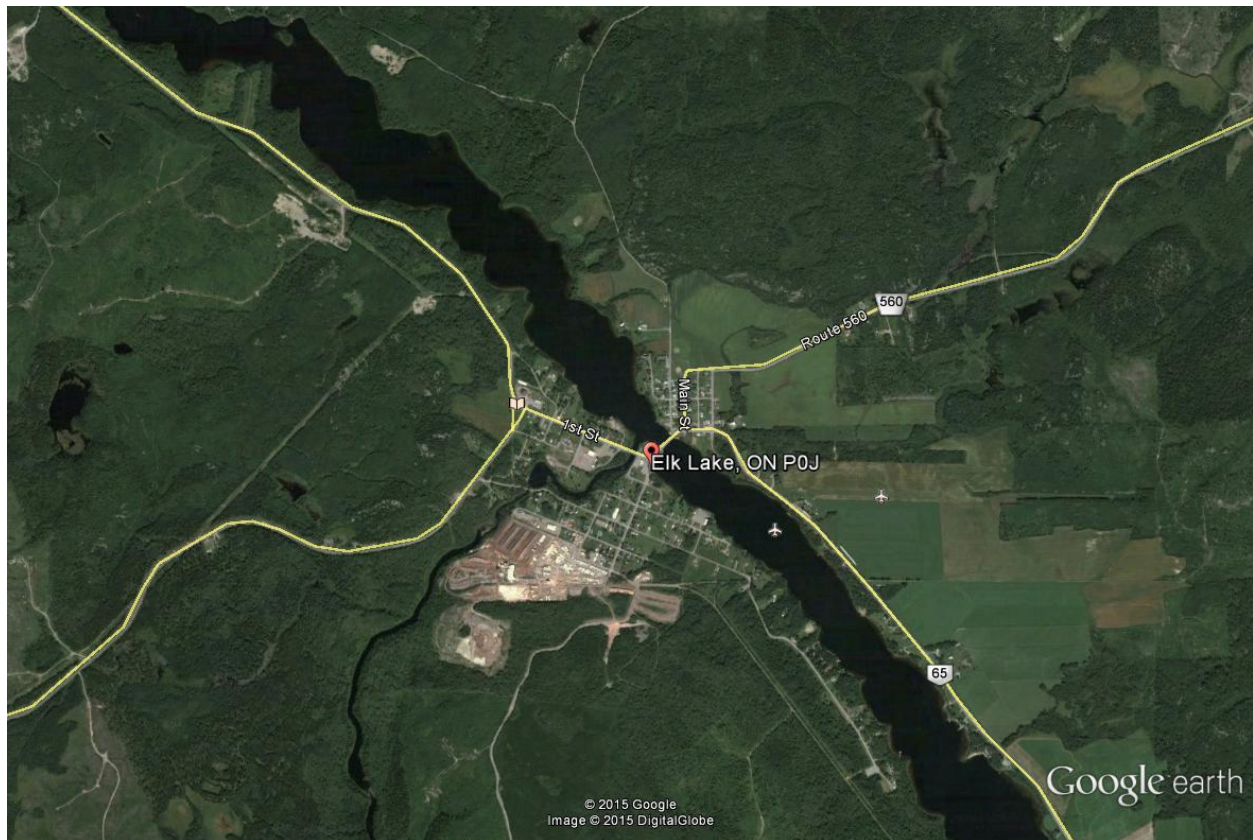


ASSET MANAGEMENT PLAN
for the
Corporation of the Township of James

Prepared by: The Elk Lake Community Forest
UPDATED June, 2025 by Township Staff



Asset Management Plan Township of James

Preamble

An asset management plan is a strategic document that states how a group of assets is to be managed over a period of time. The plan describes the Characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

An Integrated Asset Management Plan is similar however the integration refers to infrastructure that shares a common location within the utility corridor (e.g. roads, gutters, streetlights)

This asset management plan has the following sections:

1. Introduction
2. State of local infrastructure
3. Expected levels of service
4. Asset management strategy
5. Financing strategy
6. Recommendations
7. Policy

This Asset Management Plan builds on and compliments the existing Official Plan (as originally prepared and submitted to the Municipality May, 1983 and subsequently amended). It is also consistent with the Township's Asset Management Guidelines and Tangible Capital Asset Policy, as included in Appendix i.

The Asset Management Plan outlined in this report represents a forecast of the Municipality's infrastructure-related activities under a series of assumptions that are documented within the plan. The asset management plan does not represent a formal, multi-year budget for infrastructure acquisition and maintenance activities but rather a long-term strategy intended to guide future decisions of the Municipality and its elected officials and staff, recognizing that the approval of operating and capital budgets is undertaken as part of the Municipality's overall annual budgeting process.

Executive Summary

This Asset Management Plan builds on and compliments the existing Official Plan (as originally prepared and submitted to the Municipality May, 1983 and subsequently amended). It is also consistent with the Township's Asset Management Guidelines and Tangible Capital Asset Policy as included in Appendix i.

The Inventory of Tangible Assets identifies a broad range of assets with a total value of approximately \$6.3 million. This Asset Management Plan focuses on two key, high value assets, namely the Water Treatment Plant and Pine Street. Together these two assets comprise over 2/3 of the value of the Tangible Assets. The balance of the assets will continue to be maintained and/or replaced as needed.

The water treatment plan is owned and operated by the Township with support provided by the Ontario Clean Water Agency. (OCWA)

Pine Street is the only paved road in the municipality, and in addition to its use by residents, provides direct access to the Elk Lake Planing Mill (major sawmill owned by Interfor) for most of the inbound raw material and all of the outbound products.

The municipality has considered strategies for prolonging the lifespan of Pine Street, which experiences significant industrial use as a primary thoroughfare to the mill. The lifespan of the water treatment plan well exceeds the term of the plan, and the cost for exceeds the ability for the municipality to fund full replacement on its own. The need for replacement and the potential for government financial assistance will be evaluated at the appropriate time in the future.

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1. Introduction

Geographic and Demographic Scope

The township of James/Elk Lake is located in the Temiskaming District in Northeastern Ontario and is situated at the point where the Bear Creek (Makobe River) flows into the Montreal River. In the 2011 Census, Statistics Canada reported that the population of the Township was 424 people living in 253 dwellings. (Municipal staff indicated that the actual population is 470 individuals). In addition, the community is home to a small number of seasonal residents.

The community is referred to as both "The Corporation of the Township of James" (the legal entity) and more commonly as "Elk Lake" (the developed portion of the township).

The Township (as much of the Temiskaming District) was organized and incorporated in the early 1900s (1909) following the discovery of silver and the establishment of several mines in the area. With the emergence of the pulp and paper and softwood lumber industry in the mid and later 1900s, the forest industry plays a key role in the sustainability of the community. The Elk Lake Planing Mill (ELPM), a major sawmill is the largest single ratepayer in the community, employs approximately 150 full time people and is a major user of municipal services.

In addition to the forest industry, Elk Lake supports mining activities in Matachewan and areas west of the community and also boasts a number of tourist camps and lodges offering packages for the outdoor sports and nature enthusiast.

Figure 1. Location of the Township of James within Northeastern Ontario



Figure 2: Topography of Township of James

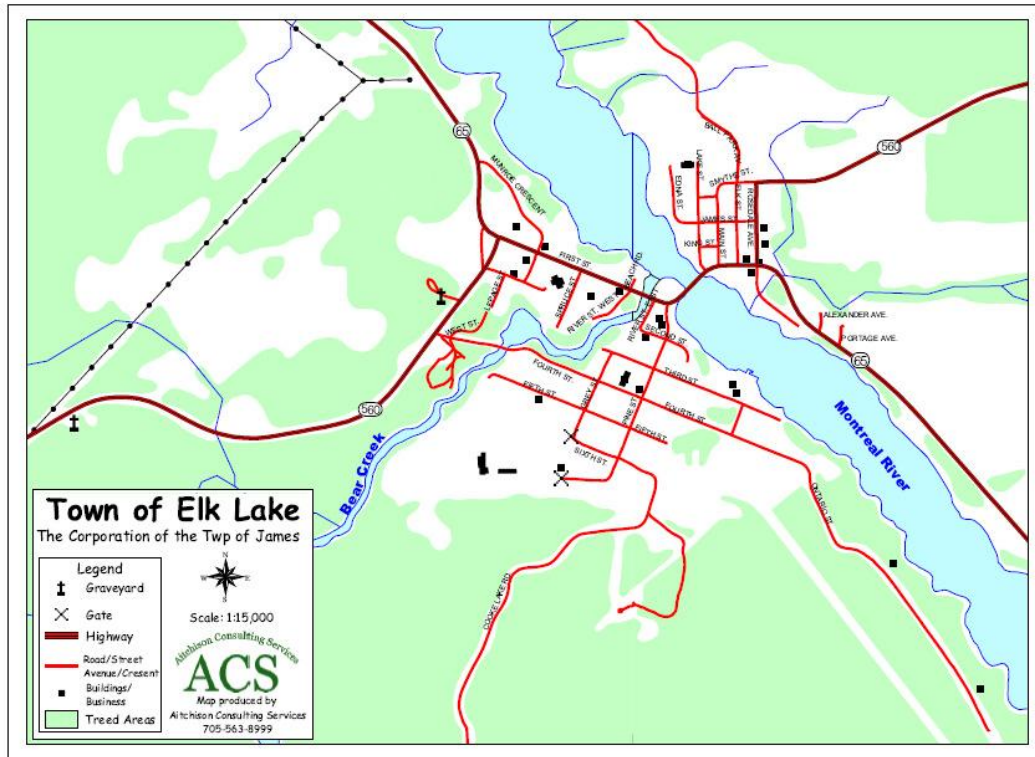


Figure 3. Developed Area of the Township of James/Elk Lake
Asset management planning defined:

Asset management planning is the process of making the best possible decisions regarding the acquisition, operating, maintaining, renewing, replacing and disposing of infrastructure assets. The objective of an asset management plan is to maximize benefits, manage risk and provide satisfactory levels of service to the public in a sustainable manner. In order to be effective, an asset management plan needs to be based on a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them.

Recognizing that funding for infrastructure acquisition and maintenance is often limited, a key element of an asset management plan is the setting of strategic priorities to optimize decision-making as to when and how to proceed with investments. The ultimate success or failure of an asset management plan is dependent on the associated financing strategy, which will identify and secure the funds necessary for asset management activities and allow the Municipality to move from planning to execution.

The Township of James is a relatively small community with limited financial and staff resources, with a challenging environment to pursue growth.

The Township recognizes that in order to sustain services and maintain the quality of life as desired for its residents and for the competitiveness of its businesses, it must manage the Municipality's assets cost effectively. For this reason, the Municipality is developing an asset management plan for its road network, equipment and buildings. Once the plan is developed for the various components of the infrastructure the municipality will assimilate and synthesize the information into a comprehensive plan.

The asset management plan is a comprehensive plan that inventories and assesses the infrastructure and develops a plan to best maintain the infrastructure. The plan must take into account timely maintenance and capital repairs in order to best preserve the asset, while maintaining the desired levels of service to the public. The plan takes a long view perspective on managing the asset through life cycle cost analysis in which timely maintenance and rehabilitation can save money in the long term. The plan outlines how to sustain the infrastructure and provides strategies on how to finance the operation, maintenance, renewal and expansion of the system.

The asset management plan covers a period of ten (10) years in which the plan will be updated every five (5) years.

This asset management plan was developed by the Elk Lake Community Forest with assistance from Kemp, Elliot and Blair Chartered Accountants (New Liskeard).

The primary goals of the Township of James are:

To provide a safe, healthy environment for the residents, visitors and businesses in the community which complements the natural scenic and attributes and opportunities for consumptive and non-consumptive natural resource utilization.

To maintain a level of service consistent with the legal requirements, needs and expectation of the community.

To create a fiscal environment which provides a low cost/high benefit to the community thereby encouraging new individuals, families and business to the community.

To ensure that financial obligations are met in appropriate manner by the existing population (does not unduly pass financial obligations to subsequent residents)

The Asset Management Plan will provide guidance to staff and Council of the Township and will assist in the preparation of annual budgets and work plans. More importantly, the AMP identifies appropriate strategies for the management of community's assets with life spans which may be in excess of 50 years, but with high replacement costs and variable maintenance costs.

The purpose of the asset management plan is to provide the staff and council with a strategic document that states how a group of assets is to be managed over a period of time. The plan describes the characteristics and condition of infrastructure assets, the

levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.

This management plan includes a wide range of assets. For the purpose of the organization of this report, assets have been categorized as follows (as per the organization of the Inventory of Tangible Capital Assets included in Appendix ii)

General Government (less than 0.5% of asset value and includes buildings, equipment and furniture associated with municipal operations)

Protection (approximately 3.7% of asset value and includes trucks, equipment associated with fire department)

Transportation (approximately 25.1% of asset value and includes roads, culverts, bridges streetlights)

Environmental (approximately 57.3% of asset value and includes water treatment plant, storm sewers)

Health (less than 1% of asset value and includes the vault cemetery)

Recreation (approximately 11.5% of asset values and includes Recreation facility building and library)

Planning (approximately 2.8% of asset value and includes the Township Industrial Park)

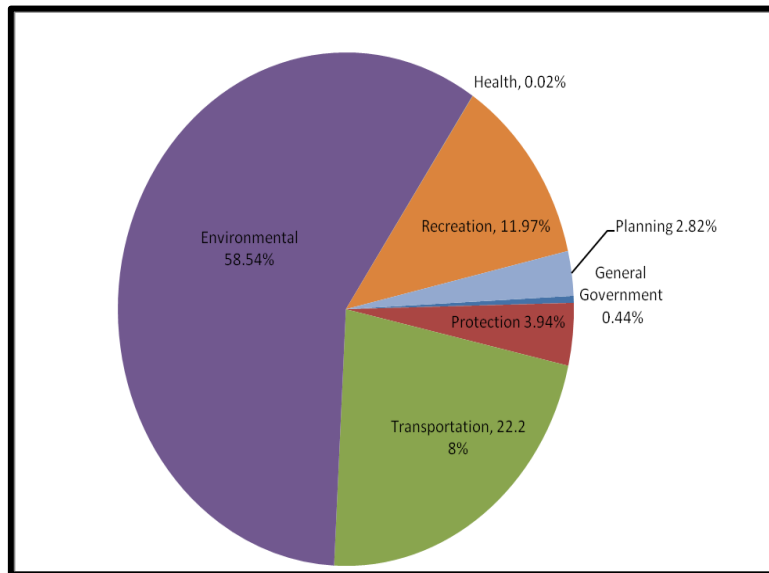


Figure 4: Distribution of Assets

Unique Challenges

Asset Management
Township of James

In the document ***“BUILDING TOGETHER; Guide for Municipal Asset Management Plans”***, the Ministry of Infrastructure identified that one of the guiding principles for the development of an asset management strategy is that ***“Some communities face unique challenges that require tailored solutions.”***

This is indeed the case in the instance of the Township of James. The community has a population of 470, and a single primary industry (Elk Lake Planing Mill) in which approximately 150 individuals are employed on a full time basis. Roughly 2/3 of the employees live outside of the municipality, however, the infrastructure required to support the mill (namely the construction and maintenance of an adequate route for log deliveries into the mill and product out of the mill and supply of water) puts significant pressure on the infrastructure.

The distribution of the value of municipal assets is highly concentrated in two specific assets. The value of the water treatment plant and Pine Street (the only paved road in the Municipality) are critical assets and make up approximately 65% of the total assets. Adding the additional non-paved roads results in the fact that over 80% of the municipal assets are made up of the water treatment plant and transportation assets.

Consistent with the distribution of total asset value, this Plan is heavily focussed on the two categories of assets. Within the transportation assets, the paved road is particularly addressed.

Duration of Plan

This plan will be updated accordingly to be compliant with O. Reg. 588/17: ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE.

Phase in Schedule:

July 1, 2019	Date for municipalities to have a finalized strategic asset management policy that promotes best practices and links asset management planning with budgeting, operations, maintenance and other municipal planning activities.
July 1, 2022	Date for municipalities to have an approved asset management plan for core assets (roads, bridges and culverts, water, wastewater and storm water management systems) that identifies current levels of service and the cost of maintaining those levels of service.
July 1, 2024	Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that identifies current levels of service and the cost of maintaining those levels of service.
July 1, 2025	Date for municipalities to have an approved asset management plan for all municipal infrastructure assets that builds upon the requirements set out in 2024. This includes an identification of proposed levels of service, what activities will be required to meet proposed levels of service, and a strategy to fund these activities.

Table 1-1: Ontario Regulation 588/17 Requirements

2. State of Existing Local Infrastructure

If requested the background information and reports used to inform the summary-level information for each asset category will be made available to the public. Public will be able to make an appointment to view these documents at the Township of James office. Documents will not be given out in paper or electronic copies.

The existing local infrastructure has been reasonably well maintained and continues to provide for the needs of the community.

2.1 Transportation

Roads & Bridges Inventory

The roads are categorized as:

Paved: 622 m (5.8 % of municipal road inventory in length)

Gravel: 1917 m (10.4 % of municipal road inventory in length)

Surface treated: 9551 m (83.8 % of municipal road inventory in length)

ROAD INVENTORY			
	Year Treated	Length (M)	Condition Rating
Paved			
Pine	2008	622	Fair
Subtotal Paved		622	
Gravel			
King Street	1909	61	Fair
River Street West	1909	166	Good
Alexander Road	1965	67	Fair
Portage Road	1976	67	Fair
Dump road	1982	756	Fair
Ball Park Ave from 2.7km-3.5 km mark		800	Good
Subtotal Gravel		1917	
Surface Treated			
Edna	1979	277	Good
James	1979	202	Good
Main	1982	440	Good
Elk	1982	298	Good
Fourth	1982	1700	Poor
Grey	1982	359	Fair
Lake	1982	528	Poor
Lepage	1982	120	Poor
Munroe	1982	424	Fair
River East	1982	108	Poor
Smythe	1982	44	Poor

Table 2.1: Road Inventory

Spruce	1982	239	Poor
West	2005	151	Poor
Cooke Lake	2005	100	Good
Sixth	2006	321	Poor
Ontario	2006	1202	Poor
Poplar	2006	117	Fair
Second	2006	212	Poor
Third	2009	753	Fair
Fifth	2009	754	Poor
Ontario	2009	1202	Poor
Business Prk			Good
Subtotal Surface Treated		9551	
TOTAL		12090	

Table 2.2 Bridge Inventory

Location	Year Purchased	Purchase Price	Useful Life	Years in Service	Expected Replacement Year	2022 Net Book Value	Replacement Cost
Bear Creek Bridge	2013	\$388,527.00	75	12	2088	\$327917	518,983.63

Transportation Condition Rating

The Descriptor of “Good”, “Fair” or “Poor” is indicated based on a physical inspection by our Public Works Staff as well as remaining life.

Asset condition must be assessed according to standard engineering practices. For bridge structures, condition is based on an analysis of bridge inspection reports.

With the exception of Pine Street, the condition of the assets have been assessed by municipal staff and prioritized accordingly.

Table 2.3 Road Condition Rating Description

Condition	Description
Good	Smooth with very few cracks or surface defects
Fair	Comfortable with intermittent cracks, surface deformations or surface cracks
Poor	Frequent cracks, surface deformation or surface defects

Accepted replacement values in 2025 dollars for the Township of James transportation assets are summarized in Table 2.4 below.

Type of Road	Cost Per Meter
Gravel Surface	\$9
Surface Treated	\$21.63
Paved	\$57.11

The above cost applies to one meter of road square but does not include ditching or storm sewers. Unit rates for road reconstruction were obtained from Exp Engineering in 2022. The Bank of Canada CP index was used to rate the cost for 2025

Transportation Useful Life

The expected service life of transportation assets are summarized in Table 2-5 below.

Asset	Useful Life
Paved Roads	30
Gravel Roads	7
Surface treated Roads	15
Bridges	75

Summary of Road Improvement Priorities (from Township Staff Reports)

As per the comments solicited from Township Public Works Department Staff, as included in Appendix iii, the following is a summary of road improvement priorities (ordered from highest to lowest)

- Grey
- Second Street West
- Fifth Street
- Munroe Crescent

This section is further supported by an inventory database of infrastructure assets covered by the plan, which includes basic asset information (e.g. asset type/class, physical description, location, expected useful life, etc.) and information that will require regular updates (e.g. replacement cost, condition, performance, etc.).

Surface Treated Roads

Location	Year	Cost to	Useful Life (years)	Year Treated	Cost to Treat	Anticipated Replacement Year	2022 Net	Replacement	Length
	Installed	Install					Book Value	Value	
Edna	1979	\$4,006.00	15			1994		\$34,902	277
James	1979	\$2,670.00	15	2022	\$9,463.45	2037	\$9,463.45	\$25,452.00	202
Main	1979	\$4,006.00	15	2022	\$25,272.32	2037	\$25,272.32	\$55,440.00	440
Elk	1982	\$5,413.00	15	2022	\$23,339.52	2037	\$23,339.52	\$37,548.00	298
Fifth	1982	\$2,165.00	15	2009	\$6,890.00	2024	\$888.81	\$95,004.00	754
Fourth	1982	\$9,689.00	15	2009	\$6,239.00	2024	\$805.00	\$214,200.00	1700
Grey	1982	\$2,237.00	15	2009	\$6,737.00	2024	\$535.00	\$45,234.00	359
Lake	1982	\$7,217.00	15	2022	\$21,826.10	2037	\$21,826.10	\$66,528.00	528
Lepage	1982	\$1,804.00	15			1997		\$15,120.00	120
Munroe	1982	\$6,477.00	15	2009	\$9,225.00	2024	\$1,190.02	\$53,424.00	424
River East	1982	\$1,804.00	15			1997		\$13,608.00	108
Smyth	1982	\$3,608.00	15	2022	\$14,131.00	2037	\$14,131.00	\$5,544.00	44
Spruce	1982	\$1,804.00	15			1997		\$30,114.00	239
Third	1982	\$3,969.00	15	2006	\$5,359.00	2021		\$94,878.00	753
West	1982	\$5,413.00	15			1997		\$19,026.00	151
Cooke Lake	2005	\$1,919.00	15			2020			
Sixth	2005	\$5,074.00	15	2009	\$5,627.00	2024	\$726.00	\$40,446.00	321
Ontario	2009	\$44,400.00	15	2016	\$84,036.00	2031	\$50,253.53	\$151,452.00	1202
Poplar	2006	\$4,649.00	15			2021		\$14,742.00	117
Second	2006	\$1,694.00	15			2021		\$26,712.00	212
Business Park	2009	\$4,210.00	15			2024	\$543.10		
TOTAL		\$124,228.00			\$218,145.39		\$148,973.85	\$1,039,374	8,249

Gravel Roads

Location	Year	Cost to	Useful Life (years)	Year Treated	Cost to Treat	Anticipated Replacement Year	2022 Net	Replacement	Length (m)
	Installed	Install					Book Value	Value	
King	1909		7					\$2,928.00	61
River	1909		7					\$7,968.00	166
Alexander	1965	\$1,832.00	7					\$3,216.00	67
Portage	1972	\$6,976.00	7					\$3,216.00	67
Dump	1982	\$23,811.00	7					\$36,288.00	756
Ballpark								\$38,400.00	800
TOTAL		\$32,619.00						\$92,016.00	1,917

Paved Roads

Location	Year	Cost to	Useful Life (years)	Year Treated	Cost to Treat	Anticipated Replacement Year	2022 Net	Replacement	Length(m)
	Paved	Install					Book Value	Value	
Pine	2008	\$1,018,957.00	30			2038	\$214,627.48	\$197,049.60	622
TOTAL		\$1,018,957.00					\$214,627.48	\$197,049.60	622

As noted in the Preamble and Introduction, a significant proportion of the municipality's total book value is contributed by Pine Street (the only paved road in the community. This section of road from the corner of Hwy #65 and the entrance to the Elk Lake Planing Mill (major large industrial facility), is the only route for heavy traffic out of the mill. The majority of raw material (logs) is delivered via this road. Since 1985, production at the sawmill has increased three-fold, and loaded weights have tended to increase.

Normal production at this level results in over 20,000 shipments via truck per year of lumber, chips and logs over this short section of municipal infrastructure.

Furthermore, given the tight turning requirement at the eastern end of Pine streets, operators typically raise the lift axles on the trailers, which results in the remaining axles bearing the balance of the load and putting additional pressure on the road itself. Pine Street is experiencing premature deterioration and the expected useful life of the asset will be reduced considerably if the current usage continues.

In order to extend the useful life of Pine Street, a municipal weight restriction by-law was considered by Council. Following considerable discussion within the community, staff and council, the resolution was passed by Council that would enable the enforcement of bylaw that would restricts load weights on Pine Street (Included in Appendix v) and may be enforced as needed.

The purpose of the by-law is to prolong the condition of Pine Street given the heavy traffic that it experience as the only available route to the Elk Lake Planing Mill from the east, north and west.

Note: Log deliveries from the south are able to utilize the Cooke Lake Road.

2.2 Water & Drainage Assets

Water Treatment Plant

2.6: Water Treatment Facility

Water System	Year Installed/replaced	Cost	Useful Life	Anticipated Replacement Year	2022 Net Book Value	Replacement Value
Water Plant, Distribution System, wells	1990-1998	\$3,857,869.00	50	2040-2048	\$2,297,633.00	\$8,201,829.00
New Water Services	2003	\$67,503.00	50	2051-2056	\$55,217.00	\$109,085.00
Distribution System, Filtration, Industrial Pk.	2008	\$887,739.00	50	2057-2059	\$791,216.00	\$1,082,154
Process Computer	2016	\$31,889.00	5	2021	\$12,755.00	\$36,162.00
TOTAL		\$4,845,000			\$3,156,821.00	\$9,429,230

The Water Treatment Facility was constructed in 1992-93 following a catastrophic mine tailings spill that occurred upstream near the Town of Matachewan in October, 1990 and was Officially Opened in 1994. The value of the facility makes up approximately 60% of the net book value of the listed municipal assets.



Figure 6: Plaque on Elk Lake Water Treatment Plant

The facility is operated by a certified technician employed by the Township with the assistance of Ontario Clean Water Agency.

As per the Operational Plan for the Elk Lake Drinking Water System (full document is available on line at www.elklake.ca)

The Elk Lake Drinking Water System is owned by the Corporation of the Township of James and is operated by the Ontario Clean Water Agency (OCWA). The system consists of a Class 1 water treatment subsystem and a Class 1 water distribution subsystem.

Description of the Elk Lake Drinking Water System (DWS# 220007329)

The Elk Lake Drinking Water System is a communal ground water well supply that services the Town of Elk Lake. It is a standalone system not connected to any other drinking water systems.

The water treatment facility is located on Lot 83, First Street in the Township of James and is supplied by one 65 m deep, double steel casing production well. The production well is located in the pump house and is equipped with a single variable-speed vertical turbine pump, rated at 63 L/s with a 250 mm diameter magnetic flow meter installed on the discharge line.

A second well located in Lot 5, Concession 5 in the Township of James acts as a monitoring/observation well. It is drilled to a depth of 65 meters and consists of a steel casing.

The raw water is directed to an iron and manganese removal system consisting of two reaction vessels for sodium hypochlorite injection, three pressure filters each having a rated capacity of 646 L/min, three flow meters dedicated to each filter and continuous monitoring of chlorine residual and filter operation. The filter backwash recycling system is equipped with a 40 m³ underground holding tank, a submersible pump rated at 3.8 L/s with a discharge line that re-circulates the supernatant with raw water at the well pump header, and a sludge pump for residual disposal to a tanker truck.

The disinfection system consists of a 450 L sodium hypochlorite solution tank with duplicate pace-to-flow chemical feed injection pumps (one duty and one standby). Chemical injection is accomplished at the raw water pipe header, prior to entering the reaction vessels. The treated water discharges into twin cell storage clearwells having a total volume of 540 m³.

Curtain baffling was installed in Cell #2 of the clearwell to provide sufficient chlorine contact time during scheduled cleaning of the cells.

Three vertical turbine pumps (one duty, one standby draw from clearwell #1, and one fire pump installed over clearwell #2) with variable frequency drives each rated at 37.5 L/s. A magnetic finished flow meter, chlorine residual analyzer, and a surge anticipator are installed on the discharge main prior to exiting the pump house and entering the distribution system. An emergency stand by power generator is available and capable of supplying power to the entire facility during power failures. The water treatment process is controlled by a dedicated SCADA computer system.



Figure 6 :Elk Lake Water Treatment Plant

The Elk Lake Drinking Water System is classified as a Large Municipal Residential Drinking Water System and provides water to an estimated population of 440 Residents. The distribution system was constructed in 1992 and consists of mainly of

PVC Constructed pipe. It contains about 53 fire hydrants and approximately 160 service connections There are no off-site water storage facilities in the distribution system, as storage is incorporated within the treatment plant.

The Municipality may need to revisit their policies regarding user fees, such as water rates. The prices of water and wastewater services in Ontario are low compared to many other jurisdictions and in many cases rates charged do not reflect the full cost of services. In the case where individual homes and/or business are consuming a disproportional volume of treated water, water meters may need to be installed.

Ontario Clean Water Agency provides the Township with a 5 Year Recommended Capital /Major Maintenance from 2024 – 2029 (full report available at the Municipal Office).

The Most pressing project is to be the replacement of the Supervisory Control And Data Acquisition (SCADA). The SCADA is used for controlling and monitoring various processes such as drinking water management. It uses a combination of software to collect real time data from remote locations, processes and allow monitors to make adjustments remotely.

Water & Drainage Assets Inventory

Table 2-7 Hydrant Inventory

Hydrant	Quantity	Date Installed	Years in Service	Useful Life	Average Condition	Replacement Year	Cost to Replace
Fire Hydrants	63	1993	29	50	Good	2043	\$12000/hydrant

Table 2-8 Main Inventory

Size	Quantity	Length	Date Installed	Years in Service	Useful Life	Average Condition	Replacement Year	Cost to Replace
50mm	3		1993	29	50	Fair	2043	
150mm	72		1993	29	50	Fair	2043	
200mm	13		1993	29	50	Fair	2043	
300mm	3		1993	29	50	Fair	2043	

Table 2-9-1 Culvert Inventory

Asset Description	Material	Diameter(mm)	Length(m)	Total Length(m)	Average Condition
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Culverts	Plastic	203	33.5	251.4	Fair
		250	56.4		
		300	62.5		
		450	71.6		
		600	27.4		
	Steel	203	103.6	5273.1	Fair
		250	1675		
		300	2703.6		
		450	576		
		600	106.7		
		760	108.2		

Water & Drainage Assets Condition Rating

The condition of the water main and associated valves will be based on the age of the pipe and the remaining service life. The condition of the Hydrants is based on a visual inspection completed by Township of James Public Works as well as a manual inspection completed by OCWA semi-annually. Culverts were visually inspected by Public Works.

Table 2-10 Water & Drainage Asset Condition Rating Description

Condition	Description
Good	Physically sound with minimal deterioration
Fair	Some deterioration, requires monitoring & maintenance
Poor	Significant deterioration, at risk of affecting service



Good



Fair



Poor

Replacement Values

Accepted replacement values in 2024 dollars for the Township of James Water assets are summarized in Table 3.2-4 below. There are many variables when considering replacement value of these assets and until township of James tenders a project we

are unable to have complete and true accurate costing. However, the below estimated costs were given to us as a starting point by OCWA and Exp Engineering.

Table 2.11 Replacement costs

Asset	Size	Unit Cost
Hydrant	N/A	\$12,000
Main	ALL SIZES	\$1000/m
Valve	ALL SIZES	\$1000/m
Plastic Culvert	203 – 300mm	\$250/m
	450-600 mm	\$350/m
Steel Culvert	203-300mm	\$225
	450-600mm	\$325

Expected Useful Life

The expected service life of Water assets were obtained during AMP training sessions with Marmak are summarized in Table 3.1-3 below.

Table 2.12 Useful Life

Asset	Useful Life
Hydrant	50
Main	75
Valve	75
Plastic Culvert	50
Steel Culvert	50

2.3 Fleet & Equipment

Table 2.13: Fleet & Equipment Inventory

The replacement value of fleet does not include the replacement of Fire Fleet as they will be reflected separately under Fire Asset Management plan

Inventory overview:

The AMP communicates the requirements for the sustainable delivery of services through management of fleet assets, compliance with regulatory requirements, and required funding to provide the defined levels of service over the planning period. This AMP covers Fleet that is \$5,000 and over in accordance with our Strategic Asset Management Policy.

Description	Main Use	Purchased	Condition	Replacement Value	Years in Service	Lifespan
½ Tonne	Main Truck	2018	Good	\$59,133	6	10
1 Tonne	Garbage	2006	Good	\$66,595	18	10
Massey Tractor (2)	-Snow Blower -Sweeper -Brush Cutter	2022	Good	\$63,100	2	10
Massey Tractor (3)	-Loader -Road Work -Moving Materials	2019	Fair	\$27,600	16	10
John Deere	-Snow removal -Landscape -Grave Digging -Moving Gravel	2015	Good	\$144,900	8	20
Toro Z Master	Cutting Grass	2014	Poor	\$9,100	10	10

Lifecycle Strategies

The fleet in the Township are managed and operated to meet the agreed Levels of Service while managing life cycle costs. The following are different stages of lifecycle of the roads:

Acquisition – the activities to provide a better level of service of each department (e.g., new fleet acquisition by departments due to growth in the Town).

Fleet Asset Management Plan

Operation – the regular activities to provide services (e.g., fleet staff and technicians to assist with fleet maintenance etc.)

Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g., servicing of fleet like brakes, transmission, tire inspections and other preventative and reactive maintenance activities on the fleet)

Replace or renew – the activities that return the service capability of an existing asset to its original condition or an upgrade with additional enhancements to meet the changed service delivery to that which it had originally provided. The prioritization for the replacement of a fleet asset nearing or at end-of-life is done by visual inspection of the condition of the asset and analysing the utilization factors like odometer readings.

Dispose – the activities that return the asset after it reaches its end of life (e.g., trade off a like to like replacement of an existing fleet, trade off equipment attached to a fleet)

Table 2.14 Lifecycle Activities

Lifecycle Activity	Examples
Non-Infrastructure solutions	▪ Visual Inspection of fleet condition ▪ Predictor modeling – demonstrating long range needs for Fleet
Operations & Maintenance	▪ Preventative Maintenance and inspections of fleet ▪ Routine maintenance activities for all fleets ▪ Inspection of fleet as per Public Works checklists
Acquisition activities	▪ Acquisition of New fleet by Public Works/Council
Replacement activities	▪ Replacement of existing fleet as needed
Disposal activities	▪ Trade off older fleet with new fleet ▪ Trade off fleet attachments

2.4 Land & Buildings

Inventory

Table 2.15: Land & Buildings Inventory

Description	Location	Age	Useful Life	Condition	Replacement Cost
Green Garage	Ontario Street	29	75	Fair	\$168,600
Skating Rink + Roof	11 Fourth Street West	52 2	75	Good	\$1,008,800
Community Centre	08 Fourth Street West	46	75	Fair	\$3,353,900
Fitness Facility + Change rooms	11 Fourth Street West	5	75	Good	\$359,200
Library	19 First Street	22	75	Good	\$864,000
Museum	16 Rosedale Avenue	115	75	Fair	\$565,000
Concession Booth	Smyth Street	11	75	Good	\$104,000
Ball Park Bathrooms	29 Lake Street	33	75	Fair	\$82,500
Water Treatment Plant	04 First Street	31	75	Good	3,000,000
Municipal Office	33 Third Street East	25	75	Good	\$877,200
Ball Park Pavilion	Smyth Street	14	75		\$143,100
Gazebo (Jack Munroe)	First Street	10	75	Good	\$29,200
Gazebo (Trailer Park)	Fourth Street		75	Good	\$7,100
Public Works Garage	33 Third Street East	25	75	Good	\$379,400
Storage Shed (PW Garage)	33 Third Street East	25	75	Good	\$60,900
Announcers Booth	Smyth	n/a	75	Fair	\$12,700
Beach Outhouse	First Street	33	75	Poor	\$11,200
Gazebo (Beach)		59	75	Fair	\$27,100
Fire Hall	33 Third Street East	25	75	Good	\$499,200
Lifeguard Shack	First Street	59	75	Poor	\$6,000
Beach Change room	First Street	33	75	Poor	\$6,000

Condi
on
Rating

The

buildings and contents are reviewed annually by insurance companies and assigned current replacement values.

Condition Rating for Land & Buildings is based on the number of service/maintenance done on the building in the last year and upcoming service requests. Recent upgrades (last 5 years) will play a factor in this rating.

Table 2.16: Condition Rating

Condition	Description
Good	Less than 5 Service Calls/Repairs. No upcoming service calls
Fair	5-10 service calls in the last 2 years.
Poor	Frequent repairs & major upcoming repairs.

3. Current Levels of Service

Levels of Service (LOS) are statements of service performance delivery. LOS is established based on Council direction, the needs or wants of the community as well as legislative and regulatory requirements. This report includes Operating Performance Indicators (OPI's) for current levels of service. Through the ongoing Asset Management process LOS will be further defined for the Town, the Town's assets, and the community. All are interconnected.

The level of service is a reflection of the quality, function and capacity of the services being provided. The aspects to be considered include:

- The level of service currently provided to user
- The annual cost to continue to provide the current level of service
- How the current level of service is expected to change in the future given current funding levels
- If you are meeting the level of service expectations of your users given the costs to provide current, increased or decreased levels of service

Customer (i.e. taxpayer) concerns and complaints are typically communicated to the Township Clerk/Treasurer and/or Deputy Clerk during office hours. These concerns are then typically relayed to the Public Works Department staff. After hours concerns and those of a more serious nature (e.g. water main breakages) may be conveyed directly to the Reeve, Council and/or directly to Public Works staff. In the event that concerns are not addressed to the satisfaction of the taxpayer, the issue may be elevated to a discussion at Council.

Although there is no formal Desired Level of Service Policy, it appears that service is satisfactory at this time.

The following sections present the Current Community and Technical LOS for the Township of James Core Assets, which will drive the Risk and Life Cycle Management Strategies of this AM Plan in the future.

Community LOS: Qualitative descriptions that demonstrate the Townships customer and other stakeholder expectations of transportation services.

Technical LOS: Technical metrics that translate customer expectations into technical objectives and performance measures

3.1 LOS Roads

Table 3.1 : O. Reg. 588/17 Prescribed Levels of Service for Roads

Service Attribute	Community Levels of Service (Qualitative)	Technical levels of Service (Technical Metrics)
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity.	Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality.
Quality	Description or images that illustrate the different levels of road class pavement condition.	1. For paved roads in the municipality, the average pavement condition index value.
		2. For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor).

Table 3.2: Transportation Levels of Service Framework Township of James

LEGISLATED	COMMUNITY Levels of Service	TECHNICAL Levels of Service
O. Reg. 588/17: ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE & O. Reg. 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS	As required under O. Reg. 588/17 for the Community LOS for Pavements, the map provided in Appendix A provides qualitative description by displaying the road connectivity throughout the Township of James as well as the road pavement condition.	Assets are in adequate condition, maintained and customer requests are responded to
	Description or images that illustrate the different levels of road class pavement condition.	Assets Comply with Regulation 239/02 MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS

**Table 3.3 - Technical LOS for Roads:
Lane-km**

Road Classification	Lane-km
Gravel Roads	6.84
Paved Roads	1.917
Surface Treated Roads	9.551

**Table 3.4- Technical LOS for Roads: Pavement
Condition Index**

Road Classification	Current Qualitative Performance	Source
Gravel	Fair	AMP/ Public Works
Paved	Fair	
Surface Treated Roads	Poor	

Cost to Maintain LOS Roads

Winter Maintenance: 45000 annually

A full chart of Road Inventory, PCI & Surface Condition can be found on Page 12 of the AMP(Table1)

3.2 LOS Water Assets

Community & Technical LOS can be categorized as relating to one of the following service attributes:

Capacity: Assessing whether services have enough capacity and are accessible to the customers.

Function: Assessing whether services meet customer needs while limiting health, safety, security, natural and heritage impacts.

Reliability: Assessing whether services are reliable and responsive to customers.

Table 3.5: Water Assets Levels Of Service Framework

CORPORATE	LEGISLATED	COMMUNITY Levels of Service	TECHNICAL Levels of Service
OCWA The Township of James OPERATIONAL PLAN for the Elk Lake Drinking Water System Updated: November 8, 2021, The 2021 Annual	O. Reg. 588/17: ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE & Safe Drinking Water Act, 2002	Capacity	Capacity
		Services have enough capacity & are accessible to everyone	Assets of sufficient capacity are available, convenient & accessible to everyone
		Function	Function
		services meet customers' needs while limiting health & safety impacts	Assets comply with regulations & perform their intended function.
		Reliability	Reliability

Summary/Report & Quarterly Operations Report		Services are reliable and responsive to customers	Assets are in adequate condition, maintained and customer requests are responded to
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Table 3-6: Water Assets Community & Technical Levels of Service

Service Attributes	Service expectations	Community Objectives	Community Levels of Service	Technical Levels of Service	Reference
Capacity: Services have enough capacity & are accessible to everyone	Adequate Capacity	Provide adequate availability of water service to properties	CGIS & Water Distribution System Maps	Number of Properties Connected to the Water Distribution System	O.Reg.588/17
		Provide adequate availability of fire flow to properties	CGIS Mapping of Fire Hydrants and a paper map at the Municipal Office & Fire Hall	Number of properties where fire flow is available	O.Reg.588/17
Function: services meet customers' needs while limiting health & safety impacts	Adequate Water Quality	Provide Safe Drinking Water	boil water advisories	number of days in a year where a boil water advisory is in place	O.Reg.588/17 & OCWA Annual Summary
	System Efficiency				
Reliability: Services are reliable and responsive to customers	Reliable water Service	Water assets are kept in a good state of repair	Overall Asset Condition	Assets described as Fair or Better Condition	CGIS
		Water Mains Remain Intact	Description of Service Interruptions due to water Main Breaks	Number of days without service due to breaks	O. Reg 588/17 OCWA
		hydrants are reliable	Overall Asset Condition	Assets described as Fair or Better Condition	CGIS

3.3 LOS Bridges & Culverts

Table 3.7 - O. Reg. 588/17 Prescribed Levels of Service for Bridges & Culverts

Service Attribute	Community Levels of Service (Qualitative)	Technical levels of Service (Technical Metrics)
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Percentage of bridges in the municipality with loading or dimensional restrictions.
Quality	Description or images of the condition of bridges and how this would affect use of the bridges. 2. Description or images of the condition of culverts and how this would affect use of the culverts.	For bridges in the municipality, the average bridge condition index value. 2. For structural culverts in the municipality, the average bridge condition index value.



Figure 5: Bridge across Bear Creek

Table 3.8: Bridges & Culverts Community & Technical Levels of Service

Service	Community	Technical
Scope	Heavy Trucks, Pedestrians, Cyclists, ATV's, Emergency Vehicles.	100% of the Bridges owned by the Township of James (Being the Bear Creek Bridge) have load restrictions.
Quality	Figure 5 (Above) shows the Bear Creek Bridge.	Based on Visual Inspections completed by Township of James Public Works, the average condition of our culverts is fair. Continued monitoring & inspections will be completed to ensure no interruptions to service.

3.4 Fleet & Equipment LOS

Service Levels are defined as customer Levels of Service and technical Levels of Service.

Table 3.9: 1 Tonne Garbage Truck

Attribute	Community Level of Service	Current Performance
Scope	See Inventory section for a list of fleet & services	6 Vehicles recorded in the Asset Management Plan in accordance with our Strategic Asset Management Policy
Reliability	Residence have a reliable truck to pick up their Garbage in a timely manner Public Works Department has a back-up truck that can be used for Garbage Pick-up in case of any break-downs	The Garbage truck is in workable condition in order to do Garbage weekly 1 time in 2023 Public Works had to use the ½ tonne which cause longer wait times for garbage to be picked up, otherwise the truck has been reliable.

Capacity	1 Tonne – Mainly Used on Mondays, Thursdays for Garbage/Recycling Monday Garbage Pick-up day (Business Only) 1 'Run' Thursday's Residential Garbage Pick-up 2 'runs' Monday Pick-up usually done by 10am Thursday's Pick-up usually done by 11am	16.66% of Fleet are seasonal/used 6 months out of the year 83.34% of Fleet are used daily/weekly
Reliability	The 1 Tonne Truck can hold a substantial amount of Garbage in order that residence gets their garbage picked up with little delays, and typically by 11am.	
Condition		
Safety		

3.5 Land & Buildings

Table 3.10 Land & Buildings LOS

Attribute	Community Level of Service	Technical Level of Service
Scope	Appendix 1 – List of buildings and services (excel)	Appendix #2, Facilities by Services Provided Excel
Accessibility	Community Buildings are Safe & Accessible to the public. The community Centre needs a ramp going from the main entrance down to the Skating Area. Elk Lake Heritage Museum was renovated with a ramp in ____ Elk Lake Community Centre was equipped with a Ramp at the entrance in _____. Side doors can be	5 complaints about accessibility in the Municipal office. The municipal office has a set of stairs that needs to be used to gain access to Municipal Services. Staff will make every effort to Accessibility plan # of Buildings Compliant with AODA

	used to gain access to the main floor/rink area. A ramp would be beneficial from the upper area of the Community Hall going down to the main area of the community hall.	
Safety	Fire extinguishers are tested monthly	0 service complaints about safety in community buildings
Sustainability		
Reliability		

4. Asset Management Strategy

The asset management strategy is the set of planned actions that will enable the assets to provide the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost (e.g., through preventative action). The following activities address planned actions:

Non-infrastructure solutions – actions or policies that can lower costs or extend asset life (e.g., better integrated infrastructure planning and land use planning, demand management, insurance, process optimization, managed failures, etc.)

The Township utilizes an efficient approach to delivery through which private contractors (eg. *Connors Sand and Gravel* for road grading and maintenance, *H. Fiset and Sons* and other local contractors as required) compliment Township public works operations. By doing so, the Township has limited the amount of heavy equipment that it owns and maintains.

Given that the Township is approximately 40 km from the next nearest organized municipality, the sharing of equipment and services is not practical in most cases.

The Township also engages consultants in the role of Economic Development Officers on an “as needed basis” to review and develop policies and procedures that contribute to efficient asset management. Costs for these services are contained within “general government”. As noted previously, the investment in non-infrastructure solutions included development of a load limitation by-law within the community to prolong the life of municipal roads.

Maintenance activities – including regularly scheduled inspection and maintenance, or

more significant repair and activities associated with unexpected events. The Township has been able to inspect and maintain most of the equipment that it does own to extend usable life of the asset(s).

Renewal/rehabilitation activities – significant repairs designed to extend the life of the asset. For example, the lining of iron water mains can defer the need for replacement.

Replacement activities – activities that are expected to occur once an asset has reached the end of its useful life and renewal/ rehabilitation is no longer an option.

Staff and council will continue to evaluate the need for the replacement of asset(s) once the usable life has been reached or exceeded. In the short term, staff has indicated that the Rider Lawnmower and the Tractor will need replacement in the early part of the term of this Asset Management Plan.

The most valuable capital asset in the community is the Water Treatment Plant (discussed in Section 3 – State of the Infrastructure), has a useful life as identified in the *Inventory of Tangible Assets* of 50 years. The building was constructed in 1992 of brick with a concrete foundation. Equipment is regularly maintained through an agreement with OCWA.

From an engineering standpoint, the facility is expect to have a useful (subject to regular maintenance) in excess of 100 years.

The capacity of the plant far exceeds the current and forecast demand for potable water in the community. Given the advances in technology and further improvements anticipated between the present time and the time at which the plant will need to be replaced, it is not anticipated that a comparable facility would be constructed.

A reserve fund has been established to ensure that capital expenditures are adequately financed. OCWA will provide notification in advance of any substantial capital investment or replacement to the operating system.

Disposal activities – the activities associated with disposing of an asset once it has reached the end of its useful life, or is otherwise no longer needed by the municipality.

The Township will continue to evaluate opportunities to dispose of activities in the event that the asset(s) has reached the end of its useful life or if the asset(s) is deemed to be surplus to the essential needs of the community. The municipality will dispose of assets through a public process according to their policies and past practices. Typically there are no costs associated with disposal but rather small revenues.

In the event that municipal revenues are significantly reduced, Council has expressed an interest in disposing of Pumper Unit #1 and reconsider emergency response targets.

Expansion activities (if necessary) – planned activities required to extend services to previously unserved areas – or expand services to meet growth demands.

The municipality has initiated efforts to annex 3 surrounding townships. Although this will provide some opportunities for increased revenue through land development, it will also require an extension of services to seasonal residents

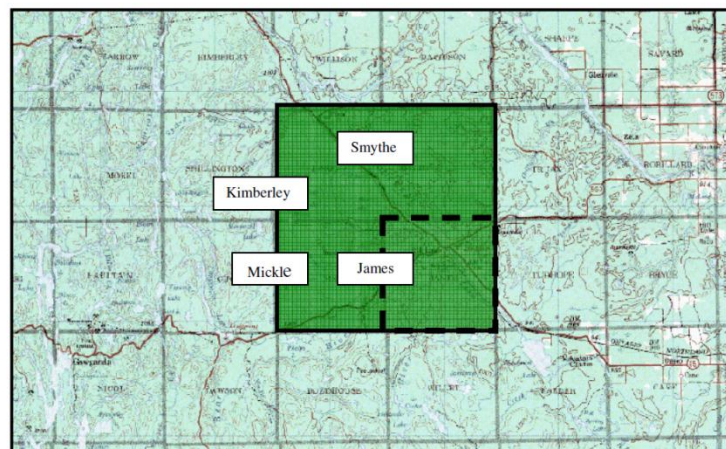


Figure 8: Annexation Initiative

Procurement methods. To ensure the most efficient allocation of resources a number of delivery mechanisms are considered for significant procurement requirements. Where appropriate (for instance the recent participation with a number of other communities for GIS support), “group” purchasing is utilized. Given the distance to neighbouring communities, this is not always feasible

In the past, the municipality has been success in acquiring sufficient funds have not engaged in design-build-finance arrangements.

Table 6: Transportation Assets Lifecycle Activities

Type	Activity	Frequency	Cost
Maintenance	Street Sweep	As needed Seasonally	\$5,000/year
	Snow Removal	As Needed Seasonally	\$15,000/year
	Salt/Sand	As needed/Seasonally	\$40,000/year
Rehabilitation	Filling Cracks	As needed	\$
	Potholes	As needed	
Replacement	Full Replacement costs have been outlined in the inventory section of this AMP		

Table 7: Water Assets Lifecycle Activities

Type	Activity	Frequency	Cost
Maintenance	Valve Cycling	Yearly	\$2/meter
	Water Testing	Daily	OCWA
	Hydrant Exercises	Bi-Annually	OCWA
	Reclaim Tank Clean Out	Yearly	OCWA
Rehabilitation			
Replacement	Full Replacement costs have been outlined in the inventory section of this AMP		

Table 8: Bridge & Culvert Lifecycle Activities

Type	Activity	Frequency	Cost
Maintenance			
Rehabilitation	Ditching	As needed	\$2,000/year
Replacement	Full Replacement costs have been outlined in the inventory section of this AMP		

5. Financing Strategy and Projections

This section of a detailed asset management plan shows yearly expenditure forecasts broken down by:

- Non-infrastructure solutions.
- Maintenance activities.
- Renewal/rehabilitation activities.
- Replacement activities.
- Disposal activities.
- Expansion activities (if necessary).
- Non-application expenditures

Financial reporting for the Township has been categorized in the following manner.

- General Government
- Protection to Persons & Property
- Transportation Services
- Environmental Services
- Health Services
- Social Services
- Recreation and Culture
- Capital Expenditures
- Planning and Development

In order to identify past expenditures consistent with the *Guide for Municipal Asset Management Plans*, past budgets and expenditures were reviewed.

In the case of municipal gravel roads, maintenance is regularly performed by Township staff as a regular activity and therefore cannot be discretely identified.

In the case of the largest capital asset, (water treatment facility), the Township has an agreement in place with Ontario Clean Water Agency (OCWA) through which regular maintenance is conducted which will prolong the life of the asset. OCWA provides the Township with a *Notice of Capital Expenditures* for the following year. This expense varies, however has been between \$2,000-\$10,000 annually.

As per the Notice, OCWA recommends that "...despite best maintenance practices, unexpected equipment failures can occur as your facility ages. A contingency fund for such an event can make it much less painful." To this end, a reserve fund has been established.

Over the past 5 years, revenues to the municipality have been based on approximately the following breakdown:

OMPF (Provincial Transfer Payments): 16% of total revenue

Municipal Tax Collection: 68% of total revenue

The Township does not anticipate any significant variations to the noted distribution of revenue.

Increases in expenditures

The Township does not anticipate any significant changes to expenditures during the term of the Asset Management Plan.

The Township's approach to Asset Management has historically been interactive. Capital expenditures are typically identified in advance and incorporated into the budgets and work plans for the following or subsequent year (pending the nature of the expenditure(s)).

Township council is committed to tax rate stability. Despite this commitment, as a result of changes in assessment values as provided by MPAC (***Municipal Property Assessment Corporation***), drastic changes to individual tax bills for both residential and industrial property owners and to the municipal revenue have been experienced.

Through a balanced approach of modest capital improvements, a diligent maintenance program the level of expenditures are expected to remain stable.

The 2022 budget summary outlines the basic distribution of expenditures and revenues for the Township and is as follows and represents a balanced budget:

Township of James 2022 Budget Summary	
Municipal Expenditures	'22 Budget Proposal
General Government	330,245
Protection to Persons & Property	155,555
Transportation Services	252,090
Environmental Services	241,476
Health Services	23,557
Social Services	103,688
Recreation & Culture	88,513
Capital Expenditures	799,114
Planning & Development	131,006
TOTAL MUNICIPAL EXPEND.	2,125,243
Revenue Except Tax	1,355,244

BALANCE	769,999
EXPENDITURE SUMMARY	
Boards of Education	114,793
Municipal	2,122,943
TOTAL EXPENDITURES	2,237,736

Individual Financial Strategies

Industrial Park

The Township of James constructed an industrial park in 2008 which includes a number of potential sites for bioenergy initiatives and/or other industrial uses.

As the mining sector was experiencing strong growth and activity in the region, it was anticipated that there would be interest for the rental or purchase of lots in the park.

The audited financial statements indicate a land improvement cost of \$196,403 plus \$303,125 for the construction of Industrial Park Road, an additional \$ 4,821.00 to surface treat the road, and \$252,454.00 for water services to the park.

The Township does not anticipate spending any capital dollars on the industrial park during the life of the Asset Management Plan unless requested and/or negotiated with a new tenant/purchaser. When the 10-year capital plans are completed for roads and the water system, the Township will further assess the industrial park.

Since 2012, the Township has rented space in the industrial park to Eacom Timber for the storage of equipment. This rental agreement is expected to expire during the term of this Asset Management Plan.

Since it has been several years since the industrial park was established, and a number of neighbouring municipalities have established industrial development parks, the Township will review the asking prices for the remaining industrial park lots to ensure that they reflect fair market value.

Surface Treated Roads

The Township has 20 surface treated roads with a total length of 8,249 m. (8.25km) and a net book value of \$1,039,374. In the past 10 years, 50% of the surface treated roads have been upgraded, but based on the audited financial statements, a further upgrade will be required within the 10 year life of this Asset Management Plan.

The Township will continue to assess the surface treated roads based on acceptable

industry standards. Visual inspections of the roads will continue to be done to gather information such as surface condition, surface type, widths, structural adequacy, drainage and perceived needs.

Most of the regular maintenance is contracted out to local contractors which allow the Township to operate with very few staff and pieces of equipment in their Public Works department. The Township will continually look for new materials and best practices in the industry that may extend the useful life of their road network.

Gravel Roads

The Township currently has 1917 m (1.917 km) of gravel roads that they own and maintain on a year round basis.

The Townships activities undertaken each year to maintain the gravel roads include, gravelling, grading, ditching, and snowplowing. The Township contracts out most of the gravel road maintenance to local construction companies which works well for the municipality and the contractors and supports the local economy. Contracting out these services allows the Township to run the Public Works department with minimal equipment and staffing.

The Township takes advantage of joint purchasing of A-gravel with other municipalities in the area. This partnership arrangement helps the Township realize economies of scale which reduces costs.

The Township will assess the gravel roads based on acceptable industry standards which they will obtain from an agency such as Municipal Dataworks or Ministry of Transportation (MTO). A visual inspection of the roads will continue to be done to gather information such as surface condition, surface type, widths, structural adequacy, drainage and perceived needs.

Paved Roads

The Township of James has three paved streets, with the most prominent being Pine Street which carries truck and vehicle traffic to and from the Elk Lake Planing Mill, which is the Township's largest employer. In 2008, the Township spent over \$1 million to rehabilitate Pine Street. This was the first time in 22 years that the street required major work. Due to operational changes at the Planing Mill, there is more truck traffic using this street than there was in the past, and the street is eroding pre-maturely. On July 19, 2012 the engineering firm, Exp., provided a Pavement Condition Report which concluded that:

Pine Street will require more frequent rehabilitation than a normal municipal street

because of the high volume of heavily loaded commercial traffic.

It is unlikely that Pine Street will remain in a serviceable condition for 22 years as previously experienced. A life span before major repairs may occur in as little as 12 years.

The maintenance costs incurred by the Township for Pine Street are higher than other streets and can be expected to increase as the street ages.

To address some of the issues with Pine Street, on January 8, 2014, the Township passed By-law No. 14-05 being a By-law to designate weight restrictions of vehicles and trailers on Township streets. The Township is anticipating that this weight restriction bylaw will extend the useful life of Township streets. The Township will continue to monitor the condition of Pine Street using engineering services as required.

The Township also allocates funds to reserves to pay for the future rehabilitation of Pine Street. The Township will monitor the condition of Pine Street and will consider the cost of rehabilitation when determining the amount of money that will be allocated to reserves. Prior to the 5 year review of the Asset Management Plan, the Township will prepare a 10-year capital budget for the maintenance and repair of Pine Street and the other two smaller paved streets, Sixth Street and Smyth Street.

The Township is required to clean Pine Street on a regular basis because of the soil and wood based debris that falls from the transport trailers that are hauling logs and lumber to and from the mill. Prior to the 5 year review of the Asset Management Plan, the Township will review the level of maintenance that is required on Pine Street in order to extend the useful life of the street.

Water System

The Township of James' drinking water system consists of wells, a water treatment plant and a distribution system with approximately 160 service connections and 63 fire hydrants. The operation of the system is contracted out to Ontario Clean Water Agency (OCWA). With a net book value of \$3,156,821.00 it is the largest capital asset that the Township owns.

The system was installed between 1990 and 1998, with a major upgrade taking place in 2007-2009 and a new process computer installed in 2016. The system is a sufficient size to handle anticipated future growth of the community without requiring an expansion.

OCWA prepares an annual report regarding the operations of the system and presents it to the Township for their information. OCWA also provides the Township with a list of capital asset improvements that are recommended to maintain the system in a good

working condition. Improvements that are required for public health and safety are given priority.

The Township currently allocates money to reserves for future capital costs that may be required to upgrade or replace the system.

The Township will also review the cost to operate the drinking water system and assess the user fees for water services to ensure that costs are being covered by the users of the system. The Township can then consider whether or not the user fees should be adjusted.

6.RECOMMENDATIONS

In addition to the comments made in the proceeding pages of this document, there are a number of recommendations that should be addressed in future asset management initiatives:

1. Develop, through more detailed analysis and plan for allocating the funds to the operating and/or capital budgets, as required, in order to successfully implement the asset management plan;
2. Develop a policy and implement a strategy to reach long term sustainable funding for each of the assets covered in this Plan;
3. Implement a comprehensive budget structure along service delivery lines, so that service managers can adequately know what the true total cost of their service is.
4. Engage the community in discussing the true cost of services and the assets required to provide those services. Develop and implement service levels that are in line with public expectations and willingness to pay;
5. Review the selection and use of rehabilitation strategies on life-cycle costing and on a return-on-investment (ROI) basis.
6. Review operating and maintenance practices balancing least life-cycle cost against level of service and risk exposure, on a business-case basis using InfraGuide Best Practices and other industry sources;
7. Provide regular updates to the SOTI Report Card and Analysis.
8. Re: Water Treatment Plan. The Township should continue to receive and take OCWA's recommendations for capital investment in the water treatment plan under

advisement. In the very long term the Township should investigate options for replacement in a manner consistent with the demographics of the community.

CAPITAL PLAN RECOMMENDATIONS

1. That asset condition assessment of capital assets should be considered wherever feasible. The application of a standard life expectancy of an asset reflects a financial approach). Age-based condition assessment has the least level of confidence for building a capital plan.

2. That the Township of James could consider releasing a policy defining its strategy and intention as it pertains to the infrastructure deficit, including communications to the general public.

3. That the Town be proactive in reviewing and capitalizing on the upcoming Province and Federal contributions to the infrastructure deficit to ensure maximum benefit for the Town.

4. That the Town be proactive in reviewing funding options including Infrastructure Ontario Lending Policies, Private Public Partnerships, user fees and other funding options to have understanding of financing options, should the need arise.

5. That the Town address their infrastructure deficit.

6. That the Town proactively define organizational responsibilities to maintain the asset inventory including proposed and actual project cost information, updating the data as assets are acquired or betterments are added to existing assets and projects are started and completed. In this manner, the accuracy of future Capital Plan will increase over time.

7. That the Town incorporate a Level of Service analysis prior to resolving the infrastructure deficit in order to maximize the impact of their capital investments and impact of their capital investments.

8. That the Town consider establishing as policy the following guiding principles, that it be:

Customer Focused: To have clearly defined Levels of Service and applying asset management practices to maintain the confidence of residents in how the Township of James assets are managed.

Forward Looking: To make the appropriate decisions and provisions to better enable its assets to meet future challenges, including changing demographics and populations, customer expectations, legislative requirements, technological and environmental factors.

Service Focused: To consider all the assets in a service context and taking into account their interrelationships as opposed to optimizing individual assets in isolation.

Risk-based: To manage the asset risk associated with attaining the agreed levels of service by focusing resources, expenditures, and priorities based upon risk assessments and the corresponding cost/benefit recognizing that public safety is the priority.

Value-Based/Affordable: To choose practices, interventions and operations that aim at reducing the life cycle cost of asset ownership, while satisfying agreed levels of service. Decisions are based on balancing service levels, risks, and costs.

Holistic: To take a comprehensive approach that looks at the "big picture" and considers the combined impact of managing all aspects of the asset life cycle.

• **Systematic:** To adopt a formal, consistent, repeatable approach to the management of its assets that will ensure services are provided in the most effective manner.

9. Innovative: To continually improve its asset management approach, by driving innovation in the development of tools, practices, and solutions. To meet the goals and objectives of this policy, senior management could consider:

a) the creation and maintenance of a Comprehensive Asset Management (CAM) governance structure to lead the development of AM tools and practices and to oversee their application across the organization.

b) Adopt a Comprehensive Asset Management Strategy (AMS) to:

- Establish, document and continually adhere to industry recognized asset management protocols;
- Refine levels of service that balance customer expectations with risk, affordability and timing constraints as it pertains to the Town's unique requirements;
- Adopt risk-based decision-making processes that consider the likelihood of asset failure and the consequence of a failure with regards to impacts on safety and levels of service;
- Develop asset management knowledge and competencies aligned with recognized competency frameworks;
- Entrench lifecycle costing when evaluating competing asset investment needs across the Townships assets
- Monitor the performance of the assets and track the effectiveness of AM practices with a view to continuous improvement;
- Where practical, strive to go beyond minimum legislative requirements as an enabler to make the Township more resilient to changing social, environmental

and economic conditions.

7. Asset Management Policy

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-01-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject	
Purpose & Scope	Page 1 of 1

PURPOSE: The objective of this policy is to prescribe the accounting treatment for tangible capital assets so that users of the financial report can discern information about the investment in property, plant and equipment and the changes in such investment. The principal issues in accounting for tangible capital assets are the recognition of the assets, the determination of their carrying amounts and amortization charges and the recognition of any related impairment losses.

In addition the policy covers policy and procedures to:

- a) Protect and control the use of all tangible capital assets.
- b) Provide accountability over tangible capital assets.
- c) Gather and maintain information needed to prepare financial statements.

SCOPE: This policy applies to all Township Departments, boards and commissions, agencies and other organizations falling within the reporting entity of the Township.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-02-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject	
Definitions	Page 1 of 3

Amortization: Amortization is the accounting process of allocating the cost less the residual value of a tangible capital asset to operation periods as an expense over its useful life in a rational and systematic manner appropriate to its nature and use.

Betterments: Subsequent expenditures on tangible capital assets that:

- increase previously assessed physical output or service capacity;
- lower associated operating costs;
- extend the useful life of the assets; or
- improve the quality of the output.

Any other expenditure would be considered a repair or maintenance and expensed in the period.

Capital Lease: A capital lease is a lease with contractual terms that transfer substantially all the benefits and risks inherent in ownership to property to the Township. For substantially all of the benefits and risks of ownership to be transferred to the lessee, one or more of the following conditions must be met.

- a) There is reasonable assurance that the Township will obtain ownership of the leased property by the end of the lease term.
- b) The lease term is of such a duration that the Township will receive substantially all of the economic benefits expected to be derived from the use of the leased property over its life span.
- c) The lessor would be assured of recovering the investment in the leased property and of earning a return on the investment as a result of the lease agreement.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-02-02
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Definitions	Page 2 of 3

Capitalization Threshold: Capitalization threshold (recognition threshold) is the value above which assets are capitalized and reported in the financial statements.

Category: A category of assets is a grouping of assets of a similar nature or function in the Township's operations.

Fair Value: Fair value is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Group Assets: Assets that have a unit value below the capitalization threshold but have a material value as a group. Normally recorded a single asset with one combined value. Although recorded in the financial systems as a single assets, each unit may be recorded in the asset sub-ledger for monitoring and control of its use and maintenance. Example could include personal computers, furniture and fixtures, small moveable equipment, etc.

Residual Value: Residual value is the estimate net realizable value of a tangible capitalasset at the end of its useful life to a local government.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-02-02
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Definitions	Page 3 of 3

Tangible Capital Assets: Assets having physical substance that:

- a) are used on a continuing basis in the Townships operations.
- b) have useful lives extending beyond one year.
- c) are not held for re-sale in the ordinary course of operations.

Useful Life: Useful life is the estimate of either the period over which a local government expects to use a tangible capital assets, or the number of production or similar units that it can obtain from the tangible capital asset. The life of a tangible capital asset may extend beyond its useful life. The life of a tangible capital asset, other than land, is finite, and is normally the shortest of the physical, technological, commercial and legal life.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-03-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Capitalization Thresholds	Page 1 of 1

Tangible capital assets should be capitalized (recorded in the fixed asset sub-ledger) according to the following thresholds:

- a) all land;
- b) all buildings;
- c) civil infrastructure systems (built assets such as roads, bridges, sewers, water, transit, parks, etc.) with unit cost of \$10,000 or greater;
- d) all individual assets with unit cost of \$2,500 or greater,
- e) all group assets when totalled to \$2,500 or greater.

Capitalize betterments to existing assets when unit costs exceed the threshold.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-04-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Asset Categories	Page 1 of 1

Category Names:

- land;
- buildings;
- heavy equipment;
- motor vehicles;
- roads;
- bridges & culverts;
- signs;
- equipment, including furniture and fixtures;
- communication networks;
- computer systems (hardware and software).

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-05-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Valuation of Assets	Page 1 of 3

Tangible capital assets should be recorded at cost plus all additional charges necessary to place the assets in its intended location and condition for use.

Purchased Assets: Cost is the gross amount of consideration paid to acquire the asset.

It includes all non-refundable taxes and duties, freight and delivery charges, installation and site preparation costs, etc. It is net of any trade discounts or rebates.

Cost of land includes purchase price plus legal fees, land registration fees, transfer taxes, etc. Costs would include any costs to make the land suitable for intended use, such as pollution mitigation, demolition and site improvements that become part of the land.

When two or more assets are acquired for a single purchase price, it is necessary to allocate the purchase price to the various assets acquired. Allocation should be based on the fair value of each asset at the time of acquisition or some other reasonable basis if fair value is not readily determined.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-05-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Valuation of Assets	Page 2 of 3

Acquired, Constructed or Developed Assets:

Cost includes all costs directly attributed (e.g., construction, architectural and other professional fees) to the acquisition, construction or development of the asset.

Carrying costs such as internal design, inspection, administrative and other similar costs may be capitalized. Capitalization of general administrative overheads is not allowed.

Capitalization of carrying costs ceases when no construction or development is taking place or when the tangible capital asset is ready for uses.

Capitalization of Interest Costs

Borrowing costs incurred by the acquisition, construction and production of an asset that takes a substantial period of time to get ready for its intended use should be capitalized as part of the cost of that asset.

Capitalization of interest costs should commence when expenditures are being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use are in progress. Capitalization should be suspended during periods in which active development is interrupted.

Capitalization should cease when substantially all of the activities necessary to prepare the asset for its intended use are complete. If only minor modifications are outstanding, this indicates that substantially all of the activities are complete.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-05-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Valuation of Assets	Page 3 of 3

Donated or Contributed Assets

The cost of donated or contributed assets that meet the criteria of recognition is equal to the fair value at the date of construction or contribution. Fair value may be determined using market or appraisal values. Cost may be determined by an estimate of replacement cost. Ancillary costs should be capitalized.

Capital Leases

Account for a capital lease as acquiring a capital asset and incurring a liability. Account for a lease as an operating lease when the net present value of the future minimum lease payments or fair value, which ever is less, is less than \$10,000.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-06-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Componentization of Assets	Page 1 of 1

Tangible capital assets may be accounted for using either the single asset or component approach. Whether the component approach is to be used will be determined by the usefulness of the information versus the cost of collecting and maintaining information at the component level.

Factors to consider when determining whether to use a component approach include:

- a) Major components have significantly different useful lives and consumption patterns than the related tangible capital asset, and
- b) Value of components in relation to the related capital asset.

Civil infrastructure systems should use the component approach. Major components should be grouped when the assets have similar characteristics and estimated useful lives or consumption rates.

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-07-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Amortization	Page 1 of 2

The cost, less any residual value, of a tangible capital asset with a limited life should be amortized over its useful life in a rational and systematic manner appropriate to its nature and use. The amortization method and estimate of useful life of the remaining unamortized portion should be reviewed on a regular basis and revised when the appropriateness of a change can be clearly demonstrated.

Useful life is normally the shortest of the asset's physical, technological, commercial or legal life.

Generally, the Township uses a straight-line method for calculating the annual amortization. A comprehensive list of estimated useful lives of assets and amortization rates follows.

ASSET MANAGEMENT GUIDELINES		Policy #
		ADMIN- 001-07-02
Policy Title		Date Approved
Tangible Capital Asset Policy		
Subject		
Amortization		Page 2 of 2

Department	Asset	Useful Life (yrs)	Amortization Rate %	Department	Asset	Useful Life (yrs)	Amortization Rate %
<u>All</u>	Land		0	Public Works	Buildings	50	2
	Land Improvements		0		Vehicles	10	10
	Fencing	25	4		Heavy Equipment	25	4
	Outdoor Lights	25	4		Equipment	10	10
	Septic System	25	4	Roads	Dirt	10	10
<u>Administration</u>	Buildings	50	2		Gravelled	7	14.3
	Equipment	10	10		Surfaced	15	6.7
	Computer	5	20		Paved	30	3.3
<u>Recreation</u>	Buildings	50	2	Bridges	Wood	25	4
	Equipment	10	10		Steel	75	1.3
<u>Fire</u>	Buildings	50	2		Concrete	75	1.3
	Vehicles	20	5	Culverts	Wood	25	4
	Equipment	10	10		Plastic	50	2
<u>Landfill</u>	Buildings	10	10		Steel	50	2
<u>Cemetery</u>	Buildings	50	2		Concrete	50	2

<u>Water</u>	Buildings	50	2	Safety	Signage	10	10
	Well	50	2		Guardrails	20	5
	Distribution	50	2				
	Equipment	50	2				

ASSET MANAGEMENT GUIDELINES	Policy # ADMIN- 001-08-01
Policy Title Tangible Capital Asset Policy	Date Approved
Subject Responsibility for Disposal of Capital Assets	Page 1 of 1

Disposal of tangible capital assets that are moveable personal property is the responsibility of the Clerk-Treasurer unless delegated to operating department heads. Township personnel should notify the Clerk/Treasurer when assets become surplus to operations.

Disposal of real property will be the responsibility of the Clerk/Treasurer as determined and instructed by Council.

When other constructed tangible capital assets are taken out of service, destroyed or replaced due to obsolescence, scrapping or dismantling, the department head or designate must notify the Clerk/Treasurer of the asset description and effective date. The Clerk-Treasurer is responsible for adjusting the asset registers and accounting records recording a loss/gain on disposal.