78-09 are hereby repealed.
3. This by-law shall come into force on the date of passing.



PASSED AND ENACTED  
THIS 10<sup>TH</sup> DAY OF SEPTEMBER, 2012.

DAVID GORDON  
Mayor

CAHL POMINVILLE  
Clerk

**THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE**

**SCHEDULE "A" to By-Law**

**FEES AND CHARGES**

- Water/Sewer Connection Permit including service charge for inspection:
  - water service connection \$75.00
  - sanitary sewer connection \$75.00
  - storm sewer connection \$75.00
  - water meter installation inspection \$75.00
  
- Missed appointment \$75.00
  
- Re-inspection after 2<sup>nd</sup> inspection of same works \$75.00/re-inspection
  
- Charges for Standard Water Meter and Related Appurtenance shall be in accordance with the size of the meter, including:
  - 16 mm x 19 mm (5/8" x 3/4") meter; ..... Cost of equipment at
  - Meter Pit (excluding meter) ..... time of installation

Larger meters and non-standard meter installations shall be billed to the owner. Definition of non-standard installation and associated costs shall be at the sole discretion of the Director.
  
- Owner Requested Municipal Meter Accuracy Testing Deposit - \$50.00 for each test.
  
- Disconnection Charge - \$50.00 and will be applied to the outstanding account.
  
- Disconnection and Reconnection Charge.  
 When it has been necessary to reconnect a service as a result of non-payment, a reconnection charge of \$50.00 shall be levied against the delinquent account.
  
- Owner requested disconnection - \$50.00
  
- Owner requested reconnection - \$50.00
  
- Rates for Water taken from Hydrants
  - Corporation Fire Department Emergency use - No Charge
  
- Other Users:

- Water consumption - \$3.00/m<sup>3</sup> (Minimum charge of \$50.00)
  - Hook up fee - \$25/per use
  - Backflow prevention device rental (if applicable) - \$50/per use
  - All other costs incurred by the Corporation as determined by the Director
- 
- Cross-Connection control survey (initial and every 5 years) \$75 per property or building
  - Annual testing and inspection report \$75 per device (1 report per device)
  - Initial and annual tester application \$75 per application
  - Sewer Discharge Agreement - \$500.00
  - Sewer Compliance Program Application - \$500.00



		<b>Monthly Base Rate</b>		
<b>Meter Size</b>	<b>Meter Size Factor</b>	<b>Effective December 1 2017</b>	<b>Effective October 1 2018</b>	<b>Effective October 1 2019</b>
1/2" *	1	\$67.00	\$70.69	\$74.58
5/8" *	1	\$67.00	\$70.69	\$74.58
3/4" *	1	\$67.00	\$70.69	\$74.58
1"	2.50	\$167.50	\$176.73	\$186.45
1 1/4"	3.75	\$251.25	\$265.09	\$279.68
1 1/2"	5	\$335.00	\$353.45	\$372.90
2"	8	\$536.00	\$565.52	\$596.64
3"	16	\$1,072.00	\$1,131.04	\$1,193.28
4"	25	\$1,675.00	\$1,767.25	\$1,864.50
6"	50	\$3,350.00	\$3,534.50	\$3,729.00
8"	80	\$5,360.00	\$5,655.20	\$5,966.40
<b>Metered Water/Sewer Service Rate (per cubic meter after 5 cubic meters per month)</b>		\$3.49	\$3.68	\$3.89

**THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE**

**SCHEDULE "C" to By-Law**

**ADDITIONAL CHARGES**

- Tenant account deposit of not less than \$150.00

**THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE**

**SCHEDULE “D” to By-Law**

**Backflow Prevention Device Installation Dates**

<b>No.</b>	<b>Residential Sector</b>	<b>Hazard Level</b>	
1.	Apartment Buildings or townhomes (five units or more, with shared single-service connection)	Moderate	
2.	Single residential dwelling with swimming pool (with direct connection to the municipal water supply only)	Moderate	
3.	Duplex housing or townhomes	Minor	
4.	Single residential dwelling	Minor	

<b>No.</b>	<b>Industrial, Commercial, Institutional Sector</b>	<b>Hazard Level</b>	
1.	Agricultural/Landscaping Applications	Severe	
2.	Analytical Laboratories	Severe	
3.	Animal Feed Lot	Moderate to Severe	
4.	Animal Stock Yard	Moderate to Severe	
5.	Animal Shelter	Moderate	
6.	Arena	Moderate	
7.	Auto Body Shop	Severe	
8.	Auto Dealership	Moderate	
9.	Auto Body Refinishing	Severe	
10.	Automotive Repairs & Maintenance	Severe	
11.	Beverage Processing Plant (includes distillery and brewery)	Severe	
12.	Blood Clinic	Severe	
13.	Car Wash	Severe	
14.	Carpet Cleaners	Severe	

15.	Church	Minor to Moderate	
16.	Clinical Laboratories	Severe	
17.	Commercial Coin Operated Laundry	Moderate	
18.	Commercial Laundry (without dry cleaning)	Severe	
19.	Commercial Premises (excluding dry retail operations)	Moderate	
20.	Death Care Services	Severe	
21.	Dental Office (non-surgical)	Moderate	
22.	Dental Surgery Facility	Severe	
23.	Dry Cleaner	Severe	
24.	Exhibition Grounds	Severe	
25.	Farm	Moderate to Severe	
26.	Fire Protection Systems inter-connected with private water system	Severe	
27.	Fire Protection Systems with antifreeze, foam injection, and/or other chemical additives	Severe	
28.	Fire Stations	Moderate to Severe	
29.	Food Processing	Severe	
30.	Fuel Dispensing Facility	Moderate	
31.	Funeral Homes/Cemetery	Moderate to Severe	
32.	Gas Station	Severe	
33.	Golf Course	Moderate to Severe	
34.	Greenhouse	Severe	
35.	Grocery Store	Moderate	
36.	Hair Salon	Moderate	
37.	Hospital	Severe	
38.	Hotel & Motel	Moderate	
39.	Irrigation System (without chemical addition)	Moderate	



40.	Irrigation System (with chemical addition)	Severe	
41.	Kennel	Moderate	
42.	Medical Clinic (non-surgical)	Moderate	
43.	Medical Clinic (surgical)	Severe	
44.	Medical Laboratories	Severe	
45.	Milk/Dairy Product Processing	Severe	
46.	Mortuary or Morgue	Severe	
47.	Motorcycle Repairs & Maintenance	Severe	
48.	Nonferrous Metal Manufacturing	Severe	
49.	Nursing Home	Moderate	
50.	Paint & Coating Manufacturing	Severe	
51.	Photo Finishing	Severe	
52.	Plant Using Radioactive Materials	Severe	
53.	Planting Shop	Severe	
54.	Premises Where Access Is Prohibited	Severe	
55.	Private Fire Hydrants	Moderate	
56.	Radiator Shop	Severe	
57.	Recycling Facility	Severe	
58.	Research Buildings & Laboratories	Severe	
59.	Restaurant (including bar, coffee shop, food courts, lounge, etc.)	Moderate	
60.	Sauna & Massage Centre	Moderate	
61.	School (elementary, junior high, senior high)	Moderate	
62.	Swimming Pool Facility (public)	Moderate	
63.	Technical Institutes	Moderate	
64.	Universities & Colleges	Moderate to Severe	
65.	Veterinary Clinic	Moderate to Severe	
66.	Veterinary Hospital	Severe	
67.	Wastewater Pumping Stations	Severe	

68.	Wastewater Treatment Plants & Facilities	Severe	
69.	Water Filling Station	Severe	
70.	Water Pumping Stations	Severe	
71.	Water Treatment Plants	Severe	
72.	Wineries	Severe	

**THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE**

**SCHEDULE “E” to By-Law**

**Authorized Function List**

<b>Item</b>	<b>Function</b>	<b>Professional engineer with tester’s license</b>	<b>Certified Engineering technologist with tester’s license</b>	<b>Licensed master plumber with contractor’s and with tester’s license</b>	<b>Journeyman plumber or pipe-fitter with tester’s license</b>	<b>Apprentice plumber or pipe fitter with tester’s license</b>	<b>Licensed municipal staff with tester’s license</b>	<b>Fire system sprinkler fitter with tester’s license</b>	<b>Lawn irrigation system installer with tester’s license</b>
A	Perform cross-connection survey	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
B	Install, relocate or replace a backflow prevention device			<b>X</b>	<b>X</b>	<b>X</b>			
C	Repair of backflow prevention device <sup>4</sup>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>			
D	Test backflow prevention device	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
E	Items A, B, C and D above in relation to fire protection systems	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
F	Items B, C and D above in relation to lawn sprinkler system	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>			<b>X</b>

<sup>1</sup> Required to be under the direction of a professional engineer

<sup>2</sup> Required to be employed by a licenced plumbing contractor

<sup>3</sup> Required to be employed by a licensed plumbing contractor and under the direct supervision of a journeyman plumber or a master plumber

<sup>4</sup> Water/Sewer Operator with tester’s license

<sup>5</sup> Anyone with the tester’s license as per CSA B64-10, as amended, is permitted

**Set Fine Schedule - Part I Provincial Offences Act with respect to Water & Sewer Use  
Schedule "F" to North Grenville By-Law**

<b>ITEM</b>	<b>SHORT FORM WORDING</b>	<b>PROVISION CREATING OR DEFINING OFFENCE</b>	<b>SET FINE (INCLUDING COSTS)</b>
<b>1</b>	CONNECT WATER/SEWER SERVICE TO PREMISES WITHOUT A PERMIT.	Sec. 5	\$350.00
<b>2</b>	TAKE WATER FROM A CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 6	\$300.00
<b>3</b>	CONNECT WATER SERVICE TO ANY PREMISES WITHOUT FIRST INSTALLING AN APPROVED WATER METER/APPURTENANCE.	Sec. 7	\$300.00
<b>4</b>	ALLOW WATER SERVICE TO BE CONNECTED TO ANY PREMISES WITHOUT FIRST INSTALLING AN APPROVED WATER METER/APPURTENANCE.	Sec. 7	\$300.00
<b>5</b>	CONNECT WATER SERVICE TO ANY PREMISES THROUGH A WATER METER/APPURTENANCE NOT INSTALLED BY AN AUTHORIZED CONTRACTOR.	Sec. 7	\$300.00
<b>6</b>	ALLOW WATER SERVICE TO BE CONNECTED TO ANY PREMISES THROUGH A WATER METER/APPURTENANCE NOT INSTALLED BY AN AUTHORIZED CONTRACTOR.	Sec. 7	\$300.00
<b>7</b>	ALLOW WATER TO BE TAKEN FROM CORPORATION WATER WORKS BY OTHER MEANS THAN THROUGH AN APPROVED WATER METER.	Sec. 8	\$300.00
<b>8</b>	TAKE WATER FROM CORPORATION WATER WORKS BY OTHER MEANS THAN THROUGH AN APPROVED WATER METER.	Sec. 8	\$300.00
<b>9</b>	FAIL TO REPLACE / RETROFIT WATER METER AS REQUIRED	Sec. 9	\$150.00
<b>10</b>	FAIL TO INSTALL A LOCKABLE SHUT OFF VALVE ON A WATER METER FOR A TENANT ACCOUNT.	Sec. 12	\$150.00
<b>11</b>	FAIL TO INSTALL A SEPARATE WATER METER FOR A TENANT ACCOUNT.	Sec. 12	\$150.00
<b>12</b>	FAIL TO PLACE METER IN PROPER LOCATION AS DIRECTED.	Sec. 14	\$150.00

13	UNAUTHORIZED PERSON DID, INSTALL, INSPECT, REPAIR OR TAMPER WITH A PRIVATE WATER METER OR RELATED APPURTENANCE.	Sec. 15	\$300.00
14	UNAUTHORIZED PERSON DID, INSTALL, INSPECT, REPAIR OR TAMPER WITH A MUNICIPAL WATER METER OR RELATED APPURTENANCE.	Sec. 15	\$500.00
15	FAIL TO PROVIDE APPROPRIATE HEAT TO METER TO PREVENT DAMAGE.	Sec. 16	\$200.00
16	CHANGE LOCATION OF A WATER METER WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 18	\$350.00
17	DISCONNECT ANY PREMISES FROM THE CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 20	\$200.00
18	ALLOW TO BE DISCONNECTED ANY PREMISES FROM THE CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 20	\$200.00
19	CONNECT A PRIVATE WATER SUPPLY SYSTEM AND CORPORATION WATER WORKS WITHOUT AUTHORIZATION.	Sec. 21	\$350.00
20	ALLOW TO BE CONNECTED A PRIVATE WATER SUPPLY SYSTEM AND CORPORATION WATER WORKS WITHOUT AUTHORIZATION.	Sec. 21	\$350.00
21	MAKE A DIRECT CONNECTION BETWEEN A PRIVATE WATER SUPPLY SYSTEM AND CORPORATION WATER WORKS WITHOUT AUTHORIZATION.	Sec. 21	\$350.00
22	ALLOW TO BE MADE A DIRECT CONNECTION BETWEEN A PRIVATE WATER SUPPLY SYSTEM AND CORPORATION WATER WORKS WITHOUT AUTHORIZATION.	Sec. 21	\$350.00
23	FAIL TO INSTALL AN APPROVED BACK-FLOW PREVENTION DEVICE TO PREVENT CROSS-CONTAMINATION.	Sec. 22	\$150.00
24	FAIL TO ALTER PIPING TO PREVENT CROSS-CONTAMINATION.	Sec. 22	\$150.00
25	ALLOW A WATER WELL TO REMAIN CONNECTED TO A PREMISE SERVICED BY OR CONNECTED TO CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 25	\$350.00
26	CONNECT A WATER WELL TO A PREMISE SERVICED BY OR CONNECTED TO CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE MUNICIPALITY.	Sec. 25	\$200.00

27	BEING THE PROPERTY OWNER, DID FAIL TO ABANDON A WATER WELL AS REQUIRED.	Sec. 26	\$350.00
28	HINDER OR INTERRUPT THE AUTHORIZED INSTALLATION OR INSPECTION OF A WATER METER OR RELATED APPURTENANCE.	Sec. 28	\$250.00
29	WILLFULLY DISCHARGE WATER FROM CORPORATION WATER WORKS ALLOWING THE WATER TO RUN WASTE.	Sec. 47(b)	\$150.00
30	OWNER, DID SELL, BARTER, OR OTHERWISE DISPOSE OF WATER FROM A CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 47(c)	\$150.00
31	TENANT/OCCUPANT DID SELL, BARTER, OR OTHERWISE DISPOSE OF WATER FROM A CORPORATION WATER WORKS WITHOUT AUTHORIZATION OF THE CORPORATION.	Sec. 47(c)	\$150.00
32	WILLFULLY OPEN OR CLOSE A VALVE OR HYDRANT.	Sec. 47(d)	\$500.00
33	OBSTRUCT FREE ACCESS TO A VALVE, HYDRANT, CHAMBER OR PIPE.	Sec. 47(e)	\$300.00
34	THROW OR DEPOSIT INJURIOUS, NOISOME OR OFFENSIVE MATTER INTO THE CORPORATION WATER WORKS.	Sec. 47(f)	\$350.00
35	THROW OR DEPOSIT INJURIOUS, NOISOME OR OFFENSIVE MATTER INTO MUNICIPAL WATER.	Sec. 47(f)	\$350.00
36	WILLFULLY CAUSE DAMAGE OR INJURY TO CORPORATION WATER WORKS.	Sec. 47(f)	\$350.00
37	WILLFULLY CAUSE DAMAGE OR INJURY TO CORPORATION SANITARY SEWER WORKS.	Sec. 47(f)	\$350.00
38	WILLFULLY CAUSE DAMAGE OR INJURY TO PIPES OR MUNICIPAL WATER.	Sec. 47(f)	\$350.00
39	ENCOURAGE THE WILLFUL DAMAGE OF CORPORATION WATER WORKS.	Sec. 47(f)	\$350.00
40	ENCOURAGE THE WILLFUL DAMAGE OF CORPORATION SANITARY SEWER WORKS.	Sec. 47(f)	\$350.00
41	ENCOURAGE THE WILLFUL DAMAGE OF PIPES OR MUNICIPAL WATER.	Sec. 47(f)	\$350.00
42	WILLFULLY ALTER A WATER METER.	Sec. 47(g)	\$300.00
43	LAY PIPE TO MUNICIPAL WATER MAIN WITHOUT AUTHORIZATION.	Sec. 47(h)	
44	CONNECT TO MUNICIPAL WATER MAIN WITHOUT AUTHORIZATION.	Sec. 47(h)	

<b>45</b>	OBTAIN OR USE WATER FROM CORPORATION WATER WORKS WITHOUT AUTHORIZATION.	Sec. 47(h)	\$300.00
<b>46</b>	INSTALL OR OPERATE A WATER SOURCE HEAT PUMP CONNECTED TO CORPORATION WATER WORKS.	Sec. 47(i)	\$500.00
<b>47</b>	PARTICIPATE IN THE UNAUTHORIZED OPERATION OF A FIRE HYDRANT OR TAKING OF WATER FROM CORPORATION WATER WORKS.	Sec.47(j)	\$300.00
<b>48</b>	CONNECT PIPE OR OTHER APPURTENANCE TO THE CORPORATION WATER WORKS WITHOUT A PERMIT.	Sec.47(k)	\$500.00
<b>49</b>	CONNECT PIPE OR OTHER APPURTENANCE TO THE CORPORATION STORM SEWER WITHOUT A PERMIT.	Sec.47(k)	\$500.00
<b>50</b>	CONNECT PIPE OR OTHER APPURTENANCE TO THE CORPORATION SANITARY SEWER WITHOUT A PERMIT.	Sec.47(k)	\$500.00
<b>51</b>	BACKFILL, BURY, OR CLOSE IN ANY WORKS RELATING TO A WATER / SEWER PERMIT WITHOUT INSPECTION AND APPROVAL.	Sec. 47(l)	\$300.00
<b>THE PENALTY SECTION FOR THE OFFENCES REFERRED TO ABOVE IS IN SECTION 61 OF THE PROVINCIAL OFFENCES ACT, R.S.O. 1990, c. P.33</b>			

## THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE

### BY-LAW NO. 102-15 AS AMENDED BY BY-LAW 8-16 AS AMENDED BY BY-LAW 40-17

#### *A By-Law to Adopt Schedules of Departmental Fees & Charges For the Municipality of North Grenville*

**WHEREAS** the *Municipal Act 2001*, as amended, authorizes the council of a local municipality to pass by-laws imposing fees or charges for services or activities provided or done by or on behalf of it; for costs payable by it for services or activities provided or done by or on behalf of any other municipality or local board; and for the use of its property including property under its control;

**NOW THEREFORE** the Council of the Municipality of North Grenville hereby enacts as follows:

1. Schedules “A – Emergency & Protective Services”, “B – Planning & Development”, “C – Public Works”, “D – Corporate Services” and “E – Parks, Recreation & Culture” being schedules of departmental user fees, attached hereto and forming part of this by-law, are hereby adopted.
2. The following are hereby repealed: Schedules “A” and “D” to By-Law 61-14; Schedules “A” and “B” to By-Law 81-12; Schedules “A” and “B” to By-Law 13-03; Schedule “B” to By-Law 77-15; Section 12. in By-Law 12-09; Schedule “A” to By-Law 20-15; Schedule “A” to By-Law 14-98; Schedule “A” to By-Law 63-98; Schedule “A” to By-Law 20-02; Schedules “A”, “B” and “C” to By-Law 10-09; Schedules “A”, “B” and “C” to By-Law 63-12; Schedule “B” to By-Law 73-14; Sections 2. and 3. in By-Law 11-13; Schedule “A” to By-Law 16-13; Section 5.0 in By-Law 60-11; and, Schedules “B”, “C” and “D” to By-Law 26-13.
3. In the event any provision, or part thereof, of this by-law including Schedules “A”, “B”, “C”, “D” and “E” is found by a court of competent jurisdiction to be ultra vires, such provision, or part thereof, shall be deemed to be severed and the remaining portion of such provision and all provisions of this by-law including Schedules “A”, “B”, “C”, “D” and “E” shall remain in full force and effect.
4. The Clerk of the Municipality of North Grenville is hereby authorized to make any minor modifications or corrections of an administrative, numerical, grammatical, semantically or descriptive nature or kind to the by-law and schedule(s) as may be deemed necessary after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law.
5. This by-law shall come into full force and effect on the date of passing.

PASSED AND ENACTED  
THIS 14<sup>TH</sup> DAY OF DECEMBER, 2015.



---

DAVID GORDON  
Mayor

---

CAHL POMINVILLE  
Clerk

SERVICE	FEE
<b>Pound Redemption Fees</b>	
Call our / Pick up	\$35.00
Pound Fee	\$45.00
Board per day	\$10.00
Mileage per kilometre	\$0.42
Veterinary Service	as applicable
Damage Recovery	as applicable
<b>Dog Licence Fees - Per Year</b>	
Dogs in any one household that are over the age of 6 month, whether spayed/neutered or not	\$15.00
After March 31st	\$30.00
If a dog has been declared a "vicious dog"	\$50.00
If a dog has been declared a "vicious dog" and has committed a second offence	\$500.00
Kennel Licence	\$125.00
Replacement Tag	\$7.00
<b>Fire Emergency Response Fees</b>	
Nuisance False Alarms - for all properties	
First false alarm in any calendar year	Nil
Second false alarm in any calendar year	\$200.00
Third & subsequent false alarms in any calendar year	\$600.00
Responding to false alarms occurring as a result of work being performed on a fire alarm system or emergency system - for all properties	
First false alarm in any calendar year	\$200.00
Second & subsequent false alarms in any calendar year	\$600.00
Attending to false alarms occurring as a result of a malicious act - for all properties	
First & subsequent false alarms	\$600.00
Attending at the scene of a motor vehicle accident or at the scene of a motor vehicle fire and providing firefighting or other emergency services to a non-resident	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Attending a non-emergency elevator incident	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Attending environmental spills or other emergency requiring response	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73

SERVICE	FEE
Attending a scene for Fire Watch	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Attending a Natural Gas incident (pipeline rupture)	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Responding to assistance request by other agencies	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Responding to an Open Air Fire - Unauthorized or Out of Control Fire	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
Investigation of an Open Air Fire Complaint with By-Law contraventions (Fire Chief or Fire Prevention Response)	\$125.00
Response on a Provincial Highway with the exception of medical related emergency	
For the first hour or any part thereof per truck	\$459.45
For each additional one-half hour or part thereof per truck	\$229.73
<b>Fire Extinguisher Training Sessions</b>	
Fire Extinguisher Training, per requested date, per location, for a group up to 25 persons (max per session), between 9:00 - 17:00 Monday to Friday	\$500.00
Fire Extinguisher Training, per requested date, per location, for a group up to 25 persons (max per session), between 17:00 - 21:00 Monday to Friday, Weekends and Statutory Holidays	\$650.00
<b>Fire Safety Training</b>	
Fire Safety Training (Fire Drills), per requested date, for a group up to 25 persons (max per session) between 9:00 - 17:00 Monday to Friday	\$500.00
Fire Safety Training (Fire Drills), per requested date, for a group up to 25 persons (max per session) between 17:00 - 21:00 Monday to Friday	\$650.00
<b>Fire Inspections &amp; Permits</b>	
<b>Correspondence</b>	
Fire Code Compliance Letter	\$75.00
File Search / Fire Reports	\$75.00
Fire Investigation Report	\$75.00
Clearance Letter	\$75.00
<b>Inspections</b>	
Propane Inspection - Vendor	\$100.00
Liquor Licensing Inspection	\$100.00
Smoke Alarm Inspections	\$100.00

SERVICE	FEE
Real Estate Home Inspection	\$100.00
Private Day Care	\$100.00
Private Home for Developmentally Handicapped and Group Homes	\$100.00
General Inspections under 600 square meters	\$100.00
General Inspections over 600 square meters	\$150.00
Marijuana Grow-Op Investigation and Compliance Inspection	\$400.00
<b>Permits</b>	
Fireworks Display Review and Permit	\$100.00
Open Air Permit	
Annual Permit	\$15.00
Special Permit	\$40.00
<b>Taxi Fees</b>	
Annual Taxicab Driver's Licence or renewal (expires December 31)	\$25.00
Monthly Taxicab Driver's Licence for less than one (1) year (expires December 31)	\$15.00
Annual Taxicab Owner's Licence or renewal (expires December 31)	\$50.00
Annual Taxicab Broker's Licence or renewal (maximum of 5 taxicabs per licence)(expires December 31)	\$100.00
<b>Tariff - One to seven passengers (in accordance with vehicle specifications)</b>	
First 100 metres or part thereof	\$3.13
Each additional 100 metres or part thereof	\$0.18
Each minute waiting time while under engagement	\$0.66
Flat Fee - Urban Area	\$5.00
<b>Transient Trader - Licensing Fees</b>	
Per event (maximum 7 consecutive days) per year. May be renewed once	\$500.00
Per day. May be renewed once.	\$150.00
<b>Refreshment Vehicles - Licensing Fees</b>	
Refreshment Vehicles	\$350.00
Refreshment Carts	\$350.00
Mobile Canteens	\$350.00
<b>Carnivals, Circuses &amp; Midways - Licensing Fees</b>	
Carnival (up to 3 days)	\$100.00
Carnival (per day after 3 days)	\$50.00
Circus (up to 3 days)	\$100.00
Circus (per day after 3 days)	\$50.00
Midway - per ride (including mechanical or computerized rides)	\$10.00
Midway - per concession stand (including games, food, beverages)	\$10.00
<b>Door-to-Door Sales</b>	
Per event (maximum 5 consecutive days) per year	\$300.00

SERVICE	FEE
Per day	\$75.00
<b>Signs</b>	
Removal of a temporary sign without notification to owner	
First offence	\$0.00
Second offence	\$50.00
Third offence	\$100.00
Removal of temporary sign after notification period to owner	
First offence	\$50.00
Second offence	\$100.00
Third offence	Not returned
Removal of structural sign after notification period to owner	
First offence	\$300.00
Second offence	Not returned
Third offence	Not returned
A sign which is "not returned" will be disposed of at any time upon removal.	
Third offence	Not returned
A sign which is "not returned" will be disposed of at any time upon removal.	

SERVICE	FEE
<b>Outdoor Solid Fuel Combustion Appliance</b>	
Circulation of proposed amendments	\$50.00
<b>Planning Service Fees</b>	
Condominium*	\$2500 + \$30/unit
Condominium Conversion*	\$2,500.00
Consent Review	\$350.00
Copy of Official Plan	\$50 + \$9/map
Copy of Zoning By-Law	\$75.00 + \$9.00/map
Drain Split Agreements	\$100.00
Drainage Agreements	\$600.00
Lift Part Lot Control	\$600.00
Lift 0.3 m Reserve Blocks and Transfer of all Other Subdivision Blocks/Lots	\$300.00
LLBO, MVDL & Other Compliance Letters	\$50.00
Minor Variance / Permission*	\$650.00
Official Plan Amendment*	\$2,500.00
Removal of Holding	\$1,000.00
Renewal of Part Lot Control	\$600.00
Site Plan (Major-greenfield)*	\$2,000.00
Site Plan (Minor)*	\$900.00
Site Plan - Schedule Amendment only	\$100.00
Subdivision*	\$3500 + \$50 per lot/unit
Subdivision / Condo Amendments	\$1,500.00
Zoning By-Law Amendment (Major)*	\$2,000.00
Zoning By-Law Amendment (Minor)*	\$1,000.00
Zoning Compliance Letter	\$100.00
<b>NOTES</b>	
1. * indicates that separate engineering review fees shall also be charged.	
2. All legal fees associated with processing any application shall be charged in addition to the application fee. It may be necessary to require a deposit to be filed with each application from which legal fees will be paid. This may require a separate administration fee (i.e. 10%) for managing the deposits.	
3. The current subdivision administration fee (i.e. 3.5% of the estimated cost of the subdivision works) will still be assessed after the registration of the subdivision plan and agreement.	
<b>Construction, Renovation, Reconsturction &amp; Additions</b>	
NOTE: Private garages and/or carports built at the time of original construction are included in the foregoing fees. Buildings moved in whole, in part, or dismantled and reassembled on a new location shall be charged for the permit fees in accordance with new construction. Nothing in this section shall or be construed to override the provisions of the <i>Building Code Act</i> in allowing the construction or reassemblance of old buildings.	
Any non-structural repair valued at less that \$3000 (permit required)	No Charge
Minimum Fee (Construction valued under \$3000)	\$25.00

Construction valued in excess of \$3000 and up to and including \$250,000	\$12/\$1000 value
Construction valued in excess of \$250,000 and up to and including \$1,000,000	\$10/\$1000 value
Construction valued in excess of \$1,000,000	\$9/\$1000 value
Agricultural Buildings (including riding arenas and stables) - Permit required	\$3.25/\$1000 value
Churches, Community Halls and Church Halls (Permit required)	No Charge
Wood Stove Installations (Permit required)	\$25.00
At the sole discretion of the Chief Official, the building permit fee may be assessed on the following basis:	
a. finished space \$0.76/sq ft (\$8.17/sq m)	
b. unfinished space \$0.38/sq ft (\$4.09/sq m)	
c. renovations (\$0.38/sq ft (\$4.09/sq m)	
Public institutions (including hospitals, colleges or universities) (Permit required)	\$3.25/\$1000 value
<b>Miscellaneous Construction</b>	
Swimming Pool Permit (including pool enclosure)	\$45.00
Temporary Building Permits	\$15/month
Heating, Ventilating & Air Conditioning Systems (HVAC)	\$12/\$1000 value
Retrofit of existing HVAC Systems - Minimum Permit Fee	\$30.00
<b>Additional HVAC Fees</b>	
Ductwork (Installation & Modification)	\$10/\$1000 value
Ground & Water Source Heat Pump Installations (Permit required)	\$30.00
<b>Plumbing Permit</b>	
Minimum Permit Fee	\$12/\$1000 value
Change of Use	\$30.00
Conditional Permit (Including Agreement)	\$110.00
<b>Licence Application Review</b>	
LLBO	\$25.00
Special Occasion	\$25.00
Compliance Letter	\$25.00
Administrative Fee for Inspections After Two (2) Years	\$250.00
<b>Heritage Designated Properties</b>	
1. The fees and required forms shall apply to all heritage designated buildings.	
2. The provisions of the Ontario Heritage Act and Regulations shall apply to the issuance of any permit issued to or for a heritage designated building.	
3. Heritage buildings are those designated by by-law under the provisions of the <i>Ontario Heritage Act</i> .	
<b>Transfer of Permit</b>	
To transfer any permit from one owner to another with the authority of the Chief Official	\$20.00
To examine revised plans once a permit has been issued	\$30.00
<b>Occupancy of Building</b>	

Occupancy Permit (included in the initial price under New Construction)  
To authorize occupancy of a building prior to completion

No Charge  
\$50.00

**Refunds**

A refund of fees for a permit is authorized under the following circumstances at the discretion of the Chief Official:

- a. if no work for which the permit was issued has commenced and the application or their agent provides a written statement that the work will not be commenced; and
- b. the refund of a permit fee shall void and rescind the permit for which the refund fee is applied.

**Waiving of Fees**

- 1. Building permit fees shall not apply to the following:
  - a. building to be owned by the Municipality of North Grenville or the United Counties of Leeds & Grenville
  - b. projects which are located on property owned by the Municipality of North Grenville or the United Counties of Leeds & Grenville
- 2. The proponent is required to cover all outside costs associated with plans examination or building inspection.
- 3. The value of the building permit fees waived is acknowledged as a Municipal financial contribution towards the building or project.
- 4. In instances where a building permit fee was included in funding applications, it will be determined by staff and the proponent, on a case by case basis, how best to deal with the waived fee.



SERVICE	FEE
<b>911 Signs</b>	
Installation of a new 911 sign	\$50.00
Replacement of the blade with number	\$25.00
Replacement of post	\$25.00
<b>Entrance Permits</b>	
Standard Entrance Fee	\$850.00
Entrance (No Culvert Required)	\$350.00
<b>Entrance on Unassumed Roads</b>	
300 mm x 8 m	\$290.00
400 mm x 8 m	\$340.00
500 mm x 8 m	\$400.00
Entrance with larger or longer culverts - <i>Price adjusted to cover extra culvert costs</i>	
<b>Waste &amp; Recycling</b>	
Bag Tags (per tag)	\$1.75
Transfer Station (per tonne)	\$140.00
Minimum fee	\$10.00
<p>This fee is not applicable to waste oil, paint, tires (no rims attached), Type II &amp; III Garbage and Type I Garbage which is in a Container for Garbage and has the applicable bag tag attached. Should the weigh scale become inoperable, the Municipality shall apply disposal charges on an estimated volume basis. Only domestic Demolition and Construction Waste shall be accepted. The Director of Public Works reserves the right to limit quantities.</p>	
Type IV Garbage, brush & branches (per tonne)	\$65.00
Minimum fee	\$5.00
Freon Removal (in addition to the applicable rate)	\$30.00
<b>Water Supply System</b>	
Water/Sewer Connection Permit (including service charge for inspection)	
Water service connection	\$75.00
Sanitary sewer connection	\$75.00
Storm sewer connection	\$75.00
Water meter installation inspection	\$75.00
Missed Appointment	\$75.00
Standard Water Meter & Related Appurtenance (shall be in accordance with the size of the meter)	
16 mm x 19 mm (5/8" x 3/4") meter	Cost at time of installation
Meter Pit (excluding meter)	Cost at time of installation
Larger meters and non-standard meter installations shall be billed to the owner. Definition of non-standard installation and associated costs shall be at the sole discretion of the Director.	

SERVICE	FEE
Owner Requested Municipal Meter Accuracy Testing Deposit	\$50.00
Disconnection & Reconnection Charge	
Reconnect as a result of non-payment	\$50.00
Owner requested disconnection	\$50.00
Owner requested reconnection	\$50.00
Rates for Water taken from Hydrants	
Corporation Fire Department Emergency use	No Charge
Other Users:	
Water consumption	\$3/m3
Minimum charge	\$50.00
Hook up fee per use	\$50.00
Backflow prevention device rental per use (if applicable)	\$50.00
All other costs incurred by the Corporation as determined by the Director	
Cross-Connection control survey (initial & every 5 years)	\$75.00
Annual testing & inspection report (one report per device)	\$75.00
Initial and annual tester application	\$75.00
Sewer Discharge Agreement	\$500.00
Sewer Compliance Program Application	\$500.00

SERVICE	FEE
<b>Civil Marriage Services</b>	
During Regular Business Hours (payable to the Municipality)	\$275.00
Outside Regular Business Hours	
payable to the Municipality	\$150.00
payable to the Clerk or Deputy Clerk for time spent	\$125.00
<b>Administration &amp; Treasury</b>	
Bingo Licence per event	\$15.00
Raffle & Break Open Ticket Licence	
Percentage of the value of the prizes	3 percent
Minimum licence fee	\$10.00
Commissioner of Oaths Signature	
Resident of North Grenville	\$10.00
Non-Resident of North Grenville	\$20.00
Marriage Licence	\$110.00
Birth & Death Registrations	\$25.00
Photocopies	
First five (5) copies	No Charge
Six (6) or more per page	\$0.25
Tax Certificate (tax exempt)	\$50.00
Information Requests from Lawyers	\$5.00
Historical Search (Tax, Water or A/R) + HST	\$5.00
Computerized Hard Copy of Account + HST	\$5.00
Returned Cheque (tax exempt)	\$30.00
<b>Police False Alarms</b>	
The Alarm Holder and the registered title owner of a property containing an Alarm System which triggers a False Alarm and a response or responses by the O.P.P. serving the Municipality of North Grenville shall be jointly and severally liable to pay the Corporation of the Municipality of North Grenville.	
First and Second False Alarm - written warning	
Third False Alarm within 12 months of the first	\$100.00
Fourth False Alarm within 12 months of the first	\$200.00
Fifth & Subsequent False Alarms within 12 month of the first	\$300.00
Twelve months from the time of an Alarm System's first False Alarm, the Alarm Coordinator shall revise the registry so that the fee schedule applies as though there had been no previous False Alarms.	

SERVICE	Daily Rentals (Mon-Sun) Fri/Sat til 5 pm	Fri/Sat Evening Min 4hr Charge
<b>Facility Rental Rates</b>		
<b>Arena Floor (events) - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$44.00	\$84.00
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$52.00	\$99.00
For Profit businesses, Individuals	\$61.00	\$116.00
Non-Residents	\$72.00	\$137.00
<b>Hall A - Lions Suite (capacity 150) - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$31.00	\$62.00
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$37.00	\$73.00
For Profit businesses, Individuals	\$43.00	\$86.00
Non-Residents	\$51.00	\$101.00
<b>Hall B or Hall C - Scotiabank Suite (capacity 75) - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$22.00	\$39.00
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$26.00	\$46.00
For Profit businesses, Individuals	\$31.00	\$54.00
Non-Residents	\$36.00	\$63.00
<b>Hall A, B &amp; C (capacity 350) - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$37.00	\$75.00
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$44.00	\$88.00
For Profit businesses, Individuals	\$52.00	\$103.00
Non-residents	\$61.00	\$121.00
<b>Meeting Room 1 or 2 (2nd Floor) - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$13.00	N/A
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$15.00	N/A
For Profit businesses, Individuals	\$18.00	N/A
Non-Residents	\$21.00	N/A
<b>North Grenville Library - per hour</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$22.00	\$39.00
Non-Profit Organizations/Associations (school boards, health unit, Police)	\$26.00	\$46.00
For Profit businesses, Individuals	\$31.00	\$54.00

Non-Residents	\$36.00	\$63.00
<b>North Grenville Theatre</b> - per hour	<b>Daily Rentals (Mon-Sun)</b>	
Local Clubs/Organizations (service clubs, minor sports, local charities & groups) Includes North Grenville Concert Choir, North Grenville Youth Musical & Kemptville Players	\$34.00	
Rehearsal	\$38.00	
Show (4 hr minimum)	\$80.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$40.00	
Rehearsal	\$42.00	
Show (4 hr minimum)	\$89.00	
For Profit Business, Individuals	\$47.00	
Rehearsal	\$47.00	
Show (4 hr minimum)	\$99.00	
Non-Residents	\$55.00	
Rehearsal	\$65.00	
Show (4 hr minimum)	\$125.00	
<b>Arena Floor</b> (sports) - per hour		
Prime Time - Adult	\$50.00	
Prime Time - Youth	\$25.00	
<b>Court House/Maplewood Hall</b> - per hour		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$19.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$22.00	
For Profit businesses, Individuals	\$26.00	
Non-Residents	\$30.00	
<b>Armoury Building</b> - per hour		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$18.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$21.00	
For Profit businesses, Individuals	\$25.00	
Non-Residents	\$30.00	
<b>Other Fees</b>		
<b>Kitchen</b> - flat rate		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$56.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$66.00	
For Profit businesses, Individuals	\$78.00	

Non-Residents	\$92.00	
<b>Main Lobby or Arena Lobby - flat rate</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$77.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$91.00	
For Profit businesses, Individuals	\$107.00	
Non-Residents	\$126.00	
<b>Set Up/Tear Down for SOP (Special Occasion Permit)</b>		
<b>Events: (Halls Only) flat rate</b>		
Local Clubs/Organizations (service clubs, minor sports, local charities)	\$93.00	
Non-Profit Organizations/Associations (school boards, health unit, police)	\$109.00	
For Profit businesses, Individuals	\$128.00	
Non-Residents	\$150.00	
<b>Hall A, B &amp; C Wedding Special - flat rate</b>		
Friday night/all day Saturday		
North Grenville Resident	\$1,140.00	
Non-Resident	\$1,380.00	
All Day Saturday		
North Grenville Resident	\$960.00	
Non Resident	\$1,140.00	
Removal of Glass/Netting in Arena 1 - flat rate	\$500.00	
Set up/Tear down for Arena large floor events - flat rate	\$840.00	
Staffing Overtime for large/special events - per employee	\$20/hour	
Technical Fees for Theatre events	\$25/hour	
Theatre Dark Day	\$150/day	
<b>Riverside Park - Special Events</b>		
North Grenville Local Organization	\$200/day	
Non-Resident Organization	\$300/day	
NOTE: for events with music, there will be additional fees in accordance with the Society of Composers, Authors and Music Publishers of Canada (SOCAN). This is due to SOCAN regulations on tariff fees for musicians and song writers. This is an additional charge above the hall rental rates listed above.		
<b>Sports Field Rental Rates</b>		
<b>Baseball Diamonds</b>		
Minor Regular Season/Diamond	\$8.50/hour	
Minor Tournament/Facility	\$175/day	
Minor Pre-Season Practice	\$5/hour	
Adult Regular Season/Diamond	\$35.00/game	
Adult Tournament/Facility	\$257/day	

Pavilion & Canteen/Booking	\$72.00
<b>Soccer Fields</b>	
Minor Regular Season/Field	\$4.41/hour
Minor Tournament/Facility	\$175/day
Adult Regular Season/Field	\$44/game
Adult Tournament/Facility	\$257/day
<b>Ice Rental Rates</b>	
Prime Time - Mon-Fri, 4 pm-10:30 pm & all day Sat & Sun except 6 am- 7 am	
Non-Prime Time - Mon-Fri, 7 am - 4 pm	
Prime Time Evening Special - Mon-Sun evenings 10:30-12 am (Contract must begin at 10:30 pm)	
Weekend Special - Non-Prime Time - Sat & Sun 6 am-7 am	
North Grenville Resident - Prime Time Adult	\$182/hour
North Grenville Resident - Prime Time Youth	\$141/hour
Non-Prime Time - Adult	\$115/hour
Non-Prime Time - Youth	\$101/hour
Non-Resident - Prime Time Adult	\$222/hour
Non-Resident - Prime Time Youth	\$191/hour
Prime Time Evening Special (10:30 pm - 12 am)	\$161/hour
School - Non-Prime Time	\$75/hour
Summer Hockey Camps (Mon-Fri 8 am - 4 pm)	\$182/hour
Weekend Special Non-Prime Time (6 am - 7 am)	\$75/hour
Public Skating Session - Adult	\$3/person
Public Skating Session - Youth	\$2/person
Dead Ice - Individual (Minimum 2)	\$20/person
No Refunds - Monday - Friday only	
<b>Advertising Rates</b>	
Arena 1 - Rink Board (1 year term)	\$500.00
Arena 1 - Rink Board (2 year term)	\$950.00
Arena 1 - Banners (1 year term)	\$300.00
Arena 1 - Banners (2 year term)	\$550.00
Arena 2 - Rink board (1 year term)	\$500.00
Arena 2 - Rink board (2 year term)	\$950.00
Arena 2 - Banners (1 year term)	\$300.00
Arena 2 - Banners (2 year term)	\$550.00
<b>Arena Lobby</b>	
3D Pucks (1 year contract)	\$200.00
Digital TV Screens	\$35/month
Digital TV Screens	\$300/yr
Recycle Station (12 month contract)	\$30/month
Framed Posters (3 month contract)	\$160.00

Framed Posters (6 month contract)	\$300.00	
Framed Posters (1 year contract)	\$600.00	
Sports Field Fencing - Banner		
Baseball Diamonds (5) - 1 year contract	\$200 each	
Outdoor Soccer Facility - 1 year contract	\$200.00	

**Note:**

- 1) HST to be added to all facility rental fees.
- 2) For all rentals that are held on Paid Statutory Holidays (consistent with the Municipality of North Grenville Human Resources Policy) where staff are required, a premium of \$20.00/hr per employee plus HST will be applied to the above rates.