Agenda

Operations Committee

Chair: Councillor Plummer
Tuesday, November 18, 2025
Council Chambers
Following Parks and Recreation Committee

(This meeting is live streamed on the City's YouTube page or it can be viewed on YourTV Community Channel 12)

1. **Call to Order**

2. **Disclosure of Pecuniary Interest & General Nature Thereof**

3. **Approval/Amendment of Meeting Agenda**

4. **Approval of Minutes**
   a. Operations Committee – September 16, 2025

5. **Business Arising from Minutes**

6. **New Business**
   a. Draft Reserve and Reserve Fund Policy – Treasurer/Deputy Clerk Lochtie
   b. *Unaudited* 2024 Financial Results – Treasurer/Deputy Clerk Lochtie
   c. 2024 DWQMS Management Review Report – Director Lewis

7. **Adjournment**

Operations Committee Meeting Minutes

Council Chambers
Pembroke, Ontario
September 16, 2025
6:00 p.m.

1. Land Acknowledgement

2. Call to Order

Present:
Councillor Plummer, Chair
Mayor Gervais
Deputy Mayor Abdallah
Councillor Jacyno
Councillor Kuehl
Councillor Lafreniere
Councillor Purcell

Also Present:
David Unrau, Chief Administrative Officer/Deputy Clerk
Victoria Charbonneau, Municipal Clerk
Angela Lochtie, Treasurer/Deputy Clerk

3. Disclosure of Pecuniary Interest and General Nature Thereof

There were no disclosures of pecuniary interests declared.

4. Approval/Amendment of Meeting Agenda

Resolution OPS 25-09-01
Moved by Mayor Gervais
Seconded by Councillor Kuehl
That items 7.a. ZEVIP Grant Update and 7.b. FCM Grant Reconsideration on the agenda be tabled [as they are being addressed at the September 16, 2025 Council meeting].
Carried

5. Approval of Minutes

6. Business Arising from Minutes

7. New Business

a. ZEVIP Grant Update - Tabled

b. FCM Grant Reconsideration – Tabled

c. Upper Ottawa Valley (UOV) OPP Community Engagement Plan

Clerk Charbonneau presented the report. A discussion was held, and the following points were raised:

- It was highlighted that drug enforcement is of significant importance to the City of Pembroke and it should be acknowledged and added to the Engagement Plan as a stand alone item.

Resolution OPS 25-09-02
Moved by
Seconded by
That the Operations Committee approve and recommend to Council endorsement of the Upper Ottawa Valley Detachment Engagement Plan, as follows:

That the City of Pembroke Council endorses the identified priorities of the Upper Ottawa Valley OPP Engagement Plan as follows:

- Public safety and crime prevention
- Community engagement and partnerships
- Support for vulnerable populations
- Traffic and road safety
- Emergency response and preparedness
- Drug Enforcement

Carried

8. Adjournment

Resolution OPS 25-09-03
Moved by
Seconded by
That the Operations Committee meeting of September 16, 2025, adjourn at 6:19 p.m.
Carried

Pembroke
the heart of the ottawa valley

Committee Report

To: Councillor Andrew Plummer
Operations Committee

From: Angela Lochtie, Treasurer/Deputy Clerk
Treasury Department

Date: 2025-11-18

Subject : **Draft Reserve and Reserve Fund Policy**

Recommendation:

That the Operations Committee recommend approval of the draft Reserve and Reserve Fund Policy.

CAO Review :

I concur with the recommendations of this report.

David Unrau, P.Eng., PMP

Financial Comment:

Once approved, this document will govern how reserve and reserve funds are managed for the City of Pembroke.

Angela Lochtie
Treasurer/Deputy Clerk

Background:

This draft policy was initially presented to Council in 2024.

Discussion:

It has been updated for feedback received from Council as well as any changes to reserves over the past year. If approved, this will be presented as a by-law for passing at the next regularly scheduled Council meeting.

In addition to this feedback, the policy has been updated as follows:

- The Council approved target level for the Community Improvement Plan reserve is recommended to be increased from $75,000 to $125,000 in support of the upcoming plan revision.
- Giving the recent funding shortfall in the Joint Water/Waste Water Vehicle and Equipment reserve, it is recommended to maintain a minimum balance of $50,000.
- A Levy Stabilization Reserve has been added for future use if required/

Per the Director of Building, Planning and By-Law, the Animal Control Reserve for spay and neuter clinics is no longer required by the SPCA. In the 2026 budget, it is proposed to use the balance of reserve funds to fund SPCA contract cost increases over the next several years until said funds are depleted. This change will be discussed and decided upon during the 2026 budget deliberations.

Alternatives Considered:

None. A reserve and reserve fund policy reflects best practice.

Strategic Plan Impact:

This policy links to long-term financial planning.

Attachments:

Draft policy.

Respectfully submitted,

Angela Lochtie, Treasurer/Deputy Clerk
Treasury Department

1. Policy Statement

A Policy governing the management and administration of reserves and reserve funds as per Section 290 of the Municipal Act, 2001 whereby, a municipality may establish reserves and reserve funds for any purpose for which is has authority to spend money. In addition, a municipality is required to establish certain reserve funds to meet its statutory obligations.

2. Purpose and Objectives

The purpose of this policy is to establish policies and procedures to create and manage reserves and reserve funds to:

a) Meet legislative requirements;
b) Ensure adequate cash-flow;
c) Manage long-term infrastructure needs ensure long-term financial sustainability;
d) Address financial risks related to unforeseen events and/or extraordinary expenditures;
e) To smooth expenditures which would otherwise cause fluctuations in operating or capital budgets to better manage the long-term impact to ratepayers;
f) Take advantage of financial opportunities that may arise.

3. Definitions

a) Reserve - Monies set aside by approval of Council and not restricted by legislation. Reserves can be related to projects that are of a nature prescribed and managed by approval of Council. Reserves do not typically receive an annual interest allocation. Funds held in a reserve can be utilized at the discretion of Council, subject to the parameters defined in the reserve policy when established.

b) Reserve Fund - Monies set aside for a specific purpose as required by provincial legislation, a municipal by-law, or agreement. Reserve Funds typically receive an annual interest allocation. There are two types of reserve funds: obligatory reserve funds and discretionary reserve funds.

c) Discretionary Reserve Fund - Monies set aside for a specific purpose by Council and legislated by municipal by-law. If Council should decide to spend the money for purposes other than what it was originally intended for, then a new by-law must be passed under section 417(4) of the Municipal Act.

d) Obligatory Reserve Fund - Monies set aside and legally restricted by provincial legislation, a municipal by-law, or agreement. The funds are raised for a specific purpose and cannot be used for any other purpose. All earnings derived from investment of the reserve funds must form part of the reserve fund.

4. Establishment and Modification

Council shall establish a reserve fund for liabilities of the City which are incurred but not payable until later years, as prescribed by any legislated or statutory requirement (such as revenue from development charges), and may establish discretionary reserve fund(s) to be used for any other authorized exclusive purpose.

Council may establish reserves through inclusion in the annual operating or capital budget as adopted by Council; or via a formal resolution or by-law of Council.

Prior to establishing a new reserve, a formal motion will be passed by Council which defines the need, target funding level (if applicable), contribution sources and projected disbursements (when practicable) to meet planned future obligations. A sample motion is included as Annex B.

Prior to establishing a new reserve fund, a formal by-law will be passed by Council which defines the need, target funding level (if applicable), contribution sources and projected disbursements (when practicable) to meet planned future obligations.

All new reserve or reserve funds will be added to this policy by the Treasurer as approved by Council.

5. Investment

Reserve and reserve funds must be invested in accordance with the City's investment policy. Reserves and reserve funds may be invested for a term that will not exceed its expected date of need.

Unless otherwise prescribed by legislation or formal grant agreement, interest shall be allocated to reserve funds annually on December 31 based on the balance as at January 1st of each year. Any earnings derived from investment of reserves' are reported as general revenue-fund earnings. Interest may be allocated to reserves where it is appropriate to adjust their balances for inflation or to help achieve target balances.

6. Contributions and Withdrawals

All contributions to and/or withdrawals from reserves and reserve funds shall be approved by Council, normally as part of the annual budget approval process or specifically by resolution with the following exceptions:

- Direct contribution to reserve and reserve fund such as statutory development charge contributions or settlement in account of prior year events
- As defined in the specific reserve authorities below.

Contributions from operating budgets to reserves shall be transferred upon the approval of the City's budget. Contributions from reserves and reserve funds to capital or operating accounts shall be transferred at least annually on December 31st or upon completion of a project. Actual transfers are amended at year-end based on actual expenditures in compliance with the procurement by-law, policies, and procedures and any in-year changes approved by Council via resolution.

Transfers from a reserve or reserve fund shall not occur if the transfer would put the reserve or reserve fund into a negative balance. If this is the case, inter-fund temporary borrowing will be investigated as a funding source.

Any annual City surpluses in the general fund shall first be used to address any reserve shortfalls as per the minimum target funding levels for each reserve or reserve fund that may be set by Council as part of this policy. If insufficient surplus funding is available to fully top up all reserve and reserve funds, the general capital fund shall first be replenished, with any remaining surplus funding available allocated to each reserve on a pro-rated basis. Any additional general fund surplus funding available after reserve and reserve fund replenishment may be allocated by Council via resolution to any other reserve or reserve fund, including any new reserves or reserve funds.

Any water fund surplus shall first be used to address any joint water reserve shortfalls as per the minimum target funding levels, with the balance of any remaining surplus funds to be allocated to the Joint Waterworks Capital Reserve.

Any water fund deficit shall be transferred from the Joint Waterworks Capital Reserve or Water Plant Reserve as may be available.

Any sanitary sewer fund surplus shall first be used to address any joint sanitary sewer reserve shortfalls as per the minimum target funding levels, with the balance of any remaining surplus funds to be allocated to the Joint Sanitary Sewer Capital Reserve.

Any sanitary sewer fund deficit shall be transferred from the Joint Sanitary Sewer Capital Reserve or Pollution Control Plant as may be available.

7. Lending/Temporary Borrowing

Temporary inter-fund borrowing to cover a reserve or reserve fund shortfall is permitted and encouraged to avoid external debt charges. However, borrowing from a reserve or reserve fund may occur only when an analysis of the reserve has determined that excess funds are available and that the use of these funds will not adversely affect the intended purpose of the reserve. A plan to repay the reserve or reserve fund within a reasonable timeframe must be documented and implemented. Interest, equivalent to the City's interest rate earned over the applicable period will be applied to the outstanding amount borrowed from any Reserve Fund at least annually.

Where applicable, legislative requirements may apply. For example, the Development Charges Act permits inter-fund borrowing between DC reserve funds, but amounts borrowed must be repaid with interest at a rate not less than the Bank of Canada rate on the day on which the Development Charges By-law comes into force updated on the first business day of every January, April, July, and October.

8. Termination/Closure

If the purpose or purposes for which the reserve or reserve fund was created have been accomplished and the reserve or reserve fund is determined to be no longer necessary, subject to any legislative restriction if applicable, the Treasurer, in consultation with the Department Head and CAO, and, shall report to Committee with the recommendation on:

a) The closure of the reserve or reserve fund
b) The disposition of any remaining funds
c) The necessary amendment to the Reserve by-law

A resolution of Council will be required to close a reserve as part of the annual budget process. The By-law establishing the Reserve Fund will be required to be repealed in order to close a Reserve Fund, if applicable.

9. Roles and Responsibilities

Once Council approves reserves by resolution and reserve funds by by-law, the City Treasurer shall have overall authority for the reserves and reserve funds managed by the City. Specific roles and responsibilities are specified below.

The Treasurer shall:

a) Develop and update this policy as necessary and present changes to Council;
b) Ensure that the principles and requirements contained in this policy are applied consistently across all departments;
c) Prepare and present reports and/or by-laws to Council associated with the establishment, monitoring, or termination of reserves and reserve funds.
d) Perform the transfers to and from reserves and reserve funds as authorized by Council;
e) Recommend strategies for the adequacy of reserve levels taking into consideration the City's strategic plan, asset management plan, and long-term financial plans;
f) Ensure reserves and reserve funds managed by the City are in line with senior government statutes and agreements and other pertinent policies; and
g) Report to Council the reserve balances and forecast as part of the annual budget approval process;

Municipal Council shall:

a) In accordance with the Municipal Act 2001, Section 224 develop and evaluate policies, ensure that administrative policies, practices and procedures and controllership policies, practices and procedures are in place and maintain the financial integrity of the municipality.
b) Approve transactions to and from reserves and reserve funds through the budget process or by specific resolution (for reserves) and by-laws (for reserve funds).

The Chief Administrative Officer shall:

a) Support the Treasurer in ensuring the principles and mandatory requirements contained in this policy are applied consistently across all City departments.

Department Heads shall:

a) Provide the Treasurer with the most current capital asset information to be used in the assessment of the adequacy of capital lifecycle reserves;
b) Inform the Treasurer when reserve or reserve fund transfers are required; and
c) Consult with the Treasurer when reserve or reserve funds are required for unbudgeted transactions.

10. Reporting

The Treasurer or designate shall prepare the following reports regarding reserves and reserve funds managed by the City:

a) Annual Audited Financial Statements: Shall include a statement of financial position, financial activities and changes in fund balances for all reserves and reserve funds.

b) Reserve and Reserve Fund Report: A financial plan forecasting reserve and reserve fund balances and a comparison to target objectives shall be prepared periodically based on the most current information available; this report may include the establishment of new, modification of existing and termination of existing reserves and reserve funds.

c) Annual Budget: Reserve and reserve fund balances, projected contributions and planned drawdowns for a ten-year period shall be presented in each multi-year budget, if applicable.

d) Statutory Annual Reports: Annual reports detailing pertinent information regarding statutory reserves including Development Charges, parkland in lieu and Community Benefit Charges if applicable, shall be presented to Council as required. These reports are typically presented as part of the annual budget process.

Attachments

Annex A – Reserve and Reserve Funds Descriptions

Annex B – Template Motion for Creating a New Reserve or Reserve Fund

Annex A: Reserve and Reserve Fund Descriptions

General authority: The Treasurer is authorized to transfer funds into and out of reserves, reserve funds and joint reserve funds as approved by Council through the annual budget process and/or by specific resolution and/or as specified in the procurement by-law. All other authorities are described below.

Reserves

Reserve Name:	Building Inspection
Type Legislative Reference:	Contingency, Smoothing Ontario Building Code
Contribution/Revenue Source:	Building Department surplus
Eligible Expenditures:	Building Department deficit
Council Approved Target Level:	Not applicable
Authority:	Transfers In: Treasurer authorized to transfer annual building department surplus as compared to the annual budget into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any annual building department shortfalls as compared to the annual budget.
General Ledger Reference:	50-999-0450-7808

Reserve Name:	Benefit Administrative Contingency
Type:	Contingency, Smoothing
Contribution/Revenue Source:	Benefit plan and payroll tax surpluses
Eligible Expenditures:	Annual budget smoothing of significant salary, benefit and/or other employment -related cost increases in a single year. Includes short term sick leave benefits, collective agreement settlements and other one-time employment payments.
Council Approved Target Level:	Minimum balance $50,000
Authority:	Transfers In: Treasurer authorized to benefit plan and payroll tax surplus payments into reserve as applicable. Transfers Out: Treasurer authorized to transfer funds to cover sick leave benefits when position is backfilled, and other approved but unbudgeted one-time salary, retro, and/or other benefit payments if required.

Note:	Council may approve use as part of annual budget approval to smooth tax levy impacts of annual benefits cost increases.
General Ledger Reference:	50-999-0450-7815

Reserve Name:	Working Funds
Type:	Cash Flow
Contribution/Revenue Source:	Annual surpluses
Eligible Expenditures:	Not applicable
Council Approved Target Level:	January to March forecasted general operating expenses less estimated monthly pre-authorized tax payments.
Other Comments:	Also used for unspent project funding carrying forward from one year to the next while project still in process. The Treasurer is authorized to transfer funds in and out for this specific purpose as may be required.
General Ledger Reference:	50-999-0450-7800

Reserve Name:	Operating Contingency
Type:	Contingency
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	As approved by Council
Council Approved Target Level:	N/A
Other Comments:	Not currently used.
General Ledger Reference:	50-999-0450-7816

Reserve Name:	Physician Recruitment
Type:	Project
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Physician recruitment initiatives endorsed by other local organizations
Council Approved Target Level:	Minimum balance $25,000
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover physician recruitment expenses as approved by the CAO.
General Ledger Reference:	50-999-0450-7807

Reserve Name:	Police
Type:	Contingency

Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Annual budget smoothing of significant OPP cost increases in a single year.
Council Approved Target Level:	Minimum balance $50,000
Note:	Council may approve use as part of annual budget approval to smooth tax levy impacts of annual policing cost increases.
General Ledger Reference:	50-999-0450-7805

Reserve Name:	OPP Station
Type:	Capital
Contribution/Revenue Source:	Annual budget contributions
Eligible Expenditures:	Capital spending on the City's Police Services Building located at 77 International Drive, Pembroke
Council Approved Target Level:	Not set.
Authority:	General authority
Interest:	Yes, to keep pace with inflation
General Ledger Reference:	50-999-0450-7806

Reserve Name:	Waste Management
Type/Legislative Reference:	Smoothing
Contribution/Revenue Source:	Waste Management Department Surplus Annual budget allocations
Eligible Expenditures:	Waste Management Department Deficit Annual budget allocations
Council Approved Target Level:	Not set.
Authority:	Transfers In: Treasurer authorized to transfer annual waste management department surplus into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any annual waste management department deficits.
General Ledger Reference:	50-999-0450-7825

Reserve Name:	Election
Type/Legislative Reference:	Smoothing
Contribution/Revenue Source:	Annual budget contributions
Eligible Expenditures:	Actual election expenses
Council Approved Target Level:	Expected election budget divided by four years

Authority:	Transfers Out: Treasurer authorized to transfer funds to fund actual election costs as applicable
General Ledger Reference:	50-999-0450-7875

Reserve Name:	Equipment & Vehicles
Type:	Capital
Contribution/Revenue Source:	Annual budget contributions calculated as the forecasted replacement cost divided by the estimated useful life of all City-owned vehicles and equipment in the roads, recreation and building/by-law departments
Eligible Expenditures:	Capital replacement of existing vehicles and equipment
Council Approved Target Level:	Not applicable
Authority:	General authority
General Ledger Reference:	50-999-0490-7850

Reserve Name:	Fire Equipment
Type:	Capital
Contribution/Revenue Source:	Annual budget contributions calculated as the forecasted replacement cost divided by the estimated useful life of all City-owned vehicles and equipment in the Pembroke Fire Department
Eligible Expenditures:	Capital replacement of existing vehicles and equipment
Council Approved Target Level:	Not applicable
Authority:	General authority
General Ledger Reference:	50-999-0490-7860

Reserve Name:	Winter Control
Type:	Contingency
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Winter road and sidewalk operating costs
Council Approved Target Level:	Minimum balance $150,000
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any annual winter control operating deficits.
Interest:	Yes, to keep pace with inflation
General Ledger Reference:	50-999-0490-7905

Reserve Name:	Aquatic Centre
Type:	Capital, Project
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Capital expenditures for the current Kinsmen Pool or new aquatic facility
Council Approved Target Level:	Not set
Authority:	General authority
General Ledger Reference:	50-999-0490-7906

Reserve Name:	Parks & Recreation Facilities
Type:	Capital
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Capital projects related to Parks and Recreation Facilities
Council Approved Target Level:	Not set
Authority:	General authority
Interest:	Yes, to keep pace with inflation
General Ledger Reference:	50-999-0490-7907

Reserve Name:	Transit
Type:	Project
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	On-demand Transit Pilot Project expenditures
Council Approved Target Level:	Not set
Authority:	General authority
General Ledger Reference:	50-999-0490-7908

Reserve Name:	Emergency & Disaster Recovery
Type Legislative Reference:	Contingency Municipal Disaster Recovery Assistance (MDRA) Grant Program
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Emergency expenditures incurred when an emergency is declared
Council Approved Target Level:	3% of the City's Own Purpose Taxation Levy as calculated in the annual Financial Information Return (FIR)
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any costs related to a declared emergency or area flooding.
Interest:	Yes, to keep pace with inflation

General Ledger Reference:	50-999-0490-7909

Reserve Name:	Community Improvement Plan (CIP)
Type Legislative Reference:	Project Community Improvement Program
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Community Improvement Program grants and other related expenditures as approved by Council
Council Approved Target Level:	Minimum $125,000
Authority:	Transfers In: Treasurer authorized to transfer annual CIP program surplus into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any CIP program deficit.
General Ledger Reference:	50-999-0590-7925

Reserve Name:	Hoffman Lane
Type:	Contingency, Project
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Projects or emergencies related to Hoffman Lane
Council Approved Target Level:	Not set.
Authority:	General authority
General Ledger Reference:	50-999-0590-7955

Reserve Name:	Parking Authority Renamed: Public Parking Lots
Type Legislative Reference:	Capital Legacy reserve from when public parking lots were operated as a separate parking authority, now used as a capital reserve.
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Capital parking improvements
Council Approved Target Level:	Not set.
Authority:	General authority
Interest:	Yes, to keep pace with inflation
General Ledger Reference:	50-999-0620-8065

Reserve Name:	Storm Sewer
Type Legislative Reference:	Contingency, Smoothing N/A

Contribution/Revenue Source:	Storm Sewer Fund surplus
Eligible Expenditures:	Storm Sewer Fund deficit
Council Approved Target Level:	Not applicable
Authority:	Transfers In: Treasurer authorized to transfer annual storm sewer fund surplus as compared to the annual budget into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any annual storm sewer fund shortfall as compared to the annual budget.
General Ledger Reference:	50-999-0450-7975

Reserve Name:	Bi-Centennial Reserve
Type Legislative Reference:	Project N/A
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Bi-Centennial-related projects and celebrations as approved by Council.
Council Approved Target Level:	Not applicable
Authority:	General authority
General Ledger Reference:	50-999-0490-7910

Reserve Name:	Levy Stabilization
Type:	Contingency
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	As approved by Council
Council Approved Target Level:	Not applicable
Authority:	General authority
General Ledger Reference:	50-999-0450-XXXX

Reserve Name:	Sidewalk Reserve (Un-serviced Areas)
Type	Project
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Capital projects for new sidewalks added to un-serviced areas of the City
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0490-7911

Reserve Funds

Reserve Name:	Fiddle Park Field Repairs Reserve Fund
Type Legislative Reference:	Contingency Per By-Law 2025-34 Fiddle Festival Agreement, held in case of significant damage to Riverside Park field during Fiddle Festival
Contribution/Revenue Source:	Fiddle Festival Organizing Committee damage deposit
Eligible Expenditures:	To cover cost of field repairs.
Council Approved Target Level:	$5,000 per agreement
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover field repairs as approved by the CAO.
Interest:	Yes, per 2025 agreement
General Ledger Reference:	50-999-0450-7803

Reserve Name:	Animal Control
Type Legislative Reference:	Project SPCA Agreement
Contribution/Revenue Source:	As per the SPCA agreement, the City was required to contribute agreement savings to a reserve to fund local spay and neuter clinics and help address the feral cat population. The specified contributions have been made and are no longer required.
Eligible Expenditures:	Spay and neuter clinics.
Council Approved Target Level:	Not applicable
Other Comments:	The City's first spay and neuter clinic was conducted in 2023. No longer required per new Agreement.
Interest:	No, agreement does not require
General Ledger Reference:	50-999-0450-7881

Reserve Name:	Library Capital
Type Legislative Reference:	External Organization/Capital As set by Pembroke Public Library Board
Contribution/Revenue Source:	As approved by Pembroke Public Library Board
Eligible Expenditures:	As approved by Pembroke Public Library Board
Council Approved Target Level:	Not applicable

Authority:	All transfers in/out are required to be approved by the Board
Interest:	*Yes*
General Ledger Reference:	50-999-0590-7915

Reserve Name:	Library Contingency
Type/Legislative Reference:	External Organization/Contingency
Contribution/Revenue Source:	As approved by Pembroke Public Library Board
Eligible Expenditures:	As approved by Pembroke Public Library Board
Council Approved Target Level:	Not applicable
Authority:	All transfers in/out are required to be approved by the Board
Interest:	*Yes*
General Ledger Reference:	50-999-0590-7916

Reserve Name:	Library Bequest
Type Legislative Reference:	External Organization/Project External Donation
Contribution/Revenue Source:	As approved by Pembroke Public Library Board
Eligible Expenditures:	As approved by Pembroke Public Library Board respecting any direction provided by the doner.
Council Approved Target Level:	Not applicable
Authority:	All transfers in/out are required to be approved by the Board
Interest:	*Yes*
General Ledger Reference:	50-999-0590-7918

Reserve Name:	Library Multicultural Festival
Type:	External Organization/Project
Contribution/Revenue Source:	Multicultural Festival event surplus
Eligible Expenditures:	Multicultural Festival event deficit
Council Approved Target Level:	Not set
Authority:	Transfers In: Treasurer authorized to transfer annual event surplus into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any event deficit.
Interest:	No, temporary project reserve
General Ledger Reference:	50-999-0590-7919

Reserve Name:	Heritage Murals

Type:	External Organization/City Committee
Contribution/Revenue Source:	Heritage Mural surplus
Eligible Expenditures:	Heritage Mural deficit
Council Approved Target Level:	Not applicable
Authority:	As approved by Heritage Mural Committee
Interest:	Yes
General Ledger Reference:	50-999-0620-8100

Reserve Name:	Score Clock Reserve *New*
Type/Legislative Reference:	Per agreement with minor hockey
Contribution/Revenue Source:	Advertising revenues
Eligible Expenditures:	Score Clock Replacement
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	No, temporary project reserve
General Ledger Reference:	50-999-0590-XXXX

Reserve Name:	PBIA
Type:	External Organization
Contribution/Revenue Source:	PBIA surplus
Eligible Expenditures:	PBIA deficit
Council Approved Target Level:	Not applicable
Authority:	As approved by the PBIA board
Interest:	Yes
General Ledger Reference:	50-999-0620-8115

Reserve Name:	Water Meters
Type Legislative Reference:	Project Water Meter Fee, separate from Township of Laurentian Valley Joint Agreement as a self-funded activity in the Water Department
Contribution/Revenue Source:	Annual water meter activity surplus as applicable
Eligible Expenditures:	Annual water meter deficit as applicable
Council Approved Target Level:	Not set
Authority:	Transfers In: Treasurer authorized to transfer annual surplus into reserve if applicable. Transfers Out: Treasurer authorized to transfer funds to cover any deficit.
Interest Earning	*Yes*
General Ledger Reference:	50-999-0590-7935

Reserve Name:	Water Tower
Type Legislative Reference:	Capital Legacy reserve created before Township of Laurentian Valley (TLV) water/sewer agreement.
Contribution/Revenue Source:	Reserve discontinued.
Eligible Expenditures:	Set aside for the replacement of the Water Tower but may be used for any water project without TLV approval, only Council approval.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest Earning:	*Yes*
General Ledger Reference:	50-999-0590-7940

Reserve Name:	Waterworks Capital
Type/Legislative Reference:	Capital Legacy reserve created before Township of Laurentian Valley (TLV) water/sewer agreement.
Contribution/Revenue Source:	Reserve discontinued.
Eligible Expenditures:	Set aside for water distribution capital works but may be used for any water project without TLV approval, only Council approval.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest Earning	*Yes*
General Ledger Reference:	50-999-0590-7945

Reserve Name:	Pollution Control Capital
Type/Legislative Reference:	Capital Legacy reserve created before Township of Laurentian Valley (TLV) water/sewer agreement.
Contribution/Revenue Source:	Reserve discontinued.
Eligible Expenditures:	Set aside for the sewer works capital project (sanitary or storm) but may be used for any water project without TLV approval, only Council approval.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	*Yes*
General Ledger Reference:	50-999-0590-7950

Reserve Name:	Water Filtration Plant

Type Legislative Reference:	Capital Legacy reserve created before Township of Laurentian Valley (TLV) water/sewer agreement.
Contribution/Revenue Source:	Reserve discontinued
Eligible Expenditures:	Set aside for water filtration plant capital projects but may be used for any water project without TLV approval, only Council approval.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest	Yes
General Ledger Reference:	50-999-0620-8090

Reserve Name:	Pollution Control Plant
Type Legislative Reference:	Capital Legacy reserve created before Township of Laurentian Valley (TLV) water/sewer agreement.
Contribution/Revenue Source:	Reserve discontinued
Eligible Expenditures:	Set aside for pollution control plant capital projects but may be used for any sewer or storm sewer project without TLV approval, only Council approval.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0620-8080

Reserve Name:	Cannabis Funding
Type Legislative Reference:	Project Funding agreement
Contribution/Revenue Source:	Funding provided by province as part of cannabis legalization introductions
Eligible Expenditures:	Cannabis-related costs incurred by the City as part of cannabis legalization
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any cannabis-related expense as approved by the CAO.
Interest:	No, not required as part of funding agreement
General Ledger Reference:	50-999-0590-7922

Reserve Name:	Algonquin Pavilion

Type Legislative Reference:	Project Project-related funding provided by external contributions
Contribution/Revenue Source:	Legacy reserve
Eligible Expenditures:	Maintenance, repairs and replacement of the Algonquin Pavilion
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any Algonquin Pavilion-related expense as approved by the CAO.
Interest:	Yes
General Ledger Reference:	50-999-0620-8008

Reserve Name:	CP Track
Type:	Project
Contribution/Revenue Source:	Reserve discontinued
Eligible Expenditures:	Expenditures related to the CP Track
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any CP Track-related expense as approved by the CAO.
Interest:	No
General Ledger Reference:	50-999-0620-8050

Reserve Name:	MAT Tax
Type Legislative Reference:	Project MAT Tax By-law and related Ontario Legislation
Contribution/Revenue Source:	City share of surplus MAT revenue reported at year end as compared to budget
Eligible Expenditures:	As per Council and legislation
Council Approved Target Level:	No applicable
Authority:	General authority
Interest:	No, temporary project reserve
General Ledger Reference:	50-999-0620-XXXX

Reserve Name:	Rotary Park
Type Legislative Reference:	Project Donation from External Organization
Contribution/Revenue Source:	One-time donation
Eligible Expenditures:	Expenses related to Rotary Park
Council Approved Target Level:	Not applicable

Authority:	As approved by the donor
Interest:	No, not stipulated by donor
General Ledger Reference:	50-999-0620-8120

Reserve Name:	Kinsmen Pool/Aquatic Centre - Fundraising
Type Legislative Reference:	Project External donations
Contribution/Revenue Source:	Donations
Eligible Expenditures:	Any funs raised will be used for the construction, maintenance, repair and/or equipment of the current and any new aquatic facility.
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	No
General Ledger Reference:	50-999-0620-XXXX

Reserve Name:	Parks Development
Type Legislative Reference:	Project Cash In-Lieu of Parkland under the Planning Act
Contribution/Revenue Source:	Cash In-Lieu revenue received from developers
Eligible Expenditures:	Park improvements
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any eligible expenses as per the Planning Act as approved by the CAO.
Interest:	Yes
General Ledger Reference:	50-999-0620-8010

Reserve Name:	In-Lieu Parking
Type Legislative Reference:	Capital Cash In-Lieu of Parking under the Planning Act
Contribution/Revenue Source:	Cash in-lieu of parking fees collected from developers
Eligible Expenditures:	Per Planning Act
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer authorized to transfer funds to cover any eligible expenses as per the Planning Act as approved by the CAO.
Interest:	Yes
General Ledger Reference:	50-999-0620-8105

Reserve Name:	New Development
Type Legislative Reference:	Capital N/A
Contribution/Revenue Source:	Cost-of-Doing Business Fees collected from TLV
Eligible Expenditures:	As per by-law
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0620-8130

Reserve Name:	Development Charges
Type Legislative Reference:	Legislated Development Charges background study and by-law set under the Development Charges Act
Contribution/Revenue Source:	Development charges fees collected
Eligible Expenditures:	As per the Development Charges background study
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0620-8135

Reserve Name:	Industrial Land Sales
Type:	Project
Contribution/Revenue Source:	City land sales
Eligible Expenditures:	City property development and land purchases
Council Approved Target Level:	Not set
Authority:	Transfers In: Treasurer is authorized to transfer the net proceeds of land or property sales into this reserve. Transfers Out: Treasurer is authorized to transfer funds to cover any eligible expenses as approved by Council.
General Ledger Reference:	50-999-0620-8015

Reserve Name:	McCool Park Lot Levy
Type Legislative Reference:	Project User fee by-law 2024-47
Contribution/Revenue Source:	Lot levy fees collected
Eligible Expenditures:	Projects related to McCool Industrial Park
Council Approved Target Level:	Not applicable
Authority:	General authority

Interest:	Yes
General Ledger Reference:	50-999-0620-8020

Reserve Name:	Storm Sewer Industrial Park
Type Legislative Reference:	Project Storm Sewer Levy by-law (need #)
Contribution/Revenue Source:	Storm Sewer Levy revenues received
Eligible Expenditures:	Future storm sewer capital project in industrial park
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0620-8075

Reserve Name:	Disability Fund
Type:	Liability Reserve related to fire fighter sick pay
Contribution/Revenue Source:	Fire Department budget
Eligible Expenditures:	Fire Department sick pay expenditures as per collective agreement
Council Approved Target Level:	Based on assessment of liability as at December 31 of each fiscal year as determined by Treasury Dept.
Authority:	Transfers In: Treasurer authorized to transfer funds based on annual calculation of liability as per the terms of the Fire Fighter Collective Agreement Transfers Out: Treasurer authorized to transfer funds to cover any actual expenditures as per the Fire Fighter Collective Agreement.
Interest:	Yes
General Ledger Reference:	50-999-0620-8000

Reserve Name:	General Capital
Type:	Capital, source of the City’s share of funding for any successful grant applications
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Capital projects
Council Approved Target Level:	Minimum $1,500,000
Authority:	General authority
General Ledger Reference:	50-999-0620-8045

Reserve Name:	Modernization Funding
Type Legislative Reference:	Grant Funding One-time funding provided by the Province
Contribution/Revenue Source:	Not applicable. Funding discontinued
Eligible Expenditures:	As per Council resolution on eligible projects. Project information is updated annually as part of the annual budget
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: Treasurer is authorized to transfer funds to cover any project-related expenses are per the approved project list presented as part of the annual budget.
Interest:	No, not a requirement of the funding
General Ledger Reference:	50-999-0620-7920

Reserve Name:	Dedicated Gas Tax Reserve Renamed: Provincial Gas Tax (Transit)
Type Legislative Reference:	Grant-related Transfer Agreement
Contribution/Revenue Source:	Grant funding
Eligible Expenditures:	As per grant requirements
Council Approved Target Level:	Not applicable
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0620-8055

Reserve Name:	Federal Gas Tax Renamed: Canada Community Building Fund
Type Legislative Reference:	Grant-related Municipal Funding Agreement
Contribution/Revenue Source:	Grant funding
Eligible Expenditures:	As per grant requirements
Council Approved Target Level:	Not applicable
Authority:	Transfers Out: The Treasurer has the authority to transfer funds between Council-approved capital projects, primarily to streamline grant reporting.
Interest:	Yes
General Ledger Reference:	50-999-0620-8060

Joint Reserve Funds (TLV Water/Sanitary Sewer Agreement)

Restrictions for Joint Reserve Funds: As per the joint water/sanitary sewer agreement between the City of Pembroke and the Township of Laurentian Valley (By-Law 2022-78) Joint Reserve Funds must be used for the purpose so raised. Any transfers between these funds must be approved by both Councils.

Reserve Name:	W/WW Fleet/Equip Reserve
Type Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual budget contributions calculated as the forecasted replacement cost divided by the estimated useful life of all City-owned vehicles and equipment in the water and sanitary sewer departments
Eligible Expenditures:	Capital replacement of existing vehicles and equipment in the water and sanitary sewer departments
Council Approved Target Level:	Minimum $50,000
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0625-7855

Reserve Name:	Water Filtration Plant
Type/Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual budget contributions
Eligible Expenditures:	Capital projects at the Water Filtration Plant
Council Approved Target Level:	Not set
Authority:	Transfers Out: Treasurer is authorized to transfer funds to cover any unplanned deficit in the water fund as may be applicable
Interest:	Yes
General Ledger Reference:	50-999-0625-8090

Reserve Name:	Pollution Control Plant
Type/Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual budget contributions
Eligible Expenditures:	Capital projects at the Pollution Control Plant
Council Approved Target Level:	Not set
Authority:	Transfers Out: Treasurer is authorized to transfer funds to cover any unplanned deficit in the sanitary sewer fund as may be applicable

Interest:	Yes
General Ledger Reference:	50-999-0625-8080

Reserve Name:	Waterworks Capital
Type/Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Water distribution capital projects
Council Approved Target Level:	Not set
Authority:	Transfers Out: Treasurer is authorized to transfer funds to cover any unplanned deficit in the water fund as may be applicable
Interest:	Yes
General Ledger Reference:	50-999-0625-7945

Reserve Name:	Sanitary Sewer Capital
Type/Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual surplus allocations or budget contributions
Eligible Expenditures:	Sanitary sewer capital projects
Council Approved Target Level:	Not set
Authority:	Transfers Out: Treasurer is authorized to transfer funds to cover any unplanned deficit in the sanitary sewer fund as may be applicable
Interest:	Yes
General Ledger Reference:	50-999-0625-7950

Reserve Name:	Water Tower
Type/Legislative Reference:	Capital Joint Water/Sanitary Sewer Agreement
Contribution/Revenue Source:	Annual budget contributions
Eligible Expenditures:	Water tower replacement
Council Approved Target Level:	Not set
Authority:	General authority
Interest:	Yes
General Ledger Reference:	50-999-0625-7940

Reserve Name:	Joint Development Charges

Type Legislative Reference:	Capital Development Charges background study and by-law set under the Development Charges Act
Contribution/Revenue Source:	Development charges fees collected
Eligible Expenditures:	As per the Development Charges background study
Council Approved Target Level:	Not applicable
Authority:	General authority.
Interest:	Yes
General Ledger Reference:	50-999-0625-8135

Committee Report

To: Councillor Andrew Plummer
Operations Committee

From: Angela Lochtie, Treasurer/Deputy Clerk
Treasury Department

Date: 2025-11-18

Subject : ***Unaudited* 2024 Financial Results**

Recommendation:

Staff is seeking Committee approval to transfer the projected 2024 accumulated surplus in the general fund as follows: $250,000 transferred to the Aquatic Centre Reserve; $150,000 to the Emergency and Disaster Recovery Reserve; $50,000 to the Parks and Recreation Building Reserve; $1,919 to the Physician Recruitment Reserve, $75,000 to the Bi-Centennial Reserve with the balance of surplus funds transferred to the General Capital Reserve.

CAO Review :

I concur with the recommendations presented.

David Unrau, P.Eng., PMP

Financial Comment:

These recommendations reference the draft reserve and reserve fund policy included in tonight's agenda.

Angela Lochtie
Treasurer/Deputy Clerk

Background:

This report is presented annually prior to the presentation of the audited financial statements, currently scheduled for December 16, 2025.

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Discussion:

General Fund: Based on the City's unaudited financial results using the cash-basis of reporting, the City is expecting to end the 2024 fiscal year with an accumulated surplus in the General Fund in the amount of $1,038,615.30. Of this amount, $402,919.18 is related to actual cost of County services provided for 2024 as compared to budget. Without this unexpected cost savings, the adjusted surplus is $635,696.12.

This surplus is net of previously approved transfers, and the carry forward of $213,915 of project funding to the 2025 operating budget. Final 2024 reserve and reserve fund transfers have been included in the Council agenda for formal approval to complete the 2024 audit paperwork.

As per the draft Reserve and Reserve Fund Policy, the following minimum balances are required to support the General Fund:

Table 1: Evaluation of General Fund Reserve and Reserve Fund Minimum Balances

Reserve	**Minimum Balance**	**Dec 31, 2024 Balance**	**Shortfall**
General Capital Reserve	$1,500,000	$1,683,966	N/A
Benefit Administration	$50,000	$337,964	N/A
Physician Recruitment	$25,000	23,081	$1,919
Police	$50,000	$50,000	N/A
Winter Control	$150,000	$150,000	N/A
Emergency Disaster and Recovery	$729,456	$450,000 (phasing in)	$279,456
Community Improvement Plan	$125,000	$137,292	N/A

Based on this information, the proposed allocation of the estimated 2024 General Fund surplus is as follows:

Table 2: Proposed Allocation of 2024 General Fund Surplus

Item	Amount	Dec 31, 2024 Balance with Transfer
Projected 2024 Accumulated Surplus (General Operating Fund)	$1,038,615	N/A
Less: Transfer to Emergency and Disaster Recovery Reserve (Target 3% of own purpose taxation or $729,456)	-$150,000	$600,000
Less: Physician Recruitment	-$1,919	$25,000
Less: Proposed Transfer to Aquatic Centre Reserve	-$250,000	$2,080,774
Less: Proposed Transfer to Parks and Rec Building Reserve	-$50,000	$303,166
Less: Proposed Transfer to Bi-Centennial Reserve for 2026	-$75,000	$75,000
Balance: Estimated Transfer to General Capital Reserve	$511,696	$2,195,662

Pending Committee feedback, a formal resolution for these reserve transfers will be brought forward to Council for approval at the next meeting.

Water Fund: The City is expecting to end the 2024 fiscal year with a surplus of $104,551. This surplus was transferred to the Joint Waterworks Capital Reserve as required.

Sewer Fund: The City is expecting to end the 2024 fiscal year with a surplus in the Sewer Fund in the amount of $1,451,956. This surplus was transferred to the Joint Sanitary Sewer Capital Reserve as required.

At the end of 2024, it is anticipated that the Joint Waster/Waste Water Fleet/Equipment Reserve Fund will be in a deficit of $170,602. The introduction of a new minimum balance of $50,000 is proposed for this reserve, to be implemented at the end of fiscal year 2025, if approved by Council as part of the revised reserve and reserve fund policy.

Alternatives Considered:

Committee and Council may propose an alternate surplus allocation to the existing reserves and/or the creation of new reserves and/or the setting of new minimum reserve balances.

Strategic Plan Impact:

Contributions to reserves and reserve funds supports long-term financial planning.

Attachments:

2024 Year End Reserve and Reserve Fund Balances

Respectfully submitted,

Angela Lochtie, Treasurer/Deputy Clerk
Treasury Department

	D	E	F	G	H
1	**CITY OF PEMBROKE**				
2	**2024 RESERVE AND RESERVE FUNDS**				
3	**RESERVES**	**BALANCE DEC**	**TRANSFERS**		**BALANCE DEC**
4		**31 2023**	**TO**	**FROM**	**31, 2024**
5	**Building Inspection**	21,165	-	9,033	12,132
6	**Benefit Admin. Contingency**	337,964	-	-	337,964
7	**Working Funds**	601,415	213,915	149,248	666,081
8	**Operating Contingency**	-	-	-	-
9	**Legal Contingency**	-	-	-	-
10	**Fiddle Park Field Reserve**	20,000	-	-	20,000
11	**Physician Recruitment**	38,081	-	15,000	23,081
12	**Police**	50,000	-	-	50,000
13	**OPP Station**	69,029	15,000	-	84,029
14	**Waste Management**	2,145,680	108,250	-	2,253,930
15	**Election**	15,000	15,000	-	30,000
16	**Animal Control**	55,180	-	-	55,180
17	**Equipment and Vehicles**	196,852	469,465	498,630	167,687
18	**Fire Equipment**	741,840	223,000	78,666	886,174
19	**Winter Control**	150,000	-	-	150,000
20	**Aquatic Centre**	1,376,654	505,000	50,880	1,830,774
21	**Recreation Building Reserve**	126,583	126,583	-	253,166
22	**Transit**	299,710	150,000	43,021	406,689
23	**Emergency & Disaster Recovery**	250,000	200,000	-	450,000
24	**Bi-Centennial Reserve**	-	-	-	-
25	**Library Capital**	116,079	13,089	22,320	106,849
26	**Library Contingency**	293,698	20,507	10,043	304,162
27	**Library Bequest**	39,889	2,092	-	41,981
28	**Library Multicultural Festival**	-1,129	1,002	-	- 127
29	**Cannabis Funding**	40,000	-	-	40,000
30	**Community Improvement Plan**	108,342	28,950	-	137,292

	D	E	F	G	H
1	**CITY OF PEMBROKE**				
2	**2024 RESERVE AND RESERVE FUNDS**				
31	**Water Meters**	410,912	165,561	-	576,473
32	**Water Tower**	1,117,588	-	-	1,117,588
33	**Waterworks Capital**	765,253	-	642,498	122,755
34	**Pollution Control Capital**	2,017,142	-	250,000	1,767,142
35	**Storm Sewer**	-	3,839	-	3,839
36	**Hoffman Lane**	75,000	-	-	75,000
38	**TOTAL**	**11,477,928**	**2,261,253**	**1,769,340**	**11,969,841**

	D	E	F	G	H
1	**CITY OF PEMBROKE**				
2	**2024 RESERVE AND RESERVE FUNDS**				
39	**RESERVE FUNDS**	**BALANCE DEC 31 2023**	**TRANSFERS**		**BALANCE DEC 31, 2024**
40			**TO**	**FROM**	
41	**Algonquin Pavillion**	2,310	121	-	2,431
42	**Parks Development**	58,902	17,940	-	76,842
43	**Industrial Land Sales**	61,113	3,206	-	64,318
44	**McCool Park Lot Levy**	88,312	4,633	-	92,945
45	**Disability Fund**	497,599	30,693	-	528,292
46	**General Capital**	1,797,064	166,902	280,000	1,683,966
47	**Modernization Funding**	441,733	-	-	441,733
48	**Safe Restart Funding**	88,730	-	88,730	-
49	**Dedicated Gas Tax - Transit**	156,633	127,000	132,527	151,106
50	**Federal Gas Tax**	962,399	967,415	1,792,735	137,079
51	**Parking Authority**	50,230	22,635	-	72,865
52	**Storm Sewer Industrial Park**	21,154	3,740	-	24,894
53	**Water Filtration Plant**	6,290,875	330,005	5,565,621	1,055,259
54	**Pollution Control Plant**	818,164	42,919	-	861,083
55	**Heritage Murals**	2,248	145	-	2,393
56	**In-Lieu Parking**	55,569	2,915	-	58,484
57	**CP Track**	2,392	125	-	2,517
58	**PBIA**	33,389	1,752	10,414	24,727
59	**Aquatic Centre Donations**	-	-	-	-
60	**Rotary Park**	4,218	221	-	4,439
61	**New Development**	212,722	11,159	-	223,881
62	**Development Charges**	323,448	124,262	11,250	436,459
64	**TOTAL**	**11,969,204**	**1,857,786**	**7,881,278**	**5,945,712**
65	**Reserve and Reserve Funds**	**23,447,132**	**4,119,039**	**9,650,617**	**17,915,554**
66					

	D	E	F	G	H
1	**CITY OF PEMBROKE**				
2	**2024 RESERVE AND RESERVE FUNDS**				
67	**RESERVE FUNDS (W/WW**	**BALANCE DEC**	**TRANSFERS**		**BALANCE DEC**
68	**AGREEMENT WITH TLV)**	**31 2022**	**TO**	**FROM**	**31, 2023**
69	**W/WW Fleet/Equip Reserve**	19,577	169,681	359,859	- 170,602
70	**Water Filtration Plant**	114,902	236,028	-	350,930
71	**Pollution Control Plant**	100,000	105,246	-	205,246
72	**Waterworks Capital**	-	104,552	-	104,552
73	**Sanitary Sewer Capital**	155,082	1,460,091	-	1,615,173
74	**Water Tower**	217,500	211,410	-	428,910
75	**Joint Development Charges**	-	-	-	-
76	**TOTAL**	**607,061**	**2,287,007**	**359,859**	**2,534,208**
77					
78					

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Committee Report

To: Councillor Andrew Plummer
Operations Committee

From: Brian Lewis, Director
Operations Department

Date: 2025-11-18

Subject : **2024 DWQMS Management Review Report**

Recommendation:

That the City of Pembroke Operations Committee accept the DWQMS Management Review Report for 2024 and that the Mayor and Chair of Operations sign and approve as indicated.

CAO Review :

CAO supports the recommendation of the department.

David Unrau, P.Eng., PMP

Financial Comment:

There are no financial impacts to this report. Costs associated are included in the annual operating and maintenance budgets.

Angela Lochtie
Treasurer/Deputy Clerk

Background:

- A requirement of the Ontario Drinking Water Quality Management Standard (DWQMS) Operational Plan is for the Quality Management System (QMS) Representative to ensure annual management review results are conveyed to Top Management and the Owner (Council). This report fulfills that requirement.

- This report contains a summary of information that Top Management must review annually in accordance with the Management Standard.

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- The DWQMS is the key tool that supports and ensures that Council, as the Owner of the drinking water systems, is meeting its duties and responsibilities under the *Safe Drinking Water Act* and Standard of Care.

- The DWQMS has been designed for continual improvement, which is the foundation of the DWQMS Policy endorsed by Top Management and Council. The current review considers the entire 2024 calendar year (the “review period”) and where appropriate, touches on activities continuing in 2025.

- The DWQMS sets out a mandatory list of 16 issues to be examined during annual reviews and reports.

Discussion:

- The detailed results have been reviewed by Top Management in accordance with the DWQMS management review system procedure.

- Highlights of the review findings are:

  - During 2024 the City’s Drinking Water System scored 100.00 % Compliance Rating across the board after a detailed Ministry of the Environment inspection.

  - The water quality testing program meets or is better than regulations.

  - Maintenance procedures are appropriate and continually improved and updated.

  - Shortcomings are being addressed through the Preventative & Correction Action Request process.

  - The operator certification program is working; and

  - Staff are following procedures and showing a commitment to continual improvement.

In short, the 2024 Management Review shows the DWQMS is functioning successfully and reinforces the fact that the City of Pembroke produces and supplies high quality, safe drinking water.

<u>2024 External Surveillance Audit</u>

The 2024 External Surveillance Audit of the Pembroke Drinking Water System was completed November 20, 2024, with 0 (Zero) Non-conformance findings and 2 (Two) Opportunities for Improvement. Staff will consider the Opportunities for Improvement moving forward.

Alternatives Considered:

Strategic Plan Impact:

Attachments:

1. Commitment and Endorsement Page
2. OPS-UTS-DWS-GEN-OP-001-001 – DWQMS Operational Plan -rev6 - Final

Respectfully submitted,

Brian Lewis, Director
Operations Department

THE CORPORATION OF THE CITY OF PEMBROKE
DWQMS COMMITMENT AND ENDORSEMENT POLICY

The Owner and Top Management of the Operating Authority of the City of Pembroke have reviewed the contents of this Operational Plan and endorse the Quality Management System.

- Ensured the DWQMS meets the requirements of the standard
- Followed and is aware of the applicable legislative and regulatory requirements
- Communicated the DWQMS
- Determined, obtained and provided the necessary resources needed to maintain and continually improve the DWQMS

The Owner and Top Management acknowledge the need for and supports the provision of sufficient resources to implement, maintain and continually improve the DWQMS.

Top Management and the Operating Authority have reviewed the contents of the Operational Plan and ensured that the DWQMS meets the requirements of the Drinking Water Quality Management Standard.

Top Management has ensured that the relevant members of the Operating Authority are aware of all applicable legislative and regulatory requirements surrounding the operation of a drinking water system and communicate the DWQMS according to the procedures outlined in the Operational Plan

____
R. Gervais
Mayor

____
A Plummer
Chair – Operations Committee

____
D. Unrau
Chief Administrative Officer

____
B. Lewis
Director of Operations

____
M. McLaughlin
Manager of Operations

____
D. Burton
Supervisor, O.R.O. Drinking Water Treatment
DWQMS Representative

The Corporation of the City of Pembroke

Drinking Water Quality Management System: Operational Plan Summary Report

(OPS-UTL-DWS-GEN-OP-001-001)

Revision 6 – Nov 2025

Table of Contents

LIST OF APPENDICES

1.0 Quality Management System

1.1 Purpose

The purpose of this Operational Plan is to document the City of Pembroke's Drinking Water Quality Management System as part of the City's efforts to ensure that clean, safe drinking water is supplied to all of its customers. This Operational Plan was developed in alignment with the requirements of the Ministry of the Environment's Drinking Water Quality Management Standard.

1.2 Scope

This Operational Plan applies to all drinking water-related operations at the City of Pembroke. The contents of the DWQMS Operational Plan include the following:

Part Title	Part
DWQMS Operational Plan Summary Report	Main Report
Council Endorsement & Resolutions	Appendix 3-1
DWQMS System-Level Procedures and Supporting Documentation	Appendix A
DWQMS Risk Assessment Results	Appendix B
Critical Control Limit Monitoring and Response SOPs	Appendix C
Emergency Response Plan for Water Operators	Appendix D

1.3 Definitions

Accreditation Body: Body that conducts accreditation audits and recommends management system accreditation.

City: City of Pembroke

DWQMS: Drinking Water Quality Management System

DWS: Drinking Water System

DWS Vender: Supplier or service provider that provides a product or service related to the drinking-water system

Ministry: Ministry of the Environment, Conservation and Parks that developed the DWQMS Standard and requires select Ontario municipalities & utilities to develop and implement a DWQMS as a component of the Municipal Drinking Water Licence Program

OIC: Operator in Charge

ORO: Overall Responsible Operator

Owner: Legal or beneficial owner of the DWS. For the City of Pembroke, the Owner is represented by the Mayor and Council. The Chief Administrative Officer has been identified as an Owner Representative.

QMS: Quality Management System

Top Management: Person(s) at the highest management level within the Operating Authority that makes decisions respecting the DWQMS and recommended actions to the Owner regarding the DWS. For the City of Pembroke, Top Management includes the Director of Operations and the Manager of Operations.

WTP: City of Pembroke Water Treatment Plant

2.0 Quality Management System Policy

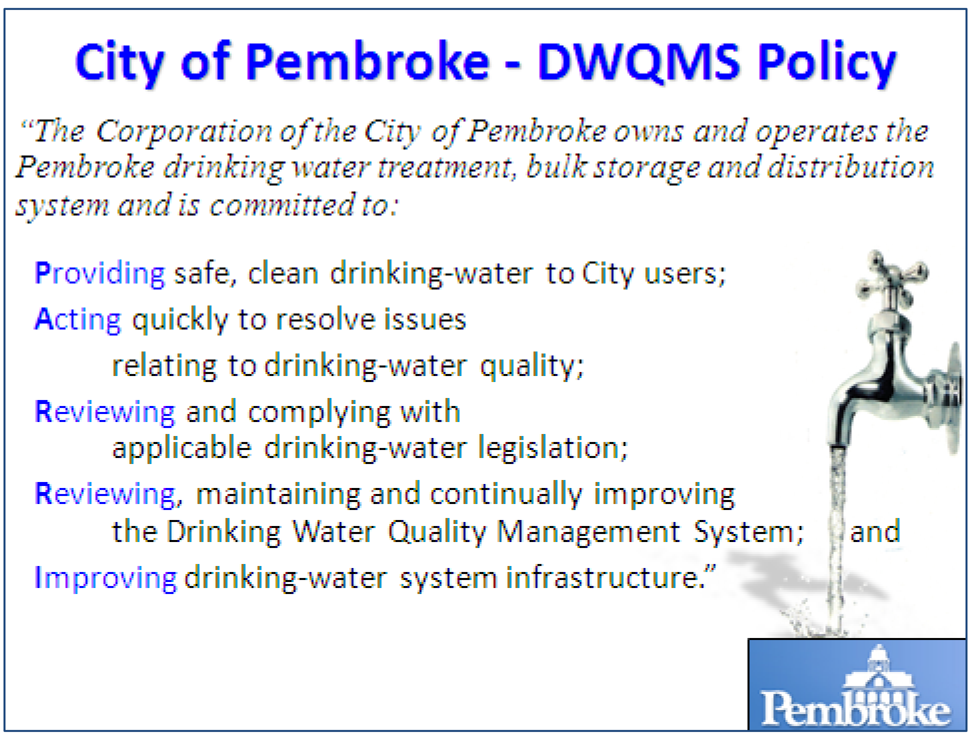
The City of Pembroke's DWQMS Policy is as follows:

"The City of Pembroke owns and operates the Pembroke drinking water treatment, bulk storage and distribution systems.

The City of Pembroke is committed to:

- Providing safe, clean drinking water to City water users;
- Acting quickly to resolve issues relating to drinking water quality;
- Reviewing and complying with applicable drinking-water legislation;
- Reviewing, maintaining and continually improving the Drinking Water Quality Management System; and
- Improving drinking water system infrastructure."

The DWQMS Policy was approved and endorsed by the Owner and Top Management of the drinking water system (See Appendix 3-1 Council Endorsement and Resolutions). The DWQMS Policy is posted at several City of Pembroke Operating Authority facilities & locations, including City Hall, the Water Treatment Plant and the Department of Operations. The DWQMS Policy will also be communicated to the public through posting on the City's website.



3.0 Commitment and Endorsement

This Operational Plan has been reviewed and endorsed by the City of Pembroke Top Management and Owner. The Operational Plan will be re-endorsed with each new council or with significant changes.

Reference Appendix 3-1: Council Endorsement & Resolutions

4.0 Quality Management System Representative

The Supervisor Drinking Water Treatment, Douglas O. Burton, or designate, has been appointed as the Quality Management System Representative for the City of Pembroke's DWQMS, and is authorized to carry out all of the duties associated with this role.

In addition to other components of his role, the Supervisor Drinking Water Treatment holds the following responsibilities as QMS Representative for the City's Drinking Water Quality Management System:

- Ensuring that the DWQMS is established, implemented and maintained;
- Reporting to Top Management regarding the status and performance of the DWQMS and any need for improvement;
- Ensuring that current versions of DWQMS documentation are in use at all times;
- Ensuring that staff are aware of all applicable legislative and regulatory requirements as they pertain to the City's drinking water system; and
- Promoting awareness of the DWQMS throughout the Operating Authority.

5.0 Document and Records Control

5.1 Document Control

A procedure has been developed that outlines document control processes for the Operating Authority. **DWQMS Control of Documents (OPS-UTL-DWS-GEN-PRO-002-001** – see Appendix A*)* describes a process for the creation, modification, review, approval, distribution, retrieval and protection of DWS-related documentation at the City of Pembroke.

DWS-related documentation is identified using a unique numbering system specified in **DWQMS Control of Documents (OPS-UTL-DWS-GEN-PRO-002-001)**. The task of creating internal DWS-related documentation is delegated to a Department of Operations staff member who is appropriately qualified regarding the subject matter of the required document. When a draft document has been prepared, review and approval of the document is completed as specified in Table 1 of **DWQMS Control of Documents (OPS-UTL-DWS-GEN-PRO-002-001).**

Revisions to existing documentation are completed by the Document Author and reviewed by the Author's Supervisor as specified in Table 1 of **Control of Documents (OPS-UTL-DWS-GEN-PRO-002-001).**

When a draft document is ready for approval, it is printed and signed by the Document Author and the Document Approver, and both the signed paper-copy and the editable electronic "master copy" of the document are provided to the Supervisor Drinking Water Treatment. The Supervisor Drinking Water Treatment finalizes the document by creating a read-only version and saving it to the "Drinking Water QMS" folder located on the Utilities Server. The Supervisor Drinking Water Treatment also prepares any required hard copies of the document and distributes these copies as specified in the **DWQMS Document Control Matrix (OPS-UTL-DWS-GEN-LM-002-001***)*; these are considered to be "controlled" copies and may not be photocopied or otherwise reproduced. Obsolete versions of documentation may be disposed (via shredding) or may be retained in a protected location as records.

The Supervisor Drinking Water Treatment maintains electronic copies of master (i.e., editable) documentation in a protected location on the Utilities server. These copies are protected from unauthorized distribution or editing.

5.2 Records Control

A procedure has been developed that outlines record control processes for the Operating Authority. **DWQMS Control of Records (OPS-UTL-DWS-GEN-PRO-003-001** – see Appendix A) specifies processes for the collection, identification, storage, maintenance, protection, retention and disposal of drinking water-related records at the City of Pembroke.

The **DWQMS Record Retention Matrix (OPS-UTL-DWS-GEN-LM-003-001)** identifies DWS records that are managed under this procedure. Each record profile within the Matrix lists the record name, minimum record retention time, record owner (i.e., person responsible for the record), and physical form of storage including the storage location(s). Where required by legislation and/or regulations, DWS records are made available for review by customers and/or stakeholders.

Once the indicated minimum retention time has been reached, drinking water system records are destroyed. Records are to be disposed by the end of the calendar year in which their retention time elapses.

6.0 Drinking Water System – Process Description

6.1 General

The City of Pembroke owns and operates the Pembroke drinking water system (DWS #220000941), which consists of the Pembroke Water Treatment Plant (WTP) and distribution system. The system is considered a large municipal residential drinking water system under O. Reg. 170/03. The WTP is rated as a Class 3 facility, while the distribution system is a Class 2 system. Bulk water storage facilities are rated as Class 3 facilities. A process flow diagram of the Pembroke drinking water system is provided in Figure 6.2.1 Pembroke DWS Process Schematic (page 10).

6.2 Pembroke WTP

The Pembroke WTP is located on Riverside Drive in the City of Pembroke. The WTP was built in 1984 and has a rated capacity of 36,374 m^3/d.

The WTP is a conventional surface water treatment plant. The raw water intake pipe is 424m in length and 760mm in diameter and draws water from the Ottawa River into the plant's raw water/low lift pumping wet wells. The flow of raw water moves through two travelling bar screens where any large debris that may have come through the intake is trapped, protecting the pumps in the next phase of the treatment process.

Four low lift vertical turbine pumps with a total capacity of 370L/s convey raw water to the chemically assisted filtration process, which includes:

- Two coagulation/flocculation trains each consisting of three tanks in series;
- Two sedimentation tanks equipped with travelling hydraulic sludge collectors; and,
- Two dual media rapid gravity filters with a total filter surface area of 102m^2. (These filters act to capture particles that may have been carried over the sedimentation process.)

Chemical feed systems include the following:

- Alum feed system consisting of two 25,000L bulk storage tanks, two feed pumps and associated piping, including one duty and one stand-by injection pump at the low lift pump discharge header for coagulation;
- Soda ash preparation and feed system for raw and treated water alkalinity and pH adjustment, consisting of a 25-tonne soda ash bulk storage tank, a dry chemical feeder, one 2,000L slurry tank and solution feed pumps;
- Activated Silicate System consisting of one 20,000L sodium silicate bulk storage tank and one 1000L sulfuric acid tank, one 1500L batch tank, one 1500L day tank and 2 chemical metering pumps, one transfer pump and associated piping;
- A gas chlorine disinfection system consisting of two one-tonne cylinder weight scales with vacuum regulators and automatic switchover system, four 200kg/d capacity chlorinators (2 duty and 2 standby), complete with associated equipment, instrumentation and controls.

On-site storage of drinking water is provided by one clearwell with a longitudinal divider wall creating two cells in series with a total capacity of 8,000m^3.

Four high lift pumps deliver treated water to the distribution system.

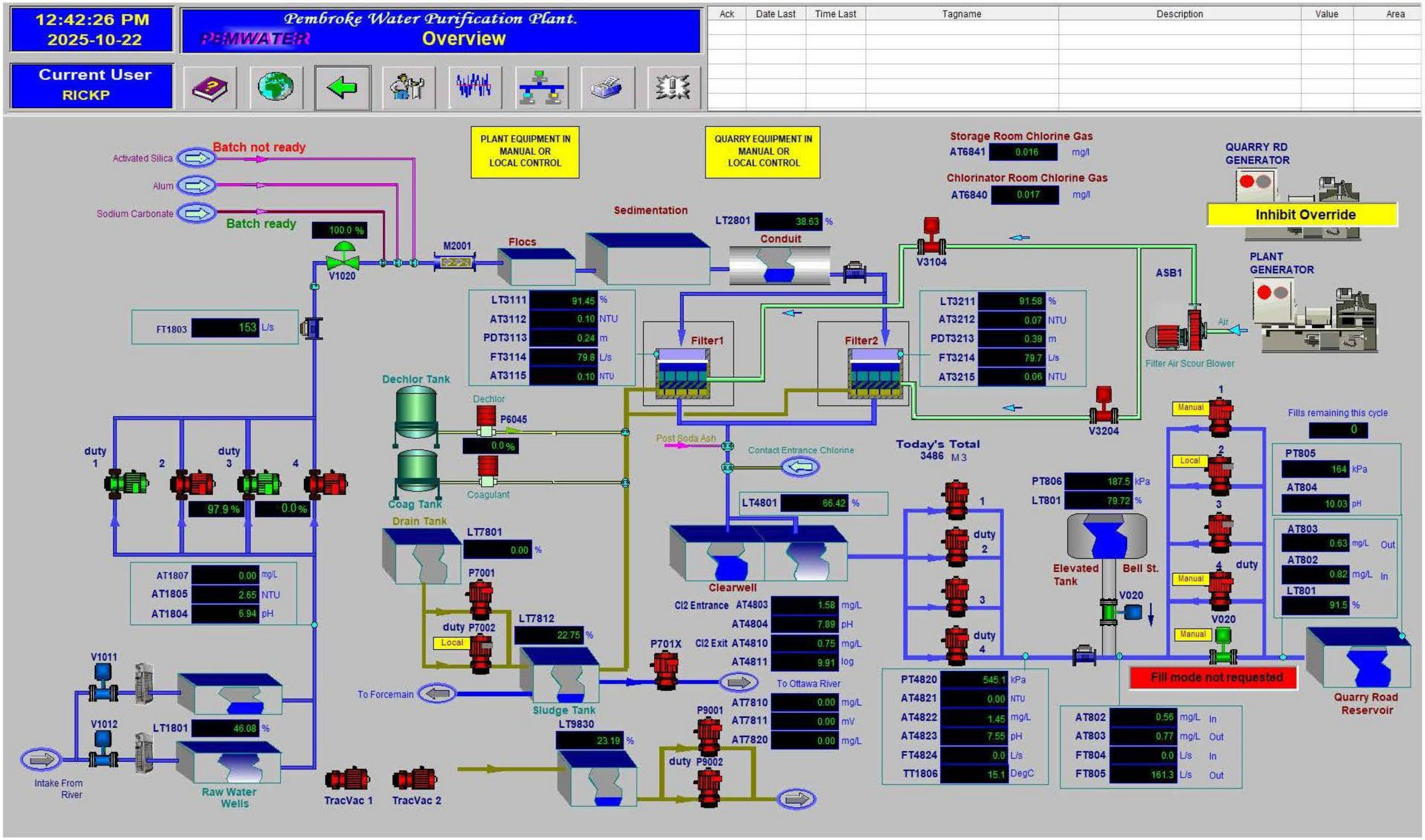
Backwash, filter-to-waste discharge and sludge from the sedimentation tanks is directed to a wastewater holding tank with a volume of 1,200 m^3. Sludge from the holding tank is directed to the sanitary sewer. Clarified and dechlorinated wastewater is discharged to the Ottawa River via an 800mm-diameter outfall pipe.

Standby power is provided by a 1000kW diesel engine generator set.

There are two storage facilities in the distribution system: a 2,300m^3 elevated tower located at the intersection of Bell Street and Fraser Street and a 4,500m^3 in-ground reservoir and booster pumping station located at Quarry Road. Re-chlorination facilities using sodium hypochlorite have been installed at both facilities and can be operated on an as-needed basis. Both locations are provided with continuous monitoring equipment (PLC) for chlorine, which are linked to the SCADA system located at the Pembroke WTP.

The Quarry Road Reservoir is connected to a stand-alone 200 kW diesel generator available to supply power in the event of a power outage or other emergency. The Quarry Road Booster Pumping Station supplies water to the distribution system utilizing two 250hp pumps.

6.2.1 **Figure: Pembroke DWS Process Schematic**



6.3 Pembroke Distribution System

The distribution system supplies water to a service population of approximately 15,000. The distribution system includes approximately 115km of watermains ranging in size from 4" to 24"; roughly 55% of these are constructed in cast-iron, with the remaining watermains constructed in ductile iron, PVC and high-pressed concrete. Other distribution system infrastructure includes approximately 500 fire hydrants, 940 distribution valves, 450 hydrant valves, and 4,300 service valves. Operating pressures within the system vary, with a low pressure of roughly 30psi at the Bell Street Elevated Tower and a high pressure of roughly 85psi at Joseph Street.

The City of Pembroke also provides treated water to the Township of Laurentian Valley (DWS No. W260007465 – LV Water Works) via the following system connection points:

- Boundary Road at Willow Drive;
- Boundary Road at Karen Street;
- Boundary Road at Bruham Avenue;
- Boundary Road at Elgin Street;
- Pembroke Street West at City limits;
- Pembroke Street East at City limits; and
- Bell Street at Angus Campbell Drive (2026).

Although not a direct connection, the City of Pembroke can also service the Town of Petawawa (DWS No. 2100002101 - OCWA) thru Laurentian Valley.

6.4 Drinking Water Source

The Ottawa River serves as the raw water source for the Pembroke WTP. The second largest river in eastern Canada, the Ottawa River runs along the Quebec-Ontario border and extends 1,271km from its headwaters to the confluence with the St. Lawrence.

The Ottawa River has many of the typical characteristics that are common of waters in the Canadian Shield. The river is naturally high in turbidity, colour and organic matter, but low in hardness and alkalinity.

6.5 Common Event-Driven Fluctuations

Water levels in the Ottawa River fluctuate naturally throughout the year in response to rain and snowmelt. The Ottawa River is a highly regulated river with 13 principal reservoirs and over 50 major dams throughout the watershed. The operation of the dams can also affect water levels in the river. Fluctuations in river water levels are noted on a seasonal basis as a result of dry conditions during summer months or flooding in spring due to melting and run-off. It should be noted, however, that fluctuations in river levels have rarely, if ever, impacted WTP operations.
Significant seasonal variations in turbidity, temperature, colour and organic content can occur. The treatment processes at the WTP are directly impacted by these changes.

6.6 Operational Challenges and Threats

Seasonal variations in turbidity are common in spring and fall and are mainly caused by heavy rainfall/snowmelt events that contribute to increased run-off from land surfaces into the river. These seasonal turbidity spikes can create operational challenges leading to higher coagulant dosages and chemical usage, greater sludge production, shorter filter run times and more frequent backwashes. These process challenges can reduce the total amount of water that can be produced at the WTP.

The temperature of the Ottawa River can vary between 0.5ºC to more than 25ºC between winter and summer months. Colder water temperatures can create problems with frazil ice in the intake pipe and raw water wet well and may also lead to increased chemical usage, as coagulation, sedimentation and disinfection are less effective at lower temperatures. Higher temperatures may contribute to increased disinfection by-product formation.

Seasonal increases in natural organic matter (NOM) may cause aesthetic problems because it imparts colour to the water, leading to more customer complaints. NOM can also cause operational problems. Increases in NOM concentrations can affect coagulation, as the optimum dosage and pH required to remove NOM differ from those for turbidity removal; increases can also affect disinfection, as the presence of NOM may increase chlorine demand and increase the rate of disinfection by-product formation. The presence of NOM in the treated water may also lead to distribution system water quality problems, as NOM may increase bacteriological re-growth by serving as a food source.

The Town of Petawawa is located upstream of Pembroke and discharges treated wastewater to the Ottawa River. The Chalk River nuclear facility is also located upstream of Pembroke on the Ottawa River. Accidental or untreated discharges from these two facilities could potentially impact Pembroke’s water treatment operations.

Operational challenges in the distribution system are typical of those in older systems. They include aging infrastructure and its impact on watermain break rates, leakage, presence of lead, discoloured water complaints due to deterioration of cast iron mains, etc. The City’s geography has historically led to the presence of dead-end watermains, requiring additional flushing and monitoring at these locations. The low levels of water hardness and alkalinity may also contribute to aggressive conditions within the distribution system.

7.0 Risk Assessment

A procedure has been created to describe the City of Pembroke's DWQMS Risk Assessment process. **DWQMS Risk Assessment (OPS-UTL-DWS-GEN-PRO-004-001** – see Appendix A*)* documents the process for completing the City of Pembroke's DWQMS Risk Assessment, including the legislative, regulatory and internal requirements for this risk assessment and the criteria for assessing risk.

Members of the City of Pembroke's Risk Assessment Team are identified in **DWQMS Risk Assessment (OPS-UTL-DWS-GEN-PRO-004-001).** Before the risk assessment is initiated, the Risk Assessment Team reviews the description of the drinking water system contained in the Operational Plan and identifies high-risk and/or high quantity users of drinking water in order to ensure their unique requirements are taken into account in completing the risk assessment.

The Risk Assessment Team then examines the City's drinking water system for potential hazards and/or hazardous event that could compromise the performance of the system and/or the quality of the drinking water. The Risk Assessment Team evaluates each identified hazard against criteria outlined in **DWQMS Risk Assessment (OPS-UTL-DWS-GEN-PRO-004-001).** The Team assesses the likelihood of the occurrence of the hazard, the consequences of the hazard's effects, and the detectability of the hazard were it to occur. Using these three criteria, a Risk Rating is determined for each hazard.

Hazards with greater Risk Ratings are evaluated to determine whether a Critical Control Point (CCP) can be established at the hazard location. Where a CCP is identified, critical control limits and monitoring/response procedures are developed to ensure that rapid action can be taken to eliminate or reduce the hazard if and when it is identified. Regardless of Risk Rating, any hazards relating to disinfection processes are identified as CCPs.

The DWQMS Risk Assessment is reviewed annually by the City's Risk Assessment Team in a formal meeting. Once every 36 months, the Risk Assessment team re-evaluates the DWQMS Risk Assessment in its entirety via a formal review and a new Risk Assessment is completed. Details of these reviews and reassessment processes are contained in **DWQMS Risk Assessment (OPS-UTL-DWS-GEN-PRO-004-001).**

8.0 Risk Assessment Outcomes

The City of Pembroke's initial DWQMS Risk Assessment was completed on November 13th and 14th, 2008. The results of this DWQMS Risk Assessment are documented in Appendix B of this DWQMS Operational Plan. All hazards and/or hazardous events were identified, assessed and addressed according to Section 7.0 of this Operational Plan and the City's **DWQMS Risk Assessment** procedure **(OPS-UTL-DWS-GEN-PRO-004-001)**.

Critical Control Limit Monitoring and Response SOPs can be found in Appendix C and are identified as follows:

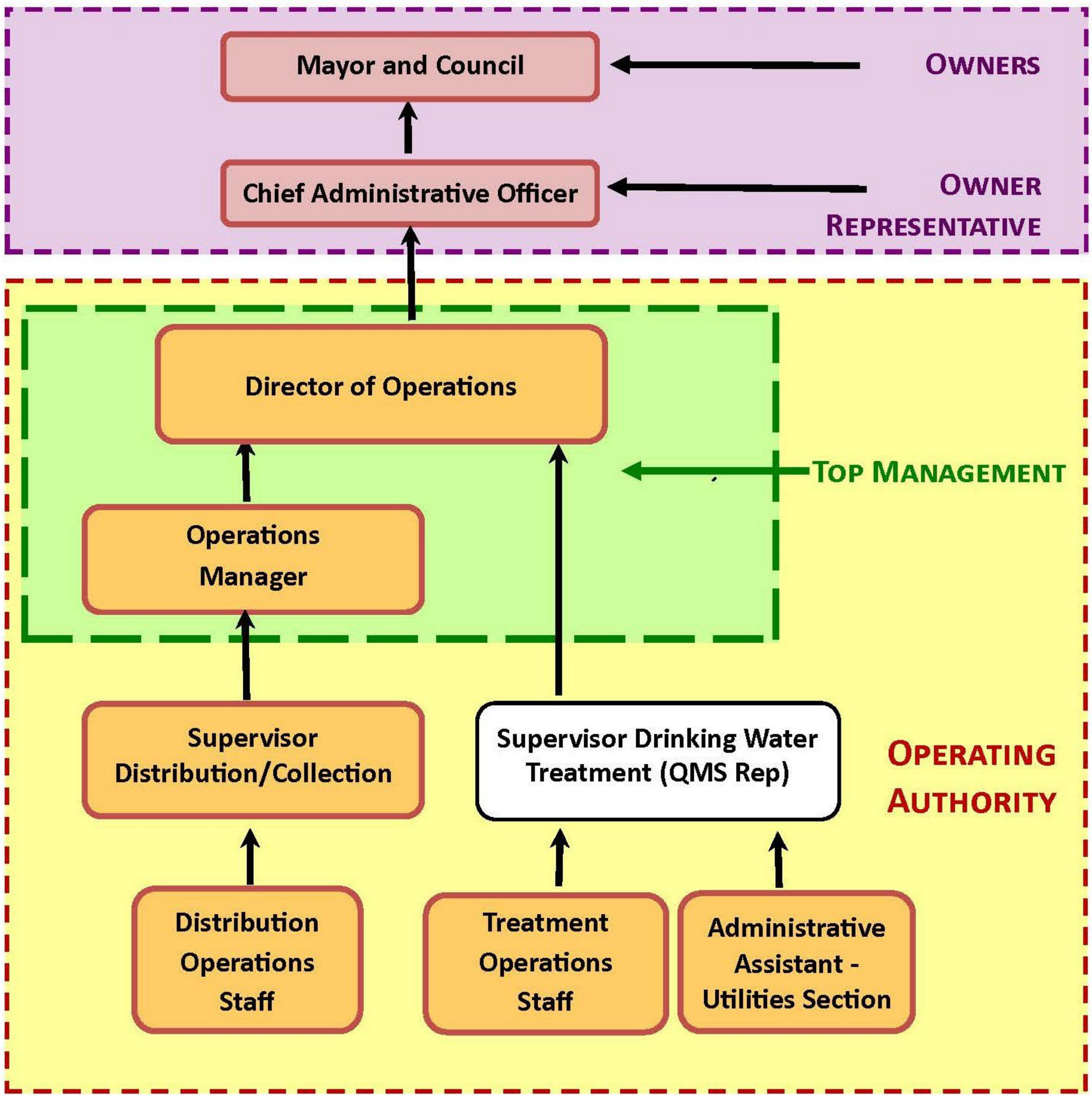
- **DWQMS Essential Supplies and Services (OPS-UTL-DWS-GEN-PRO-009-001)**
- **List of Essential Drinking Water System Supplies and Services (OPS-UTL-DWS-GEN-LM-009-001)**
- **DWQMS Review & Provision of Infrastructure (OPS-UTL-DWS-GEN-PRO-010-001)**
- **Filter Backwash (OPS-UTL-DWS-WP-SOP-011-001)**
- **Watermain Repair (OPS-UTL-DWS-WD-SOP-011-001)**
- **Hydrant/Dead End Flushing (OPS-UTL-DWS-WD-SOP-011-002)**
- **Valve Maintenance (OPS-UTL-DWS-WD-SOP-011-005)**
- **DWQMS Sampling, Testing & Monitoring (OPS-UTL-DWS-GEN-PRO-012-001)**
- **Chlorine Residual Sampling and Testing (OPS-UTL-DWS-GEN-SOP-012-002)**
- **Microbiological Sampling (OPS-UTL-DWS-GEN-SOP-012-003)**
- **Monitoring of Algal Blooms (OPS-UTL-DWS-WP-SOP-012-007)**
- **Adverse Water Quality Incident Reporting and Corrective Action (OPS-UTL-DWS-GEN-SOP-012-001)**
- **Chlorine Residual Monitoring at Bulk Water Storage Facilities (OPS-UTL-DWS-WP-SOP-012-001)**
- **Continuous Monitoring of Turbidity and Calibration of Turbidity Meters (OPS-UTL-DWS-WP-SOP-012-004)**
- **DWQMS Emergency Response Plan for Water Operations – Chlorine Emergencies (OPS-UTL-DWS-GEN-SOP-014-005)**
- **By-Law 2011-50, "A By-Law to Amend By-Law Number 2007-24, A By-Law to Regulate the Supply of Safe and Wholesome Water to the Citizens of Pembroke**
- **By-Law 2007-23, "A By-Law to Provide for the Administration, Maintenance, Operation and Regulation of Water Works"**
- **By-Law 2007-24, "Cross-Connection/Backflow Prevention By-Law"**
- **By-Law 2007-25, "A By-Law in the City of Pembroke, in the Province of Ontario, to Provide for Regulation of Public and Private Fire Service Water Mains and Hydrants"**

9.0 Organizational Structure, Roles, Responsibilities & Authorities

9.1 DWQMS Organizational Chart

The DWQMS Organizational Chart for the City of Pembroke's DWS is as follows:

9.1.1 Figure: City of Pembroke's DWQMS Organizational Chart



The DWQMS Organizational Chart is reviewed on an annual basis or if significant organizational changes occur within the Operating Authority.

9.2 DWQMS Roles, Responsibilities & Authorities

The **DWQMS Roles and Responsibilities Matrix (OPS-UTL-DWS-GEN-LM-005-001 –** see Appendix A) defines the roles, responsibilities and authorities of staff within the City of Pembroke's Operating Authority and includes both general roles as well as DWQMS-specific responsibilities for each role. The Matrix is reviewed periodically as per the **DWQMS Document Control Matrix (OPS-UTL-DWS-GEN-LM-002-001)** or as significant organizational changes occur within the Operating Authority. The Supervisor Drinking Water Treatment, along with relevant Managers and Supervisors, are responsible for ensuring that staff remain aware of their respective roles, responsibilities and authorities.

10.0 Competencies

A procedure has been developed to outline processes for management of training requirements for Certified Water Operators. **DWQMS Competencies and Training (OPS-UTL-DWS-GEN-PRO-006-001** – see Appendix A) outlines processes for planning, scheduling and tracking training activities for Water Operations staff, including training relating to certification of Water Operators in accordance with O. Reg. 128/04.

The **DWQMS Competencies Matrix (OPS-UTL-DWS-GEN-LM-006-001** – *see* Appendix A) outlines the competencies of those Operating Authority Personnel whose work directly affects drinking water quality. The descriptions highlight only those required competencies relating to work affecting drinking water quality; job descriptions are to be observed as the primary source of inclusive summaries for the listed positions. The **DWQMS Competencies Matrix** is used as a guide in planning upcoming training activities and helps to ensure that Water Operations staff are equipped with competencies and skill sets deemed to be required by the Operating Authority.

A Water Operations training record is established for every new member of Operating Authority staff. These records contain details of the employee's educational history, records of Operator Certification, and records of training activities completed. Spreadsheets are also maintained for each member of Water Operations staff that includes details of Operator Certification (as applicable), details of training activities completed, due dates for recurring training, and information about training hours accrued. The Supervisor Drinking Water Treatment uses these training spreadsheets in conjunction with the **DWQMS Competencies Matrix (OPS-UTL-DWS-GEN-LM-006-001)** to plan and schedule training activities for Certified Water Operators. Training activities are planned and scheduled in consultation with the Supervisor of Pollution Control Centre and the Supervisor of Distribution/Collection.

The Ministry's mandatory course must be completed by all Certified Water Operators at least once during the three-year period of validity of their certification. The course helps to ensure that certified personnel are kept aware of the importance and relevance of their duties and how they affect drinking water quality. The importance and relevance of Certified Water Operator duties are also reinforced through other training activities, procedure reviews, and during delegation of work activities.

11.0 Personnel Coverage

The **DWQMS Personnel Coverage** procedure (**OPS-UTL-DWS-GEN-PRO-007-001 –** see Appendix A) details processes used by the City of Pembroke to ensure that adequate staffing & personnel are available to operate and maintain the DWS. The procedure details coverage measures to be followed during regular business hours as well as after-hours periods.

11.1 Water Treatment

The Supervisor Drinking Water Treatment is appointed as the Primary Treatment ORO for the City of Pembroke's DWS. If the Supervisor is unavailable to fulfill the duties of ORO, an Alternate Treatment ORO is designated. For Treatment Operations, the OIC designation is assigned on a weekly basis in alignment with the rotation of Treatment Standby Operator assignment; the Treatment Standby Operator assumes the role of OIC for the week. (refer to **OPS-UTL-DWS-GEN-PRO-007-001 - DWQMS Personnel Coverage** – see Appendix A)

One day shift operates from 7:30am – 3:30pm daily. Operators typically work from Monday to Friday. One Operator is scheduled to work each weekend in exchange for an extended weekend during the following week; this operator is considered to be the Treatment Standby Operator and is provided with a city-owned mobile device for receipt of after-hours emergency calls. A SCADA system is used to monitor WTP and bulk water storage operations during after-hours periods. In the event of an emergency, the SCADA system auto-dialer places a call to the Treatment Standby Operator's cellphone to alert them of the problem.

11.2 Water Distribution

The Supervisor of Distribution/Collection is appointed as the Primary Distribution ORO for the City of Pembroke's DWS and designates an Alternate Distribution ORO if they are unavailable to fulfill their ORO duties. For Distribution Operations, the Chief Operator is identified as the OIC. In the absence of the Chief Operator, an Acting Chief Operator is designated. Additional OICs may be assigned as required to oversee any maintenance or repair activities.

For Water Distribution Operations, one day shift operates from 7:30am – 3:30pm daily. Operators typically work from Monday to Friday. During after-hours periods, an Operations Standby is appointed on a rotating basis to serve as the primary contact in the event of an emergency affecting Water, Sewer, Roads, etc. The Operations Standby may not be a Certified DWS Operator. After-hours emergency calls are directed to the City of Pembroke dispatch service provider for receipt and forwarding to the designated Operations Standby. Further call-in processes for Water Distribution-related emergencies are detailed in **DWQMS Personnel Coverage (OPS-UTL-DWS-GEN-PRO-007-001).**

11.3 Labour Disruption

In the event of a labour disruption, the Supervisor Drinking Water Treatment assumes control of treatment processes. For distribution operations, the Supervisor of Distribution/Collection assumes oversight and control of the water distribution system. If required, external labour may be contracted during periods of labour disruption.

12.0 Communications

A procedure**, DWQMS Communications (OPS-UTL-DWS-GEN-PRO-008-001** – see Appendix A), has been developed to outline the processes and methods used by the Top Management of the City of Pembroke's Operating Authority in communicating relevant DWS-related information to the Mayor and Council, Operating Authority staff, DWS Vendors, and the public. The procedure also outlines policies for communication with the Ministry of the Environment and Climate Change and the DWQMS Accreditation Body.

DWQMS Awareness Training has been developed by the DWQMS Implementation Team on behalf of Top Management. This training is used as a tool to communicate fundamentals of the DWQMS to Operating Authority staff and can be presented to other parties as required.

Top Management communicates the DWQMS to the Owner through presentations at Operations Committee meetings, Reports or Update Documents to Operations Committee, and informal day-to-day communications.

Operating Authority Supervisors communicate with Utilities Staff in the operation and maintenance of the drinking water system through verbal communication, formal and informal written communication, provision of procedures, DWQMS Awareness Training, meetings, and internal and external audit results.

The Operating Authority completes the majority of its communication with DWS Vendors via the Treasury Department. DWS Vendors whose products or services may affect drinking water quality are identified as per **DWQMS Essential Supplies and Services** (refer to Section 13.0 of this Operational Plan).

Drinking-water customers are able to communicate with City of Pembroke staff via the Operations Department (during regular business hours), by logging concerns via the City's website on Access E11 or via the City of Pembroke dispatch service provider (outside of business hours). Calls received at City of Pembroke dispatch service provider are routed to appropriate Water Operations staff for further action.

The Supervisor Drinking Water Treatment is designated as the primary City contact for DWQMS-related communication with the Ministry and the Accreditation Body, and works closely with Top Management in applying for, scheduling, and responding to results of DWQMS Accreditation Audits.

13.0 Essential Supplies and Services

The **DWQMS Essential Supplies and Services** procedure **(OPS-UTL-DWS-GEN-PRO-009-001** – see Appendix A) describes the processes by which the City of Pembroke identifies the supplies and services that it deems essential to its water-related operations. The procedure also documents the process followed by the Operating Authority in verifying the quality of these essential supplies and services insofar as they impact drinking water quality.

Essential supplies and services are defined as those supplies/services that are essential to the continued delivery of safe drinking water OR that are related to disinfection of drinking water or of drinking water infrastructure. The **List of Essential DWS Supplies and Services (OPS-UTL-DWS-GEN-LM-009-001** – see Appendix A) lists Pembroke's drinking water system essential supplies and services. The List includes minimum quality requirements that must be met by DWS Vendors in order to be considered for use for the DWS.

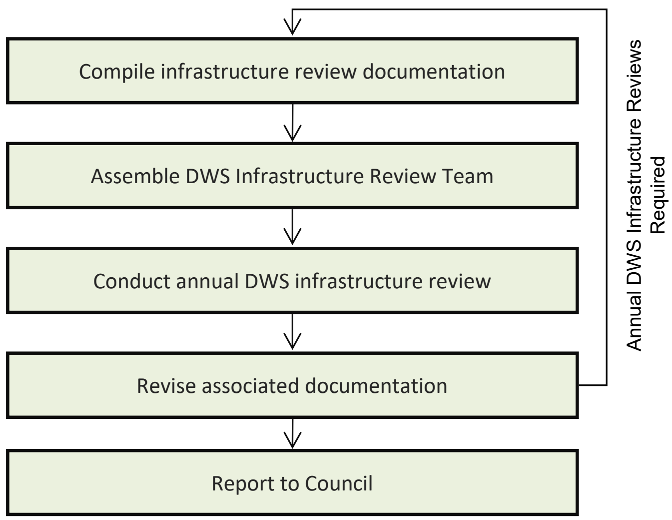
As required, the Operating Authority completes a quality assurance assessment of its essential supplies and services to ensure that they continue to conform to specified quality requirements. Vendor performance, condition and quality of the provided supply or service, and adherence to the City's specified quality requirements are considered as per **DWQMS Essential Supplies and Services (OPS-UTL-DWS-GEN-PRO-009-001).**

Results of the assessment are forwarded to Top Management along with any recommendations for DWS Vendor non-conformances, continual improvement initiatives or exclusions. Non-conformances may be issued to DWS Vendors and documented as per the **DWQMS Preventive and Corrective Action procedure (OPS-UTL-DWS-GEN-PRO-017-001).** Non-conformances are communicated to Vendors with requested date for response. Vendor non-conformance reports (with corrective actions) are reviewed as part of the Vendor QA Review.

14.0 Review and Provision of Infrastructure

The **DWQMS Review and Provision of Infrastructure** procedure (**OPS-UTL-DWS-GEN-PRO-010-001** – see Appendix A) has been developed to outline the process followed by the City of Pembroke in reviewing the adequacy of its drinking water system infrastructure. The DWS infrastructure review process is shown in Figure below.

14.1 Figure: DWQMS Infrastructure Review Process



Members of the City of Pembroke's DWS Infrastructure Review Team are listed in **DWQMS Review and Provision of Infrastructure (OPS-UTL-DWS-GEN-PRO-010-001).** The DWS Infrastructure Review Team meets on an annual basis to review the previous year's operational history and proposed infrastructure rehabilitation plans for the subsequent year.

Inputs to Infrastructure Reviews include but are not limited to results of previous infrastructure reviews, relevant operations and maintenance data, summaries of DWS assets and infrastructure, ongoing improvement initiatives, and relevant water quality data. The Team examines these inputs and identifies infrastructure elements of concern within the DWS as well as replacement strategies for these elements. Infrastructure replacement strategies are prioritized based on known water quality issues, ability to meet and maintain fire flows, condition of watermains & related infrastructure, and current, ongoing or planned drinking water quality improvement initiatives.

A DWS Infrastructure Review Report is subsequently prepared for Council that describes the conclusions of the infrastructure review and outlines recommendations regarding proposed DWS infrastructure renewal projects for the subsequent year.

15.0 Infrastructure, Maintenance, Rehabilitation and Renewal

The **DWQMS Infrastructure, Maintenance, Rehabilitation and Renewal** procedure (**OPS-UTL-DWS-GEN-PRO-011-001** – see Appendix A) provides a summary of maintenance programs completed in respect of the City of Pembroke's drinking-water system along with Operational Performance Indicators for these programs. This procedure pertains to the City of Pembroke's drinking-water system infrastructure including raw water intake, water treatment, treated water storage and water distribution infrastructure.

The City of Pembroke's Department of Operations has established several infrastructure maintenance, rehabilitation and renewal programs to protect the integrity of its drinking water system infrastructure and the quality of its drinking water. Infrastructure maintenance programs are completed according to the levels of service outlined in **DWQMS Infrastructure, Maintenance, Rehabilitation and Renewal (OPS-UTL-DWS-GEN-PRO-011-001).**

The City has established Operational Performance Indicators as a means of ensuring the continued performance of its infrastructure and the effectiveness of its maintenance programs. **DWQMS Infrastructure, Maintenance, Rehabilitation and Renewal (OPS-UTL-DWS-GEN-PRO-011-001)** includes a summary of the Operational Performance Indicators used to assess the effectiveness of DWS maintenance programs. Operational Performance Indicators are established based on unexpected failures in infrastructure, and do not include deficiencies discovered during the completion of routine maintenance programs.

The DWS Operating Authority may choose to undertake infrastructure rehabilitation activities if these activities are expected to extend the useful life of the infrastructure at a cost that is reasonable to the Operating Authority. Alternatively, renewal activities may be implemented to address significant issues with infrastructure performance. A cost-benefit analysis may be used as a basis for determining whether rehabilitation is favoured over renewal of the infrastructure in question. Rehabilitation and renewal activities are managed under the Department's Capital Budgeting program and are thus examined during annual DWQMS Infrastructure Reviews. Results of DWQMS Infrastructure Reviews are communicated to the Owner through the DWQMS Management Review (see **DWQMS Review and Provision of Infrastructure, OPS-UTL-DWS-GEN-PRO-010-001**).

16.0 Sampling, Testing and Monitoring

The **DWQMS Sampling, Testing and Monitoring** procedure (**OPS-UTL-DWS-GEN-PRO-012-001** – see Appendix A) applies to all sampling, testing and monitoring conducted or delegated by the City of Pembroke's Operating Authority as required by the applicable regulations and/or for the operation of the drinking water system. This procedure describes the required water system sampling, testing and monitoring activities completed by City of Pembroke's Operating Authority Staff, including the types and numbers of samples required, frequency of sampling and Standard Operating Guidelines to be followed.

The minimum sampling and monitoring requirements specified in O. Reg. 170/03 for the City's drinking-water system are identified in **DWQMS Sampling, Testing and Monitoring** procedure **(OPS-UTL-DWS-GEN-PRO-012-001).** As per O. Reg. 170/03, selected samples are required to be taken at a point in the system where conditions are most challenging (if applicable). Where this is a requirement for the sample in question, sample location conditions are also specified in the procedure.

Samples not specifically required by the Regulation but that are required for other reasons (i.e., water treatment process control, distribution system construction or repairs, response to customer complaints) are also identified in **DWQMS Sampling, Testing and Monitoring (OPS-UTL-DWS-GEN-PRO-012-001).**

The City's contracted Accredited Testing Laboratory provides immediate oral notification to the City in the event of an adverse test result. The City then provides immediate oral notification to the Renfrew County & District Health Unit and the Ministry of the Environment, Conservation and Parks Spills Action Centre. Additional reporting requirements, including communication of adverse test results to the Owner, are documented in **Adverse Water Quality Incident Reporting and Corrective Action (OPS-UTL-DWS-GEN-SOP-012-001).**

The Drinking Water System Annual Report is provided to the Owner by March 31st of every year. The Annual Report summarizes drinking water sampling and testing results for the previous calendar year.

17.0 Measurement and Recording Equipment Calibration and Maintenance

The **DWQMS Measurement and Recording Equipment Calibration and Maintenance** procedure (**OPS-UTL-DWS-GEN-PRO-013-001** – see Appendix A) outlines requirements for the calibration and verification of measurement and recording equipment used for sampling, testing and monitoring of the DWS.

Measurement, monitoring and recording devices owned by the City of Pembroke and used in Water Treatment and Distribution Operations are subject to periodic calibration by Operating Authority Staff and to calibration by the manufacturer, if required. The **DWQMS Measurement and Recording Equipment Calibration and Maintenance** procedure **(OPS-UTL-DWS-GEN-PRO-013-001)** identifies the measurement and recording equipment used by the Operating Authority in respect of the drinking water system and outlines the associated calibration requirements for each piece of equipment including calibration frequency and relevant calibration procedures, where applicable.

18.0 Emergency Management

The purpose of **DWQMS Emergency Management (OPS-UTL-DWS-GEN-PRO-014-001** – see Appendix A) procedure is to identify the City's **Emergency Response Plan for Water Operations (OPS-UTL-DWS-GEN-MAN-014-001)**, to specify training and testing requirements for this Plan, and to outline emergency communication protocols and emergency contacts.

The **Emergency Response Plan for Water Operations (OPS-UTL-DWS-GEN-MAN-014-001** – see Appendix D) includes detailed emergency response procedures for identified potential emergency events. This **Emergency Response Plan** is included as Appendix D to this Operational Plan. Communication protocols for each emergency scenario are embedded in the respective emergency response procedures.

The **Emergency Response Plan for Water Operations (OPS-UTL-DWS-GEN-MAN-014-001)** includes contact information for personnel who may need to be contacted in an emergency. The list includes contact information for both Operating Authority staff and external parties.

Emergency Response Plan training requirements for general Operating Authority staff, staff with responsibilities for response, and contractors/visitors are outlined **in DWQMS Emergency Management (OPS-UTL-DWS-GEN-PRO-014-001).** On an annual basis, at least one emergency response procedure contained within the **Emergency Response Plan for Water Operations (OPS-UTL-DWS-GEN-MAN-014-001)** is selected for review and testing.

The **Emergency Response Plan for Water Operations (OPS-UTL-DWS-GEN-MAN-014-001)** is reviewed and updated as required in alignment with established document control requirements, periodic testing activities, post-emergency debriefings, and/or any applicable legislative/regulatory changes.

19.0 Internal Audits

A procedure has been created to describe the City of Pembroke's DWQMS Internal Auditing Program & associated processes to evaluate the conformity of the City of Pembroke DWQMS with the requirements of the Drinking Water Quality Management Standard. The **DWQMS Internal Auditing** procedure (**OPS-UTL-DWS-GEN-PRO-015-001** – see Appendix A) documents required activities & processes relating to the planning, execution and documentation of DWQMS Internal Audits, including recording of non-conformances and reporting of results to Top Management and the Owner.

DWQMS Internal Auditors are appointed to the Internal Audit Team by the DWQMS Representative and must achieve and maintain defined competency requirements including the following:

- Internal Auditors must possess an understanding of both the requirements and the intent of the DWQMS Standard;
- Internal Auditors must be competent (i.e., must receive Internal Auditor Training);
- Internal Auditors should have a good knowledge of the drinking water system operation and of drinking water quality requirements;
- Internal Auditors must be familiar with the Department of Operations' DWQMS auditing procedures and protocols.

The Lead Auditor (or an Internal Audit Team delegate) and Supervisor Drinking Water Treatment work together to plan and execute the annual DWQMS Internal Audit with the assistance of the Internal Audit Team. The role of Lead Auditor can be fulfilled by the Supervisor Drinking Water Treatment if desired. Internal Auditors must remain objective and impartial throughout the audit process, and cannot audit their own work or work areas.

Audit conclusions may identify actual or potential non-conformances in current operations or processes, indicating the need for corrective action or preventive action, respectively. Auditors may also suggest potential improvement initiatives. Actual and potential non-conformances must be documented and resolved according to the Operating Authority's defined Continual Improvement process (refer to Section 21.0 of this Operational Plan). Completion and effectiveness of corrective and preventive actions are verified by the Lead Auditor or an Internal Audit Team delegate.

Upon completion of scheduled internal audits, the Supervisor Drinking Water Treatment (or designate) reviews audit findings and compiles the information for presentation to Top Management as part of the annual DWQMS Management Review (refer to Section 20.0 of this Operational Plan). Audit findings must be considered in future relevant audits.

The City of Pembroke's DWQMS must be audited once every 12 months.

20.0 Management Review

A **DWQMS Management Review** procedure (**OPS-UTL-DWS-GEN-PRO-016-001** – see Appendix A) has been developed to document the process followed by Top Management and Operating Authority Supervisors in planning, executing and documenting DWQMS Management Reviews, including provision of feedback to the Operating Authority and reporting of review results to the Owner. The Management Review process ensures that all levels of the organizational structure are kept informed and aware of the DWQMS and DWS performance.

The DWQMS Representative has a significant role in the DWQMS Management Review process, compiling all required input data for presentation to Top Management and attending Management Review meetings as a facilitator. (Required inputs to Management Review are listed in **DWQMS Management Review (OPS-UTL-DWS-GEN-PRO-016-001).** Other City staff may be invited to assist in presenting information to the Management Review Team, or in reviewing the information presented, where they offer additional expertise or insight regarding the subject matter. Top Management and Operating Authority Supervisors are responsible for reviewing the input materials presented and generating outputs as specified in **DWQMS Management Review (OPS-UTL-DWS-GEN-PRO-016-001).**

Management Review meetings may be conducted as a series of smaller meetings over the course of a calendar year, with one Annual General Meeting to summarize all findings and ensure that potential relationships between review inputs are examined. All required review inputs and agenda items are addressed over the course of the year.

DWQMS Management Review outputs must be documented and retained as proof of completion, and results of the Management Review must be communicated to the Owner.

21.0 Continual Improvement

The **DWQMS Preventive & Corrective Action** procedure (**OPS-UTL-DWS-GEN-PRO-017-001** – see Appendix A) was developed to document the process followed to ensure effective resolution of DWQMS non-conformances. This process is used to address both potential and actual non-conformances and includes root cause analysis, identification and implementation of preventive or corrective actions, and verification of their effectiveness.

The handling of Adverse Water Quality Incidents (AWQIs) is not included in the scope of the **DWQMS Preventive & Corrective Action procedure (OPS-UTL-DWS-GEN-PRO-017-001)**. A separate procedure has been developed to document processes for addressing these occurrences; refer to **Adverse Water Quality Incident Reporting and Corrective Action (OPS-UTL-DWS-GEN-SOP-012-001).**

Potential and actual DWQMS non-conformances are identified through several different means, including but not limited to DWQMS audits, internal and external communication, monitoring and measurement of DWQMS performance, employee observations/suggestions, and DWQMS Management Reviews. The non-conformance is documented on a **DWQMS Preventive & Corrective Action Request Form (OPS-UTL-DWS-GEN-FRM-017-001)**, and this form is used to document the Root Cause Analysis, the development & implementation of the Preventive or Corrective Action Plan, and follow-up verification activities. Designated Operating Authority Staff may be delegated to implement preventive or corrective actions. The Supervisor Drinking Water Treatment (or designate) verifies the effectiveness of the preventive or corrective action. The DWQMS Representative (or designate) is responsible for approving and closing DWQMS Preventive and Corrective Requests and will only do so once the effectiveness of the implemented solution has been verified by the Supervisor Drinking Water Treatment.

The Supervisor Drinking Water Treatment retains completed documentation of DWQMS Preventive & Corrective Action Requests and generates an annual summary of the status of non-conformances, preventive actions and corrective actions for presentation as an input to DWQMS Management Reviews.