STRATEGIC ASSET MANAGEMENT POLICY



HEMSON Consulting Ltd.

TABLE OF CONTENTS

1.0	BACKGROUND & PURPOSE	2
	1.1 Purpose	
2.0	ALIGNMENT WITH MUNICIPAL POLICIES	
	Purpose of the Asset Management Plan (AMP) Support of Municipal Plans and Policies	
3.0	GUIDING PRINCIPLES	8
4.0	ALIGNMENT WITH LAND USE PLANNING	10
5.0	ASSET MANAGEMENT RESPONSIBILITY	13
6.0	MUNICIPAL BUDGET PROCESS	16
7.0	COMMITMENT TO CONSIDER CLIMATE CHANGE IN ASSET MANAGEMENT PLANNING	19
8.0	COUNCIL AND PUBLIC INVOLVEMENT	21
9.0	CONTINUOUS IMPROVEMENT	22

1.0 BACKGROUND & PURPOSE

In 2015, the Province on Ontario established the *Infrastructure for Jobs and Prosperity Act*. The purpose of this Act is to establish mechanisms to encourage principled, evidence-based and strategic long-term infrastructure planning that supports job creation and training opportunities, economic growth, protection of the environment, and incorporate design excellence into infrastructure planning.

In December 2017, *Ontario Regulation 588/17 Asset Management Planning for Municipal Infrastructure* (O. Reg. 588/17) was passed under the *Infrastructure for Jobs and Prosperity Act*. The regulation aims to provide a more standardized framework to facilitate asset management planning for Ontario municipalities. One of the requirements of the regulations is to develop a Strategic Asset Management Policy (SAMP) which will help the Township document the relationship between the Asset Management Plan (AMP) and existing policies and practices as well as provide guidance for future capital investment decisions. The Strategic Asset Management Policy is mandated to be in place by July 1st 2019 and be updated at least every 5 years. As such, this policy aims to provide a framework for asset management planning in North Kawartha and to meet O. Reg. 588/17 requirements.

1.1 Purpose

The purpose of this policy is to provide the Township with clear guidelines and processes to achieve the following asset management objectives:

- Align the AMP with existing and future plans and policies to help inform the Township's overall capital investment decision making process and budget process.
- Ensure the asset management plan is incorporated into the following municipal processes:
 - Annual budgeting; and
 - Financial plans.
- Commit to integrate asset management planning that:
 - Co-ordinates infrastructure planning with municipal neighbours and upper levels of government;
 - Provides opportunity for North Kawartha residents to give input on asset management matters; and
 - Incorporates long-term planning for climate change mitigation and adaptation where possible.

1.2 Guide to the Township's Strategic Asset Management Policy

Each section of the Strategic Asset Management Policy (SAMP) outlines the methods the Township is committed to employ in order to achieve the policy objectives set out in Ontario Regulation 588/17. Furthermore, to provide an easy to follow and transparent process, the SAMP policies have been provided in orange boxes. The policies have been complemented with action items required to complete the policies (these action items are found in blue boxes).

It is important to note, that the SAMP provides the Township with high level guiding principles of asset management, and it does not speak to the more technical information on infrastructure needs and long term funding strategies. The Asset Management Plan (AMP) on the other hand contains technical information on the state of current infrastructure, levels of service, maintenance strategies, long-term capital needs and funding strategy scenarios. The AMP document is also complemented by a financial model for staff use and the document will be issued under separate cover. Both the SAMP and the AMP are not intended to replace the Township's decision making process but are important tools to help inform it.

2.0 ALIGNMENT WITH MUNICIPAL POLICIES

The Township's Asset Management Plan (AMP) is intended to be a tool to help guide capital investment decisions and optimize service delivery. The AMP must therefore be in alignment with other Municipal policies and strategic objectives.

2.1 Purpose of the Asset Management Plan (AMP)

The AMP provides Council and staff with a long-term guide to inform capital investment decisions, an important component to deliver responsible government. The AMP documents the information needed for the Township to make evidence based infrastructure budgeting decisions and is intended to be a technical document which includes:

- Condition of infrastructure assets;
- Current and target levels of service of the Township's infrastructure;
- Planned actions to ensure assets are providing the expected levels of service;
- Long-term capital and financial needs; and,
- Funding strategy scenarios to implement planned actions and address capital needs.

The purpose of the AMP therefore aligns with the Township's core purpose:

Provide leadership, education, infrastructure and cost effective resources to ensure sustainable rural and urban growth.

Source: Township of North Kawartha Strategic Plan (2013)

The AMP is a tool to complement the budget process and is a living document which should be reviewed on a regular basis. Finally, the AMP incorporates road condition assessments obtained through the 2012 Road Needs Study.

2.2 Support of Municipal Plans and Policies

The AMP has been developed to support the overall operational framework of the Township and support key policies and plans. A summary is provided in Table 1 below.

Table 1 Relationship of Asset Management Plan with Other Municipal Supporting Plans and Policies				
Policy/Plan	Description			
Township of North Kawartha Strategic Plan (2017)	 The Township's Strategic Plan outlines specific strategies involving the AMP: One of the Plan's four strategic goals is to invest in municipal infrastructure by ensuring existing infrastructure is being sustained, planning infrastructure to demographic needs, and exploring complete/communities and street-scaping. A key strategic action to support this goal is to "complete asset management plans for all departments" (pg. 6). 			
North Kawartha Comprehensive Zoning By-law 26-2013	 The Township's Zoning By-law is intended to control the use of land and the erection or use of buildings or structures to conform with the policies and guidelines set by the Township. The AMP aligns with the Zoning By-law by providing a guiding tool to identify infrastructure lifecycle needs as the Township develops over time. 			
Peterborough Area Climate Change Action Plan	 This plan for the Greater Peterborough Area represents an integrated plan to deal with greenhouse gas emissions, fossil fuel usage, energy consumption, and climate change adaptation. The plan tracks North Kawartha's carbon emissions by source, and aligns with the AMP requirements to consider climate change vulnerabilities and adaptation opportunities. 			
County of Peterborough Official Plan (2017)	 The County's Official Plan offers direction and vision for lower-tier Townships to follow when engaging in asset management planning. For instance, the Plan sets out the time frame off which lower-tiers must base their infrastructure planning. The Official Plan also outlines objectives and policies related to asset classes such as roads and stormwater infrastructure. 			
Annual Budget Process	 The annual budget for both operating and capital are done on a yearly basis. The AMP will specifically support evaluation of capital budget projects by establishing priority assets over the short to medium term. This will help the Township make informed capital investment decisions given limited funding availabilities. 			
Procurement Policy By-law 2014- 120	 The purpose of the By-law is to ensure that all purchases provide best value for ratepayers, and promote an open and honest procurement program that is fair, impartial and transparent. The policy ensures that purchase and acquisition of assets or goods and services are consistent with competitive standards and funding availability. 			

Table 1 Relationship of Asset Management Plan with Other Municipal Supporting Plans and Policies				
Policy/Plan	Description			
Road Needs Study (2012)	 The Road Needs Study completed in 2012 provides specific guidance and condition assessments for the Township's roads. The Townshi[has 158 lane km of roads where 35 lane km are paved. The plan includes recommended planned capital improvements needed over the longer term. This analysis is incorporated in the corporate wide AMP. 			
Township of North Kawartha Accessibility Plan 2014-2019	• The Accessibility Plan lays out a 5 year Action Plan to meet the requirements of the <i>Accessibility for Ontarians with Disabilities Act</i> . Some aspects of compliance relate to asset management; for instance, retrofitting infrastructure components such as facility doors and ramps and outlining design guidelines for public spaces.			
Municipal Emergency Response Plan (By-law 2014-96 Schedule A)	 The Emergency Response Plan sets out the roles and responsibilities of various municipal employees and community partners in the case of an emergency. Good asset management can help the Township prevent and prepare for emergencies and better manage emergency responses. 			

Strategic Policy:

- 1. Council and staff will review the SAMP on a regular basis (minimum every 5 years) and ensure that the AMP is incorporated and used to support other municipal strategies and practices which involve the management or investment of new or existing capital assets.
- 2. Asset management planning will not occur in isolation of other municipal plans and policies, but will be used to inform the strategic decisions related to capital investments based on the lifecycle analysis presented in the AMP. In the case of new capital recommendations that are not included in the existing AMP, the assumptions in the AMP will be used to perform a lifecycle analysis of those assets.
- 3. This applies to the plans presented in Table 1 and any future plans that require decisions on infrastructure investment.

3.0 GUIDING PRINCIPLES

As required by Section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015,* the Township of North Kawartha is committed to adhere to the following principles:

- 1. Infrastructure planning and investment should take a long-term view, and decision-makers should take into account the needs of Ontarians by being mindful of, among other things, demographic and economic trends in Ontario.
- 2. Infrastructure planning and investment should take into account any applicable budgets or fiscal plans, such as fiscal plans released under the *Fiscal Transparency and Accountability Act, 2004* and budgets adopted under Part VII of the *Municipal Act, 2001*.
- 3. Infrastructure priorities should be clearly identified in order to better inform investment decisions respecting infrastructure.
- 4. Infrastructure planning and investment should ensure the continued provision of core public services, such as health care and education.
- 5. Infrastructure planning and investment should promote economic competitiveness, productivity, job creation and training opportunities.
- 6. Infrastructure planning and investment should ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
- 7. Infrastructure planning and investment should foster innovation by creating opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques and practices developed in Ontario.
- 8. Infrastructure planning and investment should be evidence based and transparent, and, subject to any restrictions or prohibitions under an Act or otherwise by law on the collection, use or disclosure of information,
 - i. Investment decisions respecting infrastructure should be made on the basis of information that is either publicly available or is made available to the public, and
 - ii. Information with implications for infrastructure planning should be shared between the Government and broader public sector entities, and should factor into investment decisions respecting infrastructure.
- 9. Where provincial or municipal plans or strategies have been established in Ontario, under an Act or otherwise, but do not bind or apply to the Government or the broader public sector entity, as the case may be, the Government or broader public sector entity should nevertheless be mindful of those plans and strategies and make investment decisions respecting infrastructure that support them, to the extent that they are relevant. Examples of plans and strategies to which this paragraph may apply include,

- i. Policy statements issued under section 3 of the *Planning Act*, and provincial plans as defined by that Act.
- 10. Infrastructure planning and investment should promote accessibility for persons with disabilities.
- 11. Infrastructure planning and investment should minimize the impact of infrastructure on the environment and respect and help maintain ecological and biological diversity, and infrastructure should be designed to be resilient to the effects of climate change.
- 12. Infrastructure planning and investment should endeavour to make use of acceptable recycled aggregates.
- 13. Infrastructure planning and investment should promote community benefits, being the supplementary social and economic benefits arising from an infrastructure project that are intended to improve the well-being of a community affected by the project, such as local job creation and training opportunities (including for apprentices, within the meaning of section 9 of the Act), improvement of public space within the community, and any specific benefits identified by the community.
- 14. Any other principles that may be prescribed for the Government or the broader public sector entity, as the case may be.

4.0 ALIGNMENT WITH LAND USE PLANNING

The alignment of municipal planning initiatives and asset management is particularly important when considering overall strategic objectives and resources. The Building & Planning Department adheres to Provincial land-use legislation and incorporates the key policy principles that are important to the Township. Figure 1 below outlines the overarching link between land use planning practices and the effect of those decisions on the emplacement of infrastructure and how those assets are managed over the full life-cycle. The Township's land use planning is aligned with asset management practices as planning for infrastructure is considered through the planning process.

Population projections,
 Land supply,
 Amount, type & location of development.
 Engineering
 Infrastructure to service development,
 Responsible for the general operation, maintenance and replacement of assets.
 Provides funding for capital,
 Provides funding for operations & maintenance.

Figure 1
Link Between Land Use and Infrastructure Planning

The Township's asset management program aligns with the key planning documents outlined below:

1. Provincial Policy Statement

The *Provincial Policy Statement* (PPS, 2014) is the statement of the Government's policies on land use planning. It applies Province-wide and provides clear policy direction on land use planning to promote strong communities, a strong economy, and a clean and healthy environment. Specifically related to asset management, the PPS has several policies related to the efficient use and management of land and infrastructure and ensuring infrastructure is financially viable over the lifecycle of the asset.

2. Zoning By-Law 26-2013

The Township's Zoning By-law is intended to control the use of land and the erection or use of buildings or structures to conform with the policies and guidelines set by the Township. The Zoning By-law is important as it ensures that the design and location of buildings and structures in the Township are compatible with existing and future infrastructure. It also provides the Township with a mechanism to enforce these policies and guidelines. Examples of the guidelines outlined in the Zoning By-law include:

- Prohibiting the enlargement of buildings into the water setback or within a floodplain.
- Regulating the height, bulk, location, size, floor area, spacing, character and use of buildings or structures.
- Regulating the minimum frontage and depth of a parcel of land and the portion of the area thereof that any building or structure may occupy.

3. Official Plan

The County of Peterborough Official Plan guides land use planning across the County, including the Township of North Kawartha. The County Plan also functions as the Official Plan for several lower tier Townships, including North Kawartha. Some of the key goals identified through the Official Plan relate to the overall principles of asset management. Specifically, the third component of the strategy is to "maintain and enhance the County's quality of life through managed orderly growth and development while considering the natural environment and watersheds as a basis for the management of future development." The plan's watershed strategic approach ensures that capital planning and land use planning protect the County's natural features while still allowing for social and economic development.

In addition, the Official Plan establishes the population growth forecasts for lower-tier Townships including North Kawartha, based on the projections found in the Growth Plan for the Greater Golden Horseshoe. Under the Growth Plan, the County must allocate its total forecasted growth among the lower-tier townships. North Kawartha is expected to accommodate 3.1 per cent of the County's growth between 2006 and 2031.

The Township is responsible for maintenance of its own assets including municipal facilities and roads and ensures the financial viability of Township owned infrastructure.

Strategic Policy:

1. The Township will aim to align asset management planning with all Provincial land-use planning initiatives as well as the Zoning By-law and County's Official Plan.



Action Items: Land Use Planning and Asset Management

- The AMP will consider the growth outlook and the demand for services consistent with projections in the Peterborough County Official Plan and the Growth Plan for the Greater Golden Horseshoe.
- The Township will continue to ensure land use planning and asset management planning are consistent with the principles set out in the Zoning By-law and the County's Official Plan.

5.0 ASSET MANAGEMENT RESPONSIBILITY

The Township is committed to integrating asset management planning into capital investment decision making. For this reason, the Township of North Kawartha will establish an Asset Management Committee made up of key departmental heads that is expected to meet on a regular basis. The purpose of the Committee is as follows:

- Discuss asset management challenges and propose potential solutions as they relate to existing assets that need to be prioritized.
- Discuss prioritization strategies for assets to be included in the capital budget. It is especially important that all departments are in agreement as to which assets should be prioritized.
- Discuss and define levels of service and level of service targets and their financial implications. Level of service targets need to be defined to meet the requirements of O. Reg. 588/17.
- Address data or information needs of each department to update the asset register and asset management plan.
- Review condition assessment programs and annual state of the local infrastructure report cards.
- Ensure that relevant asset management information is communicated to Council.

The Treasurer will serve as the executive lead for the Asset Management Committee. The Asset Management Committee can be a standalone committee that meets at least twice a year. Figure 2 provides an overview of the Asset Management Committee and responsibilities of each member.

Strategic Policy:

- 1. The Township will explore implementing a corporate-wide asset management program in an effort to improve capital investment decision making.
- 2. The Township's AMP will be administered by the Asset Management Committee.
- 3. The Township will maintain a comprehensive asset registry and inventory of all municipal capital assets.

Action Items to achieve Strategic Policy

- Create internal working group and designate Treasurer to serve as the executive lead for the Asset Management Committee. The Asset Management Committee should meet at least twice a year.
- The Public Works and Infrastructure Manager will update the asset registry (Excel Financial Model) on an annual basis. The registry should include, at a minimum: ID, location, value, estimated service life, year of acquisition, and replacement costs.

Figure 2 Asset Management Committee

Municipal Council

• Responsible for the approval of capital budget and infrastructure investment decisions.

Treasurer

- Will act as the executive lead for all asset management related matters.
- Will be direct liaison to Council and responsible for reporting on asset management matters to Council on a regular basis.
- Responsible for keeping Council aware of gaps and challenges on asset management matters.
- Will act as the asset management champion.
- Responsible for maintaining an up to date asset register.
- Responsible for technical and financial analysis required to update the AMP.

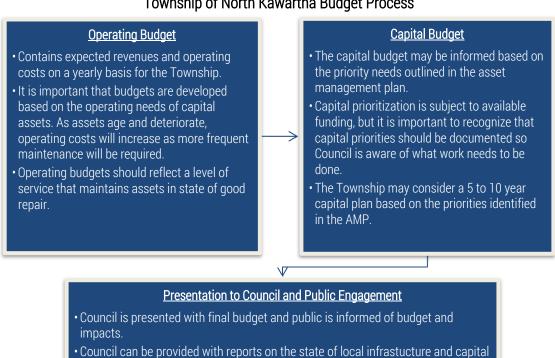
Members of the Asset Management Committee

- Includes key staff from the Fire Department, Roads Department, Parks & Recreation/Waste Management Department, Building and Planning Department and Administration Department.
- Responsible for providing the executive lead with information needed to continue to update and refine the asset management plan.
- Responsible for identifying gaps and areas of concern related to asset conditions.
- Responsible for providing potential solutions on how to address gaps.

6.0 MUNICIPAL BUDGET PROCESS

The budget process provides the Township with a method of prioritizing and allocating resources, establishing service levels, and finding a balance between taxation and cost recovery. It requires Council and staff to perform a thorough examination of services and costs that should ultimately achieve an optimum service level given available funding. The Township does not have a formal budget process document, however every year the operating and capital budgets are developed by staff based on Council direction. It is important to recognize that the AMP is a tool to help inform the Township on capital investments needs. For this reason, Figure 3 provides a flow chart of how the AMP can be used to inform budget decisions.

Figure 3
Township of North Kawartha Budget Process



To further enhance the capital budget the Township will develop a long-term capital plan for a minimum of 5 to 10 years. Expenditures and projects in the capital plan will also be categorized based on the following project categories:

priorities so they are aware of the longer term outlook.

 Non-infrastructure solutions: relates to activities which are not necessarily infrastructure related in nature but can create cost efficiencies and improve asset management in the Township. Examples include asset management training for staff, asset management software or performing asset condition assessments.

- Renewal/Rehabilitation Activities: relates to activities necessary for assets to continue
 operating in state of good repair. This includes items such as crack sealing for roads,
 rebuilding engines on vehicles or roof repairs for buildings. Gravel roads are not
 reconstructed but are maintained on an ongoing basis. Maintenance for gravel roads
 would be included in this category.
- Replacement Activities: this includes activities related to total replacement such as replacing a vehicle with new vehicle or reconstruction of a road.
- Disposal Activities: relates to activities to dispose of assets such as safe disposal of hybrid vehicle batteries. For simplicity, this can be included as part of replacement activities.

Strategic Policy:

- 1. The Township will explore opportunities to improve its budget process which considers municipal infrastructure repair and replacement activities as identified through the AMP.
- 2. The Township will integrate the AMP with long-term financial planning and budgeting strategies where feasible.
- 3. The Township will explore opportunities for asset management planning jointly with the County and neighbouring municipalities wherever there are joint benefits or costs savings that can be achieved by integrating capital projects and related work.
- 4. The Township will aim to utilize the range of funding mechanisms available to facilitate the acquisition and emplacement of capital infrastructure.

Action Items to achieve Strategic Policy

The Township will continue to develop the annual budgeting process specifically to improve the annual capital plan.

- Structural conditions can be informed through condition information in the asset registry as well as replacement schedule in the AMP.
- The Township will look to improve on the budget process by developing a long-term capital budget for a minimum of 5 to 10 years and categorizing projects and costs by non-infrastructure solutions, renewal/rehabilitation, and replacement and disposal activities.
- Report to Council regarding key asset management outcomes and trends to ensure Council is well informed in the decision making process. (see section 8)

Capitalization Threshold

The Township has defined the capitalization thresholds for accounting of tangible capital assets to meet PSAB reporting requirements through a Tangible Capital Asset Policy as outlined in Schedule "A" of By-law 99/08. A brief overview of Schedule "A" of By-law 99/08 is provided below:

- The capitalization thresholds for all asset categories have been defined in detail by asset category (i.e. buildings, vehicles, linear assets, etc.).
- The capitalization thresholds range from \$5,000 for computer hardware and software to \$25,000 for linear assets and buildings.
- The capitalization thresholds for assets included in the AMP are consistent with Schedule "A" of By-law 99/08 as these assets have been defined based on TCA information.

Strategic Policy:

- The Township will maintain its capitalization threshold for assets consistent with Schedule "A" of By-law 99/08.
- 2. The Township will continue to track assets for which full asset information is not available, however the Township is committed to acquire this information over time.

7.0 COMMITMENT TO CONSIDER CLIMATE CHANGE IN ASSET MANAGEMENT PLANNING

The Township recognizes that climate change will put additional stress on critical infrastructure. Increased frequency and intensity of rainfall and more frequent freeze-thaw cycles can cause soil instability and ground movement causing damage to roads. Furthermore, increased frequency of extreme weather events causes strain not just on linear infrastructure, but also on services critical to an emergency such as fire services, municipal facilities and others. Due to these factors, actions may be required to address vulnerabilities that may be caused by climate change.

Peterborough County, the City of Peterborough, eight lower-tier municipalities and two First Nation communities have coordinated to produce the Greater Peterborough Area Climate Change Action Plan. Through the plan, each community has adopted greenhouse gas reduction targets and will follow action plans to achieve the reductions in their respective communities. The Corporate Action Plan for North Kawartha includes strategies such as integrating climate change policies into the Official Plan and conducting vulnerability assessments to quantify the impact of expected climate change events. In relation to asset management planning, key Action Plan policies include:

- implementing a full lifecycle analysis costing for new buildings or major renovations to consider the sustainability of the building over its life;
- formalizing and delivering an equipment and vehicle preventative maintenance program on an ongoing basis; and
- replacing windows, doors and mechanical equipment with high efficiency options according to replacement schedules.

Strategic Policy:

- 1. The Township of North Kawartha may explore mitigating the effects of climate change on municipal infrastructure as outlined in its Corporate Action Plan.
- 2. The Township may choose to explore opportunities to adapt infrastructure to a changing climate, most notably through consideration of alternative and new technologies if costs and benefits are in line with Township objectives.



Action Item: Commitment to Consider Climate Change in Asset Management Planning

The Township may consider the following factors when planning for capital investment:

- Lifecycle costs associated with improving or replacing infrastructure to meet operational standards that mitigate the impacts of climate will be considered. This includes the costs of increased maintenance activities and the effects on levels of service.
- The Township may consider climate change impacts of changing weather patterns primarily on assets and services such as fire, facilities and roads.

8.0 COUNCIL AND PUBLIC INVOLVEMENT

Council and the public play key roles in the asset management process. Council is responsible for making decisions on infrastructure investments and prioritization, which ultimately impacts the services used and enjoyed by the public. Council's understanding of the infrastructure and fiscal challenges of the Township are crucial to the decision making process. As the Township's direct link to the public, it is important that Council is well informed.

Although Council is currently well-engaged throughout the budget process, additional reporting and education would be beneficial to ensure service levels are being achieved in the most fiscally responsible manner. Staff is primarily responsible for the work needed to maintain the information in the AMP up to date, including collecting data, maintaining data and determining the current and future needs of Township infrastructure.

Strategic Policy:

- 1. The Township will endeavour to be transparent by reporting the current and future infrastructure needs to Council and the public to maintain desired levels of service.
- 2. The Township will develop several "user-friendly" reporting metrics which can be used to communicate the existing state of asset management practices to residents and Council alike.

Action Items for Council Engagement

- As part of the annual budget, the Township will report to Council key asset management updates and trends.
 - State of the Local Infrastructure Report Card
 - Summary of Existing Levels of Service and future trends
 - Projection of the Cumulative Infrastructure Gap and funding shortfall.
- These reports can be developed through co-operation within the Asset Management Committee.

Action Items for Public Involvement

- Preceding the budget process, the Township is encouraged to hold a public education session on asset management. Specific items to discuss:
 - Existing Levels of Service and service expectations
 - State of the Local Infrastructure

9.0 CONTINUOUS IMPROVEMENT

The major premise of comprehensive corporate asset management is that an organization will seldom have perfect processes and data to manage the asset portfolio. Instead, the underlying culture of continuous improvement and reliability is its key to success. These improvements will be part of the Township's evolving Asset Management program.

The ISO 55000 tool provides a quantitative evaluation of the Township's asset management practices under four categories: Strategy, Assets (Technology and Physical), People, and Business Processes. The Township could evaluate each of the 39 focus areas against a scale of zero to five, where level five represents excellence within the focus area. The intention of the scale is not to achieve ISO 55000 certification, rather to use the tools available within the ISO framework as a guide. A copy of the Asset Management Maturity Scale is shown in Figure 4 below.

IAM Self-Assessment Methodology Plus Version 2.0 Developing Innocent Competent Optimising Excellent Maturity Level 0 Maturity Level 1 **Maturity Level 2 Maturity Level 3** The organisation The organisation The organisation The organisation The organisation can The organisation can demonstrate that it is systematically and demonstrate that it has not recognised has identified the can demonstrate need for this means of that it employs the leading the need for this systematicaly and consistently requirement and/ requirement, and systematically and practices, and or there is no there is evidence consistently consistently optimising its asset achieves maximum evidence of of intent to achieving the achieves relevant management value from the commitment to practice, in line with management of its out in ISO 55001. assets, in line with put it in place. can demonstrate the organisation's objectives and that these are being the organisation's objectives and operating context. progressed with credible and operating context. resourced plans in Figure 2 ISO 55001 Maturity Scale

Figure 4
Self Assessment Methodology - Asset Management

In addition to the quantitative evaluation of the Township's asset management practices, the Township should regularly review the confidence of existing data as well as its effectiveness integrating asset management activities into regular business processes. The Confidence Level Rating approach identified in Table 2 and 3 below will be used to identify what specific asset

categories/areas the Township can improve upon. The Confidence Level Rating is based on principles of the Ministry's Guide to Municipal Asset Management Plans, Federal Gas Tax Agreement Requirements, ISO 55000, and International Infrastructure Management Manual (IIMM).

	Table 2 Data Quality Confidence Grading System				
	Confidence Grade	Description			
5	Highly Reliable	Data based on sound records, procedure, investigations and analysis, documented properly and recognized as the best method of assessment.			
		Dataset is complete and estimated to be accurate +/- 2%.			
4	Reliable Data	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation.			
		Dataset is complete and estimated to be accurate +/- 10%.			
3	Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade 4 or 5 data is available.			
		Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated +/- 25%.			
2	Very Uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis.			
		Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy +/- 40%.			
1	Unknown	None or very little data held			

	Table 3 Process Effectiveness Confidence Grading System				
Confidence Grade		Description			
5	Highly Effective	 The organization's asset management activities are fully integrated and are being continuously improved upon. Asset management best practices are continuously adopted to consistently ensure the financial sustainability of assets over their full life-cycle. Asset management best practice concepts are fully rolled out and being practiced by all staff. 			
4	Effective	 The organization's asset management activities are fully effective and are being integrated throughout the business. Asset management best practice concepts are fully rolled out and being practiced by most staff. 			
3	Somewhat Effective	 The organization's asset management activities are developed, embedded and are becoming effective. Many asset management best practice concepts are rolled out and being practiced by many staff. 			
2	Ineffective	 The organization is developing its asset management activities and establishing them as Business as Usual. Some best practice concepts are rolled out and being practiced to a limited extent. 			
1	Unknown	 The organization is aware of the importance of asset management and is starting to apply this knowledge. Few best practice concepts are rolled out and to a limited extent 			

The Township can use the tables above to determine an "overall confidence level rating" which can then be correlated to the ISO 55000 State of Asset Management Maturity Scale outlined in Figure 4. The scores are reflective of the quality and type of data available, current processes and management strategies and can help the Township identify gaps in asset management data.

Strategic Policy:

- 1. The Township is committed to improve upon the existing asset management practices employed and will adopt best practices where applicable.
- 2. The Township will develop an AMP that incorporates all facets of Ontario Regulation 588/17 by 2024.
- 3. The Township will continue to evolve the asset management program to incorporate assets which have traditionally not been considered under the purview of asset management.

Action Items to achieve Strategic Policy

- The Township may consider undertaking an assessment of the Township's asset management practices against each of the 39 ISO 55000 focus areas. The results will be categorized in the context of the maturity scale identified in Figure 4.
- Set to achieve a score of 4 (competence) to 5 (excellence) for most of the categories over the next five years.
- Review data confidence for each service area/category annually.
- Review effectiveness of the asset management program and determine the degree activities are embedded into the process annually.
- Ensure an "Overall Confidence Level Rating" is produced annually so the results can be compared on a regular basis.
- The Township should continue to seek funding assistance and support from upper-tier governments to help facilitate the completion of the asset management program by 2024.